REDACTED VERSION

State Of Qatar
MINISTRY OF ECONOMY & COMMERCE
WE MANAGE OUR PRESENT WITH THE ASPIRATIONS OF THE FUTURE

Law No. (5) of 2002

Issuing the Commercial Companies Law

State Of Qatar
MINISTRY OF ECONOMY & COMMERCE

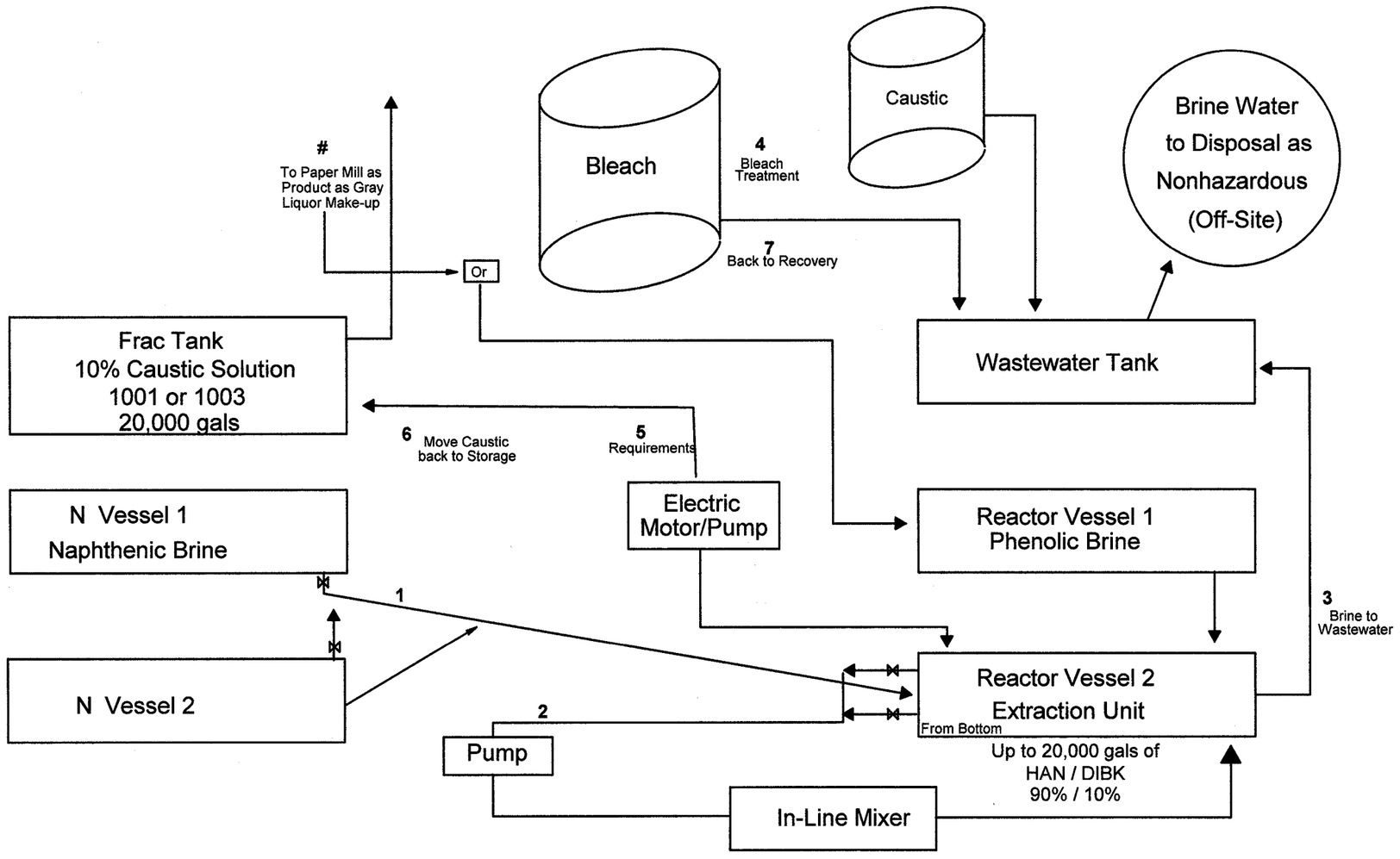
9531712
EPAHO044000604

EPAHO044000605

Phenols Extraction Process

Process Flow Diagram

July 30, 2009



Port Arthur Chemical and Environmental Services, LLC
2420 Gulfway
Port Arthur, TX 77640
713-676-1460

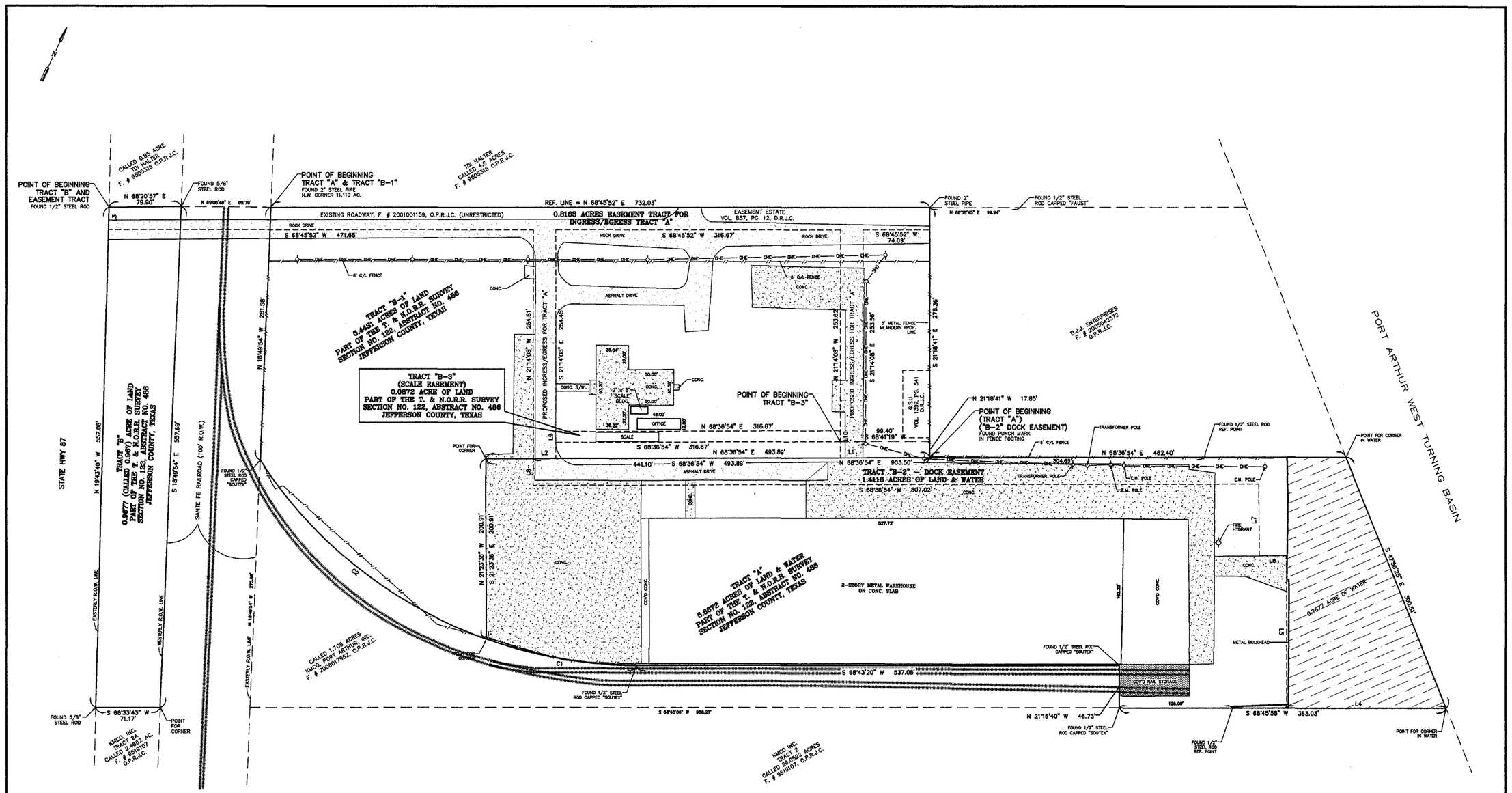
PACES Facility
"Phenols Extraction Process "

Drawn By:	CGH/clm
Date:	August 3, 2009

EPAHO04400606

8/4/09
D.S. #4
Between K-2 + wall

EPAHO04400607



LINE TABLE

LINE	BEARING	DISTANCE
L1	S 68°36'54" W	25.00'
L2	S 68°36'54" W	25.00'
L3	N 19°43'40" W	25.04'
L4	S 68°45'58" W	176.96'
L5	N 21°23'06" W	169.36'
L6	S 68°21'51" W	30.00'
L7	N 21°23'06" W	79.80'
L8	N 21°14'08" W	30.00'
L9	N 21°14'08" W	12.00'
L10	S 21°14'08" E	12.00'

CURVE TABLE

CURVE	RADIUS	ARC	BEARING	CHORD
C1	500.00'	170.13'	S 78°47'10" W	169.31'
C2	500.00'	326.11'	N 72°46'54" W	320.35'

NOTE: UNITED STATES OF AMERICA/MAINTENANCE OF THE SABINE-NECHES WATERWAY VOL. 283, PG. 595, D.R.J.C.

NOTE: PROPERTY SUBJECT TO SURFACE APPLICATION SYSTEM F. # 2001001339, O.P.R.J.C.

NOTE: ALL SET STEEL RODS ARE MARKED WITH "SOUTEX" IDENTIFICATION CAPS

DESCRIPTION OF SERVICES: PLAT & DESCRIPTION ONLY (NO CURRENT FEILD SURVEY)

SURVEYOR'S CERTIFICATION:

The undersigned does hereby certify that this survey was this day 9/22/08 made on the ground of the property legally described hereon and is correct, and that there are no discrepancies, conflicts, shortages of area, boundary line conflicts, encroachments, overlapping of improvements, easements or right of way, except as shown hereon, and that said property has access to and from a dedicated roadway. This survey is certified for this transaction only; it is not transferable to additional institutions or subsequent owners.

ANTHONY M. LEGER
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481

Census Tract: 116

FEMA Flood Zone: B & A11

Community Panel NO.: 485489-0045-E

Panel Date: 4/17/84

SOUTEX
SURVEYORS INC.
3737 DOCTORS DRIVE
PORT ARTHUR, TEXAS 77642
(409) 983-2004 (409) 983-2005

SHEET TITLE

TRACT "A" - 5.6672 ACRES OF LAND & WATER, TRACT "B-2" - (DOCK EASEMENT) 1.4116 ACRES OF LAND & WATER, TRACT "B" (VACANT) - 0.9677 (CALLED 0.967) ACRE OF LAND, TRACT "B-1" 5.4431 ACRES OF LAND, TRACT "B-3" - (SCALE EASEMENT) 0.0872 ACRE OF LAND PART OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122 ABSTRACT NO. 486 JEFFERSON COUNTY, TEXAS

PROJECT

CES ENVIRONMENTAL SERVICES
SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

PROJECT NO: 08-0732
SCALE: 1" = 50'
PRINT DATE: 9/22/08
DRAWN BY: T. CHASE
CHECKED BY: BL
APPROVED BY: AML
SHEET 1 OF 2

EPAHO04400608

TRACT A
5.6672 ACRES OF LAND AND WATER
OUT OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122
ABSTRACT NO. 486, JEFFERSON COUNTY, TEXAS

BEING 5.6672 acres of land and water out of and a part of the T. & N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 11.110) acre tract of land conveyed to LA Ash, Inc., recorded in File No. 2006050071, Official Public Records, Jefferson County, Texas; said 5.6672 acre tract being more fully described by metes and bounds as follows, to wit:

COMMENCING at a 2" steel pipe found for the Northwest corner of the (Called 11.110) acre tract; said 2" steel pipe being the Southwest corner of the (Called 4.6) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records, Jefferson County, Texas; being on the Easterly right of way line of a 100' wide Santa Fe Railroad right of way;

THENCE, Ref. Line = North 68 deg., 45 min., 52 sec., East, on the South line of the (Called 4.6) acre tract, same being the North line of the (Called 11.110) acre tract, a distance of 732.03' to a 2" steel pipe found for the Northwest corner of a tract of land conveyed to B.J.J. Enterprises, recorded in File No. 2005042372, Official Public Records, Jefferson County, Texas; said 2" steel pipe being the most Northerly Northeast corner of the (Called 11.110) acre tract;

THENCE, South 21 deg., 18 min., 41 sec., East, on the Westerly line of said B.J.J. Enterprises tract, a distance of 278.36' to a punch mark found in a fence footing for the POINT OF BEGINNING; said punch mark being the Southwest corner of the said B.J.J. Enterprises tract and an exterior corner of the (Called 11.110) acre tract;

THENCE, North 68 deg., 36 min., 54 sec., East, on the Southerly line of said B.J.J. Enterprises tract, same being the Northerly line of the (Called 11.110) acre tract, a distance of 304.65' passing a ½" steel rod found for reference point continuing for a total distance of 462.40' to a point for corner in the water of Port Arthur West Turning Basin; said point for corner being the most Northeasterly corner of the (Called 11.110) acre tract and the most Easterly Northeast corner of the herein described tract;

THENCE, South 42 deg., 56 min., 25 sec., East, on the Easterly line of the (Called 11.110) acre tract, a distance of 300.51' to a point for corner in the water for the Southeast corner of the herein described tract;

THENCE, South 68 deg., 45 min., 58 sec., West, a distance of 237.03' passing a ½" steel rod found for reference point on the North line of a (Called 29.0522) acre tract of land conveyed to KMCO, Inc. known as Tract 2, recorded in File No. 9519107, Official Public Records, Jefferson County, Texas; continuing for a total distance of 363.03' to a ½" steel rod, capped and marked "SOUTEX", found for the Southeast corner of a (Called 1.708) acre tract of land conveyed to KMCO Port Arthur, Inc., recorded in File No. 2006017962, Official Public Records, Jefferson County, Texas; said ½" steel rod being an exterior corner of the herein described tract;

THENCE, North 21 deg., 15 min., 40 sec., West, on the East line of the (Called 1.708) acre tract, a distance of 46.73' to a ½" steel rod, capped and marked "SOUTEX", found for the Northeast corner of the (Called 1.708) acre tract and being an interior corner of the herein described tract;

THENCE, South 68 deg., 43 min., 20 sec., West, on the North line of the (Called 1.708) acre tract, a distance of 537.08' to a ½" steel rod, capped and marked "SOUTEX", found for point of curvature;

THENCE, continuing on the North line of the (Called 1.708) acre tract, on the arc of a curve to the right having a radius of 500.00', an arc length of 170.13', a chord bearing of South 78 deg., 47 min., 10 sec., West, a chord distance of 169.31' to a point for corner for the Southwest corner of the herein described tract;

THENCE, North 21 deg., 23 min., 36 sec., West, a distance of 200.91' to a point for corner for the Northwest corner of the herein described tract;

THENCE, South 68 deg., 36 min., 54 sec., West, a distance of 493.89' to the POINT OF BEGINNING and containing 5.6672 acres of land and water, more or less.

EASEMENT TRACT
0.8163 ACRES OF LAND FOR INGRESS/EGRESS PURPOSES
OUT OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122
ABSTRACT 486, JEFFERSON COUNTY, TEXAS

BEING 0.8163 acre of land out of and a part of the T. & N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 0.967) acre tract of land and a 11.110) acre tract of land conveyed to LA Ash, Inc., recorded in File No. 2006050071 and File No. 2006050073 Official Public Records, Jefferson County, Texas; said 0.8163 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a ½" steel rod found for the Northwest corner of the (Called 0.967) acre tract; said ½" steel rod being the Southwest corner of a (Called 0.85) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records, Jefferson County, Texas; said ½" steel rod being on the Easterly line of a dedicated road named State Highway 87 and the Northwest corner of the herein described tract;

THENCE, North 68 deg., 20 min., 57 sec., East, on the North line of the (Called 0.957) acre tract and the South line of the (Called 0.85) acre tract, a distance of 79.90' to a 5/8" steel rod found for the Northeast corner of the (Called 0.957) acre tract; said 5/8" steel rod being the Southeast corner of the (Called 0.85) acre tract on the Westerly line of a 100' wide Santa Fe Railroad right of way; said 5/8" steel rod being an angle point on the North line of the herein described tract;

THENCE, North 69 deg., 06 min., 46 sec., East, crossing said Santa Fe Railroad right of way, a distance of 99.79' to a 2" steel pipe found for the Northwest corner of the (Called 11.110) acre tract; said 2" steel pipe being the Southwest corner of a (Called 4.6) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records, Jefferson County, Texas;

THENCE, Ref Line = North 68 deg., 45 min., 52 sec., East, on the South line of the (Called 4.6) acre tract, same being the North line of the (Called 11.110) acre tract, a distance of 732.03' to a 2" steel pipe found for the Northwest corner of a tract of land conveyed to B.J.J. Enterprises, recorded in File No. 2005042372, Official Public Records, Jefferson County, Texas; said 2" steel pipe being the most Northerly Northeast corner of the (Called 11.110) acre tract and the Northeast corner of the herein described tract;

THENCE, South 21 deg., 18 min., 41 sec., East, on the Westerly line of said B.J.J. Enterprises tract and Easterly line of the (Called 11.110) acre tract, a distance of 25.00' to a point for corner;

THENCE, South 68 deg., 45 min., 52 sec., West, a distance of 74.09' to a point for corner;

THENCE, South 21 deg., 14 min., 08 sec., East, a distance of 253.56' to a point for corner on the North line of a (Called 5.6672) acre tract of land and water surveyed this date;

THENCE, South 68 deg., 36 min., 54 sec., West, on the North line of the (Called 5.6672) acre tract, a distance of 25.00' to a point for corner;

THENCE, North 21 deg., 14 min., 08 sec., West, a distance of 253.62' to a point for corner;

THENCE, South 68 deg., 45 min., 52 sec., West, a distance of 316.67' to a point for corner;

THENCE, South 21 deg., 14 min., 08 sec., East, a distance of 254.45' to a point for corner being on the North line of the (Called 5.6672) acre tract;
THENCE, South 68 deg., 36 min., 54 sec., West, on the North line of the (Called 5.6672) acre tract, a distance of 25.00' to a point for corner;

THENCE, North 21 deg., 14 min., 08 sec., West, a distance of 254.51' to a point for corner;

THENCE, South 68 deg., 45 min., 52 sec., West, a distance of 471.65' to a point for corner of the Easterly right of way line of said State Highway 87; said point for corner being on the West line of the (Called 0.967) acre tract and being the Southwest corner of the herein described tract;

THENCE, North 19 deg., 43 min., 40 sec., West, on the Easterly right of way line of said State Highway 87, same being the West line of the (Called 0.967) acre tract, a distance of 25.04' to the POINT OF BEGINNING and containing 0.8163 acre of land, more or less.

TRACT B
0.9677 (CALLED 0.967) ACRE OF LAND
OUT OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122
ABSTRACT NO. 486, JEFFERSON COUNTY, TEXAS

BEING 0.9677 (Called 0.967) acre of land out of and a part of the T. & N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being the same land conveyed to LA Ash, Inc., recorded in File No. 2006050073, Official Public Records, Jefferson County, Texas; said 0.9677 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a ½" steel rod found on the Easterly right of way line of a dedicated road named State Highway 87; said ½" steel rod being the Southwest corner of a (Called 0.85) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records, Jefferson County, Texas; said ½" steel rod being the Northwest corner of the herein described tract;

THENCE, North 68 deg., 20 min., 57 sec., East, on the South line of the (Called 0.85) acre tract, a distance of 79.90' to a 5/8" steel rod found for the Southeast corner of the (Called 0.85) acre tract on the Westerly line of a 100' wide Santa Fe Railroad right of way; said 5/8" steel rod being the Northeast corner of the herein described tract;

THENCE, South 18 deg., 49 min., 54 sec., East, on the Westerly line of said Santa Fe Railroad right of way, a distance of 557.89' to a point for corner being the Northeast corner of a (Called 2.4682) acre tract of land known as Tract 2A conveyed to KMCO, Inc., recorded in File No. 9519107, Official Public Records, Jefferson County, Texas; said point for corner being the Southeast corner of the herein described tract;

THENCE, South 68 deg., 33 min., 43 sec., West, on the North line of said Tract 2A, a distance of 71.17' to a 5/8" steel rod found on the Easterly right of way line of said State Highway 87; said 5/8" steel rod being the Southwest corner of the herein described tract;

THENCE, North 19 deg., 43 min., 40 sec., West, on the Easterly right of way line of said State Highway 87, a distance of 557.06' to the POINT OF BEGINNING and containing 0.9677 acre of land, more or less.

TRACT B-1
5.4431 ACRES OF LAND
OUT OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122
ABSTRACT NO. 486, JEFFERSON COUNTY, TEXAS

BEING 5.4431 acres of land out of and a part of the T. & N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 11.110) acre tract of land conveyed to LA Ash, Inc., recorded in File No. 2006050071, Official Public Records, Jefferson County, Texas; said 5.4431 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a 2" steel pipe found for the Northwest corner of the (Called 11.110) acre tract; said 2" steel pipe being the Southwest corner of a (Called 4.6) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records, Jefferson County, Texas; and being the Northwest corner of the herein described tract;

THENCE, Ref. Line = North 68 deg., 45 min., 52 sec., East, on the South line of the (Called 4.6) acre tract, same being the North line of the (Called 11.110) acre tract, a distance of 732.03' to a 2" steel pipe found for the Northwest corner of a tract of land conveyed to B.J.J. Enterprises, recorded in File No. 2005042372, Official Public Records, Jefferson County, Texas; said 2" steel pipe being the most Northerly Northeast corner of the (Called 11.110) acre tract and Northeast corner of the herein described tract;

THENCE, South 21 deg., 18 min., 41 sec., East, on the Westerly line of said B.J.J. Enterprises tract, a distance of 278.36' to a punch mark found in a fence footing for the Southwest corner of said B.J.J. Enterprises tract; said punch mark being an interior corner of the (Called 11.110) acre tract on the North line of the (Called 5.6672) acre tract of land and water surveyed this date and being the most Easterly Southeast corner of the herein described tract;

THENCE, South 68 deg., 36 min., 54 sec., West, on the North line of the (Called 5.6672) acre tract, a distance of 493.89' to a point for corner for the Northwest corner of the (Called 5.6672) acre tract; said point for corner being an interior corner of the herein described tract;

THENCE, South 21 deg., 23 min., 36 sec., East, on the West line of the (Called 5.6672) acre tract, a distance of 200.91' to a point for corner on the North line of a (Called 1.708) acre tract of land conveyed to KMCO Port Arthur, Inc., recorded in File No. 2006017962, Official Public Records, Jefferson County, Texas; said point for corner being the Southwest corner of the herein described tract;

THENCE, on the North line of the (Called 1.708) acre tract on the arc of a curve to the right having a radius of 500.00', an arc length of 326.11', a chord bearing of North 72 deg., 46 min., 54 sec., West, a chord distance of 320.36' to a ½" steel rod, capped and marked "SOUTEX", found for the Northwest corner of the (Called 1.708) acre tract on the Easterly line of said 100' wide Santa Fe Railroad right of way; said ½" steel rod being the Southwest corner of the herein described tract;

THENCE, North 18 deg., 49 min., 54 sec., West, on the Easterly line of said Santa Fe Railroad right of way line, same being the West line of the (Called 11.110) acre tract, a distance of 281.58' to the POINT OF BEGINNING and containing 5.4431 acres of land, more or less.

Note: This description is based on prior surveys made by Soutex Surveyors, Inc. and does not represent a current field survey.

CES Environmental Services
LS-08-0732
Date 7-22-2008

TRACT "B-2"
DOCK EASEMENT
1.4116 ACRES OF LAND AND WATER FOR EASEMENT PURPOSES
OUT OF THE T. & N. O. R. R. SURVEY, SECTION NO. 122,
ABSTRACT NO. 486, JEFFERSON COUNTY, TEXAS

BEING 1.4116 acres of land and water out of and a part of the T. & N. O. R. R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 11.110) acre tract of land conveyed to L. A. Ash, Inc., recorded in File No. 2006050071, Official Public Records, Jefferson County, Texas; said 1.4116 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a punch mark found in a fence footing for the Southwest corner of a tract of land conveyed to B. J. J. Enterprises, recorded in File No. 2005042372, Official Public Records, Jefferson County, Texas; said punch mark being an angle point on the Northerly line of the (Called 11.110) acre tract; also being on the North line of the herein described tract;

THENCE, North 68 deg., 36 min., 54 sec., East, on the South line of said B. J. J. Enterprises tract, same being the Northerly line of the (Called 11.110) acre tract, a distance of 304.65' passing a ½" steel rod found for reference point; continuing for a total distance of 462.40' to a point for corner in the water of Port Arthur West Turning Basin; said point for corner being the most Northeasterly corner of the (Called 11.110) acre tract and the Northeast corner of the herein described tract;

THENCE, South 42 deg., 56 min., 25 sec., East, on the Easterly line of the (Called 11.110) acre tract, a distance of 300.51' to a point for corner in the water for the Southeast corner of the herein described tract;

THENCE, South 68 deg., 45 min., 58 sec., West, a distance of 179.96' to a point for corner being the most Southerly Southwest corner of the herein described tract;

THENCE, North 21 deg., 23 min., 06 sec., West, a distance of 169.36' to a point for corner being an interior corner of the herein described tract;

THENCE, South 68 deg., 21 min., 51 sec., West, a distance of 30.00' to a point for corner being an exterior corner of the herein described tract;

THENCE, North 21 deg., 23 min., 06 sec., West, a distance of 79.80' to a point for corner being an interior corner of the herein described tract;

THENCE, South 68 deg., 36 min., 54 sec., West, a distance of 807.02' to a point for corner being the most Westerly Southwest corner of the herein described tract;

THENCE, North 21 deg., 14 min., 08 sec., West, a distance of 30.00' to a point for corner being the Northwest corner of the herein described tract;

THENCE, South 68 deg., 36 min., 54 sec., West, a distance of 493.89' to the POINT OF BEGINNING and containing 1.4116 acres of land and water, more or less.

This description is based on prior surveys made by SOUTEX Surveyors, Inc., and does not represent a current field survey.

Anthony M. Leger, Registered Professional Land Surveyor No. 5481
September 22, 2008.

CES Environmental Services
LS-08-0732A

TRACT "B-3"
SCALE EASEMENT
0.0872 ACRE OF LAND OUT OF THE T. & N. O. R. R. SURVEY,
SECTION NO. 122, ABSTRACT NO. 486,
JEFFERSON COUNTY, TEXAS

BEING 0.0872 acre of land out of and a part of the T. & N. O. R. R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 11.110) acre tract of land conveyed to L. A. Ash, Inc., recorded in File No. 2006050071, Official Public Records, Jefferson County, Texas; said 0.0872 acre tract being more fully described by metes and bounds as follows, to wit:

COMMENCING at a punch mark found in a fence footing for the Southwest corner of a tract of land conveyed to B. J. J. Enterprises, recorded in File No. 2005042372, Official Public Records, Jefferson County, Texas; said punch mark being an angle point on the Northerly line of the (Called 11.110) acre tract;

THENCE, North 21 deg., 18 min., 41 sec., West, on the common line of said B. J. J. Enterprises tract and the (Called 11.110) acre tract, a distance of 17.85' to a point;

THENCE, South 68 deg., 41 min., 19 sec., West, a distance of 99.40' to a point for corner for the POINT OF BEGINNING and Southeast corner of the herein described tract;

THENCE, South 68 deg., 36 min., 54 sec., West, a distance of 316.67' to a point for corner being the Southwest corner of the herein described tract;

THENCE, North 21 deg., 14 min., 08 sec., West, a distance of 12.00' to a point for corner being the Northwest corner of the herein described tract;

THENCE, North 68 deg., 36 min., 54 sec., East, a distance of 316.67' to a point for corner being the Northeast corner of the herein described tract;

THENCE, South 21 deg., 14 min., 08 sec., East, a distance of 12.00' to the POINT OF BEGINNING andcontaining 0.0872 acre of land, more or less.

This description is based on prior surveys made by SOUTEX Surveyors, Inc., and does not represent a current field survey.

Anthony M. Leger, Registered Professional Land Surveyor No. 5481
September 22, 2008.

CES Environmental Services
LS-08-0732B

DESCRIPTION OF SERVICES: PLAT & DESCRIPTION ONLY (NO CURRENT FEILD SURVEY)
SURVEYOR'S CERTIFICATION:

The undersigned does hereby certify that this survey was this day 9/22/08 made on the ground of the property legally described hereon and is correct, and that there are no discrepancies, conflicts, shortages of area, boundary line conflicts, encroachments, overlapping of improvements, easements or right of way, except as shown hereon, and that said property has access to and from a dedicated roadway. This survey is certified for this transaction only; it is not transferable to additional institutions or subsequent owners.

ANTHONY M. LEGER
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481

Census Tract: 116
FEMA Flood Zone: B & A11
Community Panel NO.: 485489-0045-E
Panel Date: 4/17/84

SOUTEX
SURVEYORS INC.
3737 DOCTORS DRIVE
PORT ARTHUR, TEXAS 77642
(409) 983-2004 (409) 983-2005

SHEET TITLE
TRACT "A" – 5.6672 ACRES OF LAND & WATER, TRACT "B-2" – (DOCK EASEMENT) 1.4116 ACRES OF LAND & WATER, TRACT "B" (VACANT) – 0.9677 (CALLED 0.967) ACRE OF LAND, TRACT "B-1" 5.4431 ACRES OF LAND, TRACT "B-3" – (SCALE EASEMENT) 0.0872 ACRE OF LAND PART OF THE T. & N.O.R.R. SURVEY, SECTION NO. 122 ABSTRACT NO. 486 JEFFERSON COUNTY, TEXAS

PROJECT
CES ENVIRONMENTAL SERVICES
SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

PROJECT NO: 08-0732
SCALE: 1" = 50'
PRINT DATE: 9/22/08
DRAWN BY: T. CHASE
CHECKED BY: BL
APPROVED BY: AML
SHEET 2 OF 2

EPAHO04400609

8/4/09
D.S.
Between K-2 + wall
#3

EPAHO0440000610

[redacted]

Qatar Gas
Chemical Cln. Waste (streams 1 & 8)

EPAHO04400611

Budgetary Estimate by CES/AKD for Logistics, Transportation, and Disposal of Chemical Cleaning Wastes Generated by QatarGas (Streams 1 and 8)

Basic Project Background:

QatarGas has designated this material as streams 1 and 8. Approximate volumes for this material are expected to be about 2,000 cubic meters. This material comes predominantly from the pre-operational cleaning of boiler systems. The process involves a degreasing step using a surfactant/soap/detergent followed by a rinse, a citric acid stripping step to remove excess iron followed by a rinse, and a passivation step using sodium nitrate/nitrite. The remainder of the volume will be generated from a very similar process in efforts to clean a carbon steel tank/piping system. Most of this material is expected to be generated by the end of January, with some smaller volumes to follow in late March or early April 2008. The material is currently being stored in a near by storm water pond. The material is expected to have a high COD/TOC and contain iron as well as other organic and inorganic salts and small quantities of hydrocarbons.

CES/AKD assume that the storm water pond will be used to store the material until which time the storm water pond is needed for the storage of wastes from streams 7 and 9. CES/AKD would propose to provide (for QatarGas use) 6 on-site iso containers to store this chemical cleaning waste once the pond is required for storage of wastewaters from streams 7 and 9 (Beginning in early to mid March). Our approach would be to provide all the logistics (except the loading at QatarGas) using vacuum trucks/tank trucks to transport the material from QatarGas to a shore tank in UAE (rented by CES/AKD). CES/AKD would use the shore tank in UAE to consolidate the wastes into one bulk shipment to the United States for treatment. It appears that the most economical approach would be to use the bulk shipment method in lieu of using iso containers.

Additional Information required:

CES will require a sample of the waste to be shipped to CES as soon as possible so that the material can be properly analyzed and profiled. CES will also require a very detailed description of the processed to be used, along with Material Safety Data Sheets for all chemicals and contaminants.

Budgetary Estimates:

CES/AKD estimate the total project cost to be around $800,000 US Dollars. The exact costs to QatarGas can be finalized and made firm upon written request.

Streams 1 & 8

60 loads concentrate

other project — Rental & Logistics for Iso containers for interim storage (6 containers) = $25,000

60,000 — Tank Rental in UAE @ 15,000/mo. for 4 months = $60,000

~~Shipping of Approx. 100 Iso containers of waste at about $5,000/ea.~~

90,000 — Trucking approx. 100 loads of waste to UAE port @ $1500/load = $150,000

120,000 — Shipping of Approx 2,000 metric tons of waste to USA = $210,000

20,000 — Tank cleaning in UAE ≈ $20,000

30,000 — Tank Rental & throughput here ≈ $30,000

15,000 — Tank Cleaning Here ≈ $15,000

30,000 — Transportation to CES ≈ $40,000

75,000 — Disposal @ CES ≈ 128,000

$653,000

+ 20% profit 130,000

~~$783,000~~ $800,000

Budget

EPAHO044000613

Gentlemen,

Again, it was definitely a pleasure meeting with you concerning next year's glycol logistics. More importantly, we appreciate the immediate opportunity to bid on the two treatment/disposal projects which have either already kicked off or will begin in the next few months. I just wanted to recap our discussions, detail the assumptions, and list the questions that still need to be addressed.

Concerning the project already in progress:
This material has been designated as streams 1 and 8. Approximate volumes for this material are expected to be about 1,500 to 2,500 cubic meters. This material comes predominantly from the pre-operational cleaning of boiler systems. The process typically involves a degreasing step using a surfactant/soap/detergent followed by a rinse, a citric acid stripping step to remove excess iron followed by a rinse, and a passivation step using sodium nitrate/nitrite. The remainder of the volume will be generated from a very similar process in efforts to clean a carbon steel tank/piping system. Most of this material is expected to be generated by the end of January, with some smaller volumes to follow in late March or early April 2008. The material is currently being stored in a near by storm water pond. The material is expected to have a high COD/TOC and contain iron as well as other organic and inorganic salts and small quantities of hydrocarbons.

CES/AKD assume that the storm water pond will be used to store the material until which time the storm water pond is needed for the storage of wastes from streams 7 and 9. CES/AKD would propose to provide (for QatarGas use) 3 on-site frac tanks to store this chemical cleaning waste once the pond is required for storage of wastewaters from streams 7 and 9 (Beginning in early to mid March). Our approach would be to provide all the logistics (except the loading at QatarGas) using iso containers to load and store the material. The iso containers would be picked up (on chasis or flat bed) and taken to UAE for shipment to CES in the United States for treatment. The most economical approach would be to use the iso containers already on-site (being used for storage of Selexol). CES would pick up the containers from the Port of LaPorte and transport them to our site in Houston. The containers would be emptied, cleaned at CES, and returned to the Leasing company to be taken off lease. If these containers cannot be used, CES/AKD can provide iso containers. The only question that CES/AKD still needs to know is if the Iso containers storing the Selexol would be available for use. Additionally, CES will require a sample of the waste to be shipped to CES as soon as possible so that the material can be properly analyzed and profiled.

Concerning the upcoming pipe degreasing project:
These have been designated as streams 7 and 9. Approximate volumes for this material are expected to be 18,000 to 20,000 cubic meters (the volume will be twice this much when the piping for the additional train comes online). This waste will be derived from the pre-operational degreasing and cleaning of very large carbon steel piping systems. The process will involve the use of alkaline surfactants/soaps/detergents to remove hydrocarbons followed by a rinsing step. The wastewater will then be neutralized. Most of the waste will be generated during the months of March and April 2008. The waste is expected to contain sand and sediment, iron, as well as small quantities of emulsified oils, inorganic and organic salts.

CES/AKD assume that this material will be stored in the storm water pond (currently being used to store streams 1 and 8). CES/AKD must be prepared to treat up to approximately 120,000 us gallons per day in order to accommodate the work which will

be done over a six week period. CES/AKD plan to use an on-site approach to treat the wastewater to discharge standards (to be used for irrigation or dust suppression). The wastewater would be pumped directly to CES filtration and treatment systems. The treated water would be stored in 6, onsite frac tanks (manifolded as two sets of 3 frac tanks each). Treated water would be analyzed in 60,000 gallon batches prior to being discharged. CES/AKD assume that it can pump the treated water directly (via lay down hose) to a nearby drainage system. CES/AKD assume there is sufficient area to set up treatment and storage systems near the storm water pond. CES/AKD assume that all permits for operation, treatment, and discharge can be obtained by QatarGas. CES/AKD will need to ascertain the chemical constituents and analytical methods to be used in testing prior to discharging the treated water.

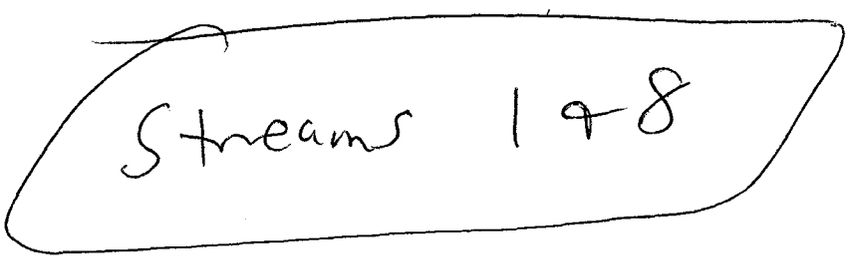
CES/AKD will provide budgetary estimates before the end of this week (no later than Thursday, December 20th). For the project already in progress, CES/AKD could start shipping this material as soon as an agreement is in place (and continue shipping the material as it is generated). We do, however, need to know if the Selexol containers can be utilized as soon as possible. For the larger project, CES/AKD would need to be given some direction quickly as time is definitely of the essence. We look forward to your response.

Regards,

Matt Bowman
President – CES Environmental Services, Inc.

	Cleaning Complete	Discharge	Volume m^3
Boiler #1	26-Nov-07	09-Dec-07	200 (to Storm Pond)
Boiler #2	17-Dec-2007 (Projected)	24-Dec-07	200
Boiler #3	14-Jan-08	21-Jan-08	200
Boiler #4	04-Feb-08	11-Feb-08	200
Boiler #5	25-Feb-08	03-Mar-08	200
Boiler #6	17-Mar-08	25-Mar-08	200
HR9201	01-Apr-08	01-Apr-08	125
HR9202	08-Apr-08	08-Apr-08	125

Note - Boiler #5 and #6 are for train 5, however, it is anticipated that contractor will clean these boilers while he is on site.



CES

Safety Auditor & Inspector
(Non-Management)

General Responsibilities:

- Reports to the **Health, Safety, and Environmental Managers**.
- Perform the Task of Auditing, Monitoring, and Inspecting all Personnel, Contractors, and ensuring Equipment Operating within the Plant occurs in a Safe and Efficient Manner.
- Respect and uphold Company Disciplinary Policy for all **CES Environmental Services, Inc. Employees**.
- Follow all Company Policies outlined in the Universal Employee Mandates.
- Understand and comply with relevant items in the **Standard Operating Procedures Manual** and the **Position Requirements**.

Specific Responsibilities:

- Monitor Plant Personnel and Grounds to ensure Safety Compliance.
- Assist the **Logistics Supervisors** and the **Driver Training Lead Man** in the Safety oversights of the **Drivers**.
- Assist the **Health, Safety, and Environmental Managers** in Safety Training and Development.
- Conduct Job Safety Analysis (JSA) and discuss the findings with the **Field Services Supervisor**.
- Review, propose, and assist in implementing procedures to enhance Plant Safety.
- Ensure all Facility Personnel perform needed Directives issued by the **Upper Level Managers**.
- Oversee/Monitor all Safety Functions during Day Shift. Decisions include referral of Safety Violations to the **Health, Safety, and Environmental Managers** and the **Upper Level Managers** where Violations occur.
- Performs Activities/Task under Direct Supervision of the **Health, Safety, and Environmental Managers**.

Revised: 01/16/2009

Security Technicians
(Non-Management)

General Responsibilities:

- Reports to the **Yard and Facilities Supervisor**.
- Patrol entire yard as continuous as possible to review security, check for spills, and watch for fires.
- Respect and uphold Company Disciplinary Policy for all **CES Environmental Services, Inc. Employees**.
- Follow all Company Policies outlined in the Universal Employee Mandates.
- Understand and comply with relevant items in the **Standard Operating Procedures Manual** and the **Position Requirements**.

Specific Responsibilities:

- Log all Personnel entering and leaving the facility from 9:00 PM to 5:00 AM.
- Check all entrance/exit gates to be sure they are closed and operating properly.
- Check the **Employee Parking Lot** and the **Waste Water Discharge Area** in the North/East corner of the **Employee Parking Lot** for odor and leaks.
- Check all trailers for leaks and make sure all discharge valves have caps and are not leaking. If no caps or the caps are broken or leaking contact the **Maintenance Office**.
- Check dome lids to be sure they are closed and tight.
- Check Frac Tanks and Roll-Off Boxes for leaks and odor.
- Check Roll-Off Boxes at **Drum Warehouse** for hot spots and smoke.
- Check all buildings on **CES Environmental Services, Inc.** Property and the **Oil Facility**.
- Check the fence line around **CES Environmental Services, Inc.** Property and **Wayland Street** Property.
- Check the yard on **Wayland Street** and all buildings. Make sure all entrance/exit gates are closed and locked.
- Check Refuel Driver to be sure no trucks were over filled, no fuel spills, make sure all equipment is fueled, and get mileage off the trucks.
- Pick up any trash while making yard check.
- Turn Security Logs into the **Yard and Facilities Supervisor** to review and turn Mileage Logs into the **Director of Maintenance and Inventory**.
- Turn in Visitor Logs and Fuel Tickets daily to the **Vice President of Operations and Maintenance**.
- Report any potential security issues to the **Yard and Facilities Supervisor**.
- In case of emergency, notify the **Yard and Facilities Supervisor** and/or the **Vice President of Operations and Maintenance** and be prepared to notify emergency agencies.
  Note: Below is the **Call List:**
  - Loren Thomas 281-798-4430
  - Karl Guidry 832-287-0862

- Clint Hopkins 832-298-9726
- Joe Camp 713-367-8601
- Greg Bowman 713-419-6076
- Matt Bowman 713-826-1329
- Steve Stricker 281-433-7052
- Ryan Thomas 281-610-5621

- Any questions call the **Yard and Facilities Supervisor**.

Revised: 01/23/2009

CES Company Policy

THINK... USE GOOD JUDGMENT	CES Environmental Services, Inc.	***YOUR ATTITUDE COUNTS***
Date Issued: 10/23/2006	DEPARTMENT(S): -Operations -Processing -Maintenance and Field Services -Sales, Finance, and Administration	Revised Date: 01/28/2009
Policy Number: 06-007	Policy Title: Facility Parking and Entry for Visitors, Contractors, Subcontractors, and Delivery Personnel	Policy Description: Designates Parking and methods of entry for Visitors, Contractors, Subcontractors, and Delivery Personnel. Also, provides a system (to be used by CES Environmental Services, Inc. Employees) for Entry Management.

1) **Visitors** entering the Plant to deliver and/or pick-up Waste/Product to/from the **Main Processing Facility** and/or the **Hydrocarbon Processing Facility** must enter the Plant at **Gate 3**, using **Call Box 3**. These **Visitors** will check in at the **Main Processing Facility**.

2) Other large truck traffic entering the Plant to make a delivery must enter through **Gate 3**, using **Call Box 3**. The **Driver** making the delivery must sign in at the **Main Office**, at the **Reception Counter**, using the CES Visitor Sign In Sheet. The **Yard and Facilities Supervisor** should immediately be called to the **Reception Counter** to meet and receive all materials delivered by any truck traffic.

3) Standard Daily Deliveries (such as **FedEx**, **US Mail**, **Office Depot**, Uniform Company, Safety Supplies, etc.) will be permitted to enter through **Gate 2** and are not required to sign in at the **Main Office**. If applicable, the **Yard and Facilities Supervisor** must be immediately contacted to receive and store the incoming items.

4) **Contractors** and **Subcontractors** must park in the area designated for **Visitor Parking** and enter through **Gate 1**, using **Call Box 1** unless they are planning to do work for which they require their vehicle inside the Plant. If the **Contractor** and/or **Subcontractor** must enter the Plant with their vehicle, they must enter the Plant through **Gate 2**, using **Call Box 2**. In either case, the **Visitor** must sign in at the **Main Office** using the CES Visitor Sign In Sheet (as above described). The **Yard**

and Facilities Supervisor and/or appropriate **CES Environmental Services, Inc. Liaison** must be contacted to meet the **Visitor** and direct them to the proper work location.

Note: The **Yard and Facilities Supervisor** and/or **CES Environmental Services, Inc. Liaison** must ensure the **Visitor** has the proper Personal Protective Equipment (PPE) appropriate to the work location he/she will be visiting. Reference CES for Policy on CES Environmental Services, Inc. Personal Protective Equipment Policy.

In the event the **Yard and Facilities Supervisor** and the appropriate **CES Environmental Services, Inc. Liaison** is not available, then the **CES Environmental Services, Inc. Employee** at the **Reception Counter** will try and contact another **CES Environmental Services, Inc. Employee** who could assist with the **Visitors** need.

All **Visitors** should be escorted to the **Waiting Area** where the **Yard and Facilities Supervisor** and/or the appropriate **CES Environmental Services, Inc. Liaison** will greet them.

5) All other **Visitors** must park in the area designated for **Visitor Parking** and enter through **Gate 1**, using **Call Box 1**, and sign in at the **Main Office** as above described. The **CES Environmental Services, Inc. Employee** at the **Reception Counter** should contact the appropriate **CES Environmental Services, Inc. Liaison** to greet the **Visitor**.

All **Visitors** should be escorted to the **Waiting Area** where the appropriate **CES Environmental Services, Inc. Liaison** will greet them.

6) Entry Management System

The following procedures should be used by to manage **Visitor** entry into the Plant:

a) The **CES Environmental Services, Inc. Employee** answering the phone (from a **Call Box**) should:

1. First determine if the **Visitor** is trying to make entry through the proper **Gate** by asking the **Visitor** which **Gate** and **Call Box** they are calling from, their name, their company name, the reason for their visit, and the proper **CES Environmental Services, Inc. Point of Contact** (if applicable).

2. If the **Visitor** is entering through the proper **Gate** (as above described in 1-5), the **Visitor** should be appropriately instructed and admitted into the Plant.

3. If the **Visitor** is attempting to enter through the wrong **Gate** or make an unauthorized entry, the **Visitor** should be instructed appropriately (as above detailed in 1-5).

Standard Operating Procedure

THINK... USE GOOD JUDGMENT	CES Environmental Services, Inc.	***YOUR ATTITUDE COUNTS***
Date Issued: 10/07/2006	DEPARTMENT(S): -Operations -Processing -Maintenance and Field Services -Sales, Finance, and Administration	Revised Date: 11/18/2008
Policy Number: 06-010	SOP Title: Flow of Essential Operating Paperwork for Maintenance	SOP Description: Defines the systems and procedures associated with the Flow of Essential Operating Paperwork for Maintenance.

1) The **Maintenance Personnel** include the following **CES Environmental Services, Inc. Employees**: The **Vice President of Operations and Maintenance**, the **Director of Maintenance and Inventory**, the **Maintenance and Inventory Supervisor**, the **Facility Maintenance Lead Man**, the **Lead Mechanic**, the **Mechanics**, the **Parts and Inventory Assistant**, the **Facility Maintenance Technicians**, the **Lead Electrician**, and the **Electricians**.

   The **Maintenance Personnel** are responsible for Maintenance and Repair on the following:

   a) Any Numbered, Mobile Piece of Equipment or Item;
   b) Any Numbered, Stationary Piece of Facility Equipment or Facility Item;
   c) Any Non-Numbered, Stationary Facility Equipment or Facility Item. Such Equipment or Items must be associated with Process or Operational Activities.

2) The **Yard and Facilities Supervisor** shall be responsible for Repair of any Non-Numbered, Stationary Facility Equipment or Facility Items that are not associated with Process or Operational Activities. Such Equipment or Items will be Ancillary to and Supportive of Process and Operational Activities.

3) The Equipment and Facility Work Orders located on the **Shared Drive** within the **Forms and Logos Folder** are the primary piece of Essential Operating Paperwork for Maintenance and Repair Activities and should be used for Completion of any Maintenance or Repair work done on any **CES Environmental Services, Inc.** Property. The Equipment and Facility Work Orders located on the **Shared Drive** within the **Forms and Logos Folder** shall be initiated by only ~~the following **CES Environmental Services, Inc. Employees** or Source Document:~~ CES Maintenance Personnel

EPAHO044000624

a) The **President**, the **Vice President of Operations and Maintenance**, the **Vice President of Accounting, Finance, Sales, and Administration**, the **Director of Field Services**, the **Director of Maintenance and Inventory** or the **Maintenance and Inventory Supervisor** (for purposes of this SOP, collectively hereinafter referred to as **Management**).
b) **Maintenance Personnel.**
c) The **Yard and Facilities Supervisor.**
~~d) The Vehicle Inspection Report (VIR).~~
~~e) The Container Inspection Form.~~

d) These may indicate that a work order needs to be initiated and this initiation will be by Scott and/or Maint. & Inv. SPVSR.

Note: Other **CES Environmental Services, Inc. Employees** who deem Repairs necessary should Report the Item to their **Supervisor** or **Department Manager**.

4) The Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder** initiated by the **Vice President of Operations and Maintenance**, the **Director of Maintenance and Inventory** or the **Maintenance and Inventory Supervisor** (for work to be completed by the **Maintenance Personnel**) shall be assigned to the **Maintenance Personnel** and placed in the Box in the **Dispatch Office** Titled **Completed Driver Vehicle Inspection Report and Roll Off/Tote Container Inspection Report**.~~

Discuss Work orders In General Here and what inbexes to put in (see * below) These usually initiated by mgmt. or other Maint. personnel

The Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder** initiated by any other **CES Environmental Services, Inc. Employees**~~ due to VIR's or Container Insp. Frms. (for work to be completed by the **Maintenance Personnel**) will be started ~~and immediately placed in~~ due to checking the Box in the **Dispatch Office** Titled **Completed Driver Vehicle Inspection Report and Roll Off/Tote Container Inspection Report**. These work Orders will be removed by the **Director of Maintenance and Inventory** or the **Maintenance and Inventory Supervisor** on a Daily Basis, and assigned to the **Maintenance Personnel**, and then placed in the Inbox Titled **Incomplete Work Orders** in either the **Fleet Maintenance and Equipment Office** for any Numbered, Mobile Piece of Equipment or Item; or the **Maintenance Repair Inspection Office** for any Numbered, Stationary Piece of Facility Equipment or Facility Item.

These will initiate work orders when equip. is Broken.

*

The Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ initiated by any **CES Environmental Services, Inc. Employees** authorized to initiate the Order (for work to be completed by the **Yard and Facilities Supervisor**) shall initiate the Order and place it in the **Main Office** in the Inbox Titled **Incomplete Facility and Equipment Work Orders (for Yard and Facilities Supervisor)**. The **Yard and Facilities Supervisor** shall check this Inbox each Day so the work may be assigned and/or subcontracted.

5) During and after the course of all Repair work, all Subcontracted Repair Tickets and Bills must be placed in the **Main Office** in the **AR/AP Office** in accordance with Standard Operating Procedure ~~on Purchase Order Request Form~~ (see SOP manual)

6) Throughout the Process of Maintenance and Repair (for work done by the **Maintenance Personnel**), the **Maintenance and Inventory Supervisor** and/or Director of Maint. and Inventory shall be in charge of maintaining all records associated with the Maintenance and Repair work.

The **Maintenance and Inventory Supervisor** and/or Director shall do this by working with other **Maintenance Personnel** to maintain records of Time Spent working on the Repair and by affixing all associated Subcontractor Bills, Parts Bills, etc. to the appropriate Equipment and Facility Work Order ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~. When the Job is Completed, the **Maintenance and Inventory Supervisor** shall place the Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ and associated Bills, Purchase Order Request Forms, etc. in the Inbox Titled **Complete Work Orders** in either the **Fleet Maintenance and Equipment Office** for any Numbered, Mobile Piece of Equipment or Item; or the **Maintenance Repair Inspection Office** for any Numbered, Stationary Piece of Facility Equipment or Facility Item. At least Once per Day, the **Maintenance and Inventory Supervisor** and/or Director shall remove Completed Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ (and attached paperwork) from the **Complete Work Orders Boxes** and enter all Information concerning Repairs, Costs, etc. in the **Access Maintenance Database**. The Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ (and paper trail associated) should then be place in the in either the **Fleet Maintenance and Equipment Office** for any Numbered, Mobile Piece of Equipment or Item; or the **Maintenance Repair Inspection Office** for any Numbered, Stationary Piece of Facility Equipment or Facility Item will be Inbox Titled **Entered and Complete Equipment and Facility Work Orders**. These Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ (and associated paperwork) will then be Filed in the appropriate **Equipment Folder** located at either the **Fleet Maintenance and Equipment Office** for any Numbered, Mobile Piece of Equipment or Item; or the **Maintenance Repair Inspection Office** for any Numbered, Stationary Piece of Facility Equipment or Facility Item. File cabinets and Name exactly

* Internal Labor must be billed off set rates as/ and derived on shared drive. Parts & materials billed at cost

For Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ to be completed by the **Yard and Facilities Supervisor**, all Subcontracted Bills/Tickets will be processed in accordance with the Standard SOP's for P.O.s (see SOP manual) ~~Operating Procedure on Purchase Order Request Form~~. Time spent on the associated Repair shall be kept and appended. This documentation shall be kept and maintained (by the **Yard and Facilities Supervisor**) in the Inbox Titled **Incomplete Equipment and Facilities Work Orders (for Yard and Facilities Supervisor)** until the Order is Complete. When the Order is Complete, the **Yard and Facilities Supervisor** will appropriately enter the Repair in the **Access Database** and place all the documentation in the **Main Office** in the **Health, Safety, and Environmental Manager's Office** in the Inbox Titled **Complete CES Equipment and Facility Work Orders**. The **Health, Safety, and Environmental Manager** will then ensure the proper Filing of the Paperwork in the **Equipment and Maintenance Files**.

* Internal Labor must be billed off set rates as/and defined on shared drive. Parts + materials billed at cost.

It is the responsibility of the **Maintenance and Inventory Supervisor**, the **Yard and Facilities Supervisor**, and the **Director of Maintenance and Inventory** to ensure the Equipment and Facility Work Orders ~~located on the **Shared Drive** within the **Forms and Logos Folder**~~ are properly filled out and captures all Cost and Labor associated with the Job. This is the Source Document that will be used to allocate Cost by Classification and/or Department. ~~Each~~ at month's end, Grey and/or controller will pull Throughout month and Work order copies from Internal Work order Journal Entries and do Quick book Journal entries to shift and appropriate costs. The work order copies will then be disposed.

Use work order copy only

Also must Address external work, use Job folders, and enter Job in Access as a Job → Scott and/or Jim spoor. to put price + txt box of Job Detail

for internal work (Lara, Scott, and Mark & Jim. Spoor. must bill/justify Document all Labor, parts, materials costs and submit to Department Director for which work was done. Dept. Director to review for accuracy then place the work order copy in an inbox in office of Grey Allred

11 Internal Work Order Journal Entries

PROPRIETARY and CONFIDENTIAL
Property of CES Environmental Services, Inc.

CES Environmental Services, Inc.

Equipment and Facility Work Order

Unit: _____ Date: _____ Miles: _____

Company Owned ☐ Yes ☐ No Bill To: _____

Job #	Description Of Repairs				
1		TW		DRM	
2		FS		DSP	
3		Trans		REC	
4		MRI		PA	
5					

Job #	Work Code		Maint Item	Work Performed	Tech	Hours	Labor $	Parts $	Total Cost

Parts

Job #	Part Description/Sublet	Part Number/Sublet	Qty	Cost	Ext Cost

Reviewed By: _____ Data Input By: _____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

EPAHO04400627

Standard Operating Procedure

THINK... USE GOOD JUDGMENT	CES Environmental Services, Inc.	***YOUR ATTITUDE COUNTS***
Date Issued: 10/16/2006	DEPARTMENT(S): -Operations -Processing -Maintenance and Field Services -Sales, Finance, and Administration	Revised Date: 12/05/2008
SOP Number: 06-011	SOP Title: New Hire and Termination Process for Employees	SOP Description: Defines the necessary procedures for Hiring and Terminating Employees.

1 Purpose

This Standard Operating Procedure (SOP) describes the process for Hiring New **Employees**, ensuring each **Employee** is correctly Trained, and getting Information to the correct Departments. This SOP also describes the proper procedures for Terminating Employment.

All Personal Information related to the New Employee is highly confidential and is to be given only to authorized CES Environmental Services, Inc. Employees who require this Information to perform their Job.

2 New Hire Process

Only the **President**, **Vice Presidents**, and **Directors** may Hire New **Employees**. With the exception of a Direct Hire from the **President**, the **Vice President of Accounting, Finance, Sales, and Administration** must approve all New Hires prior to an offer being made to the prospect. The Request needs to be made on an Employee Requisition Form (ERF), located on the **Shared Drive** within the **Forms and Logos Folder**. Once an Employee Requisition Form, located on the **Shared Drive** within the **Forms and Logos Folder** has been filled out, it is considered CONFIDENTIAL.

Note: If the Position is a New Position, a New Position Posting (detailing Responsibilities) must be created and submitted with the Employee Requisition Form, located on the **Shared Drive** within the **Forms and Logos Folder**.

Reference the CES Environmental Services, Inc. New Hire Process Flow Chart immediately following this Section.

A. The **Upper or Mid Level Manager** will submit the Employee Requisition Form, located on the **Shared Drive** within the **Forms and Logos Folder** to the **Human Resources and Support Services Supervisor** for processing.
   - The Employee Requisition Form is housed on the **Shared Drive** within the **Forms and Logos Folder**.
   - The Employee Requisition Form, located on the **Shared Drive** within the **Forms and Logos Folder** should be completed in full with the **President** or **Vice President of Accounting, Finance, Sales, and Administration's** signed approval.
   - A detailed Job Description should be attached to the Employee Requisition Form, located on the **Shared Drive** within the **Forms and Logos Folder**.
     - If requesting to Hire for a New Position, the **Upper or Mid Level Manager** must work with the **Systems Analysis and Quality Control** to set up the Position Posting and add it to the Organizational Chart.

B. The **Human Resources and Support Services Supervisor** will begin the Recruiting Process.
   - All Management Positions and Non-Management Positions will be Posted Internally. The Postings will be located in each **CES Break Room** on the **Employee Notice Board**.
   - Depending on the need, the **Human Resources and Support Services Supervisor** will use a variety of Recruiting Resources, which include Job Boards, Career Fairs, **Employee** Referrals, and Walk Ins to find qualified Candidates.
     - If Management is interested in a particular Candidate, they will refer them to the **Human Resources and Support Services Supervisor** to conduct an Initial Phone Screen.

C. The **Human Resources and Support Services Supervisor** will conduct the Initial Phone Screens.

D. The **Human Resources and Support Services Supervisor** will Pass Screened Candidates to the Requesting **Upper or Mid Level Manager** for review.

E. The Requesting **Upper or Mid Level Manager** will select Candidates to Interview.
   - The Requesting **Upper or Mid Level Manager** will provide feedback to the **Human Resources and Support Services Supervisor** within Two Days of Candidate Submittal.
   - The Requesting **Upper or Mid Level Manager** will provide the **Human Resources and Support Services Supervisor** with Two Dates and Times

where they would be available to Interview with the requested Candidate(s).
- The Requesting **Upper or Mid Level Manager** will inform the **Human Resources and Support Services Supervisor** of who will be conducting the Interview.
  - At least Two People should be involved in the Interview Process.
    - The Requesting **Upper or Mid Level Manager** and the **Human Resources and Support Services Supervisor.**
    - An **Upper Level Manager** and the Requesting **Upper or Mid Level Manager.**

F. The **Human Resources and Support Services Supervisor** will Schedule Phone or In Person Interview(s) accordingly.
- A Phone Interview should be conducted on all the **Upper Level Management** Candidates prior to inviting them for an In Person Interview.
- The **Human Resources and Support Services Supervisor** will send a Confirmation Email to the Candidate Confirming the Date and Time of their Scheduled Interview; and will Cc the Requesting **Upper or Mid Level Manager** and the **Administrative Assistants-General.**

G. Interviews are conducted.
- The **Administrative Assistants-General** will have the Candidate Fill out an Employment Application, located on the **Shared Drive** within the **Forms and Logos Folder** prior to the Interview.
- The Employment Application, located on the **Shared Drive** within the **Forms and Logos Folder** and Resume of the Candidate will be given to the **Upper or Mid Level Manager** conducting the Interview.
- After the Interview, the Employment Application, located on the **Shared Drive** within the **Forms and Logos Folder** and Resume are immediately returned to the **Human Resources and Support Services Supervisor** where it will be Filed under the appropriate **Position Title File** within **File Cabinet C** located in the Lower Left File Drawer of the **Human Resources and Support Services Supervisor's** Desk.
- Feedback is given to the **Human Resources and Support Services Supervisor** within Two Business Days following the Interview.

H. If a Candidate is not selected, Steps B-G will be repeated.

I. If a Candidate is selected.
- The Requesting **Upper and Mid Level Managers** along with the **Human Resources and Support Services Supervisor** will discuss the Offer to be submitted.
  - Compensation
  - Vacation Allowance

- Desired Start Date
  - Ensure that the Requesting **Upper or Mid Level Manager**, the **Health, Safety, and Environmental Manager**, and the **Human Resources and Support Services Supervisor** will be available on the Desired Day to conduct New Hire Orientation and Safety Training. The HR New Hire Orientation Checklist and the Safety New Hire Orientation Checklist can be found on the **Shared Drive** within the **Forms and Logos Folder** under the **New Hire Forms Folder**.
- Start Date Itinerary
- Schedule
- Station
  - If Office Space or Furniture is required, the **President** must give approval before assigning or buying.

o The **Human Resources and Support Services Supervisor** will conduct Reference Checks.
- If References are unfavorable, the **Human Resources and Support Services Supervisor** will present Reference Data to the Requesting **Upper or Mid Level Manager** who will decide if the Hiring Process will be continued.

o The **Human Resources and Support Services Supervisor** will extend Verbal Offer and send a Copy of the Offer Letter, located on the **Shared Drive** within the **Forms and Logos Folder** to the selected Candidate via Email or Mail.
- A Template of the Offer Letter will be kept on the **Shared Drive** within the **Forms and Logos Folder**, Pass Word Protected for the **Upper or Mid Level Managers** and the **Human Resources and Support Services Supervisor** Access Only.

J. Upon Acceptance of the Offer.

o The **Human Resources and Support Services Supervisor** will Schedule a time for the Candidate to complete their New Hire Paperwork.
- The New Hire Paperwork is kept on the **Shared Drive** within the **Forms and Logos Folder**, **New Hire Forms Folder** or within **File Cabinet C** located in the Lower Left File Drawer of the **Human Resources and Support Services Supervisor's** Desk. It will include the following Forms:
  - Offer Letter
  - New Hire Approval Form
  - Employment Application
  - Resume
  - W-4 Form
  - I-9 Form
  - New Hire Uniform Agreement

- Cell Phone Policy
- Fair Credit Report Act Disclosure Statement
- Drug and Alcohol Test Consent
- Emergency Contact Form
- Employee Confidentiality and Non-Compete Agreement
- Employee Acknowledgement of Workers Compensation Network
- Notification of Employment to State of Texas
- 8850 Tax Credit Form
- Universal Employee Mandates Form
- Communications and Information User Agreement Form

- The **Human Resources and Support Services Supervisor** will then refer the Candidate to **Concentra** for Pre-Employment Screening and run a Background Screen via **Lee Trans**.
  - For **DOT Regulated Drivers**, the following Screens will apply:
    - Drug Test, DOT Physical, and Respirator Fit Test.
    - Criminal Background Screen and Motor Vehicle Records (MVR).
  - For **Office Personnel**, the following Screens will apply:
    - Drug Test and Physical.
    - Criminal Background Screen.
  - For all others, the following Screens will apply:
    - Drug Test, Physical, and Respirator Fit Test.
    - Criminal Background Screen.
- The Drug Screen and Physical Results are reported to the **Health, Safety, and Environmental Managers**, who in turn provide the Results and Reports to the **Human Resources and Support Services Supervisor** for Filing in **File Cabinet B** located next to the **Human Resources and Support Services Supervisor's** Desk in the Top Drawer (outside of **Driver Employees**).
  - These Reports are Filed in **File Cabinet B** located next to the **Human Resources and Support Services Supervisor's** Desk in the Top Drawer.

K. Once the Candidate has cleared the Pre-Employment Screening and Background Screen, the **Human Resources and Support Services Supervisor** will File the Results in the **Employee File** within **File Cabinet B** located to the Left of the **Human Resources and Support Services Supervisor's** Desk and will send a Welcome Package to the New **Employee**.
   - Welcome Package
     - Welcome Letter
       - Requested Start Date and Time
       - Report to Information
       - First Day Itinerary
     - Benefit Package

L. The **Human Resources and Support Services Supervisor** will notify the **Office Supervisor** of the New Hire via Email.

M. The **Office Supervisor** will provide the **Human Resources and Support Services Supervisor** with a Time Card for the New **Employee**.

N. The **Human Resources and Support Services Supervisor** will enter the **Employee** related Information into **QuickBooks** and File the Newly Hired **Employee's** Employment Application and New Hire Paperwork in **File Cabinet A** located behind the **Vice President of Accounting, Finance, Sales, and Administration's** Desk.

O. The **Director of Logistics and Customer Service** will set up Computer Pass Codes, Email, and Phone System (whichever is applicable).

P. The **Human Resources and Support Services Supervisor** and the Requesting **Upper or Mid Level Manager** will conduct Orientation (please review the HR New Hire Orientation Checklist and the Safety New Hire Orientation Checklist which can be found on the **Shared Drive** within the **Forms and Logos Folder** under the **New Hire Forms Folder**.).
    - Human Resource Training will include the following:
        - All Personnel
            - Harassment Training

Q. The **Health, Safety, and Environmental Manager** conducts the Safety New Hire Orientation Checklist which can be found on the **Shared Drive** within the **Forms and Logos Folder** under the **New Hire Forms Folder** appropriate for the Position. If applicable, review the Policy on New Hire Policy for Department of Transportation Regulated Drivers and will give the Newly Hired **Employee** a tour of the Plant.
    - The Safety New Hire Orientation Checklist will include the following:
        - **Office Personnel**, the following will apply:
            - Right to Know
            - Personal Protective Equipment
            - Contingency Plan
        - **Field Service**, **Tank Wash**, **Processing**, **Maintenance**, and **Facility Personnel**, the following will apply:
            - Right to Know
            - Confined Space
            - Protective Personal Equipment
            - Forklift
            - Respiratory Protection
            - Contingency Plan
            - SPCC Plan

- **Drivers**, the following will apply:
  - Road Test
  - Right to Know
  - Confined Space
  - Protective Personal Equipment
  - Respiratory Protection
  - Hours of Service
  - RCRA Job Specific
  - Contingency Plan
  - SPCC Plan
- All Training will be documented and placed in the appropriate Employee Safety File, located in **Safety Training File Cabinet** within the **Health, Safety, and Environmental Manager's Office**.
- The **Health, Safety, and Environmental Manager** will also create a **Driver Qualification Folder** for all **Drivers**. The **Driver Qualification Folder** is located in the **Driver Qualification File Cabinet** within the **Health, Safety, and Environmental Manager's Office**.

R. The **Health, Safety, and Environmental Manager** will input the Safety New Hire Orientation Checklist Information into the **CES Access Database**. The **Health, Safety, and Environmental Manager** will issue the New Hire the appropriate Safety Equipment and document it on the Employee Safety Supply List located in the **Health, Safety, and Environmental Manager's Office** to be placed in the **Employee Safety File**, located in **Safety Training File Cabinet**.

Also, the **Health, Safety, and Environmental Manager** will have the New Hire (for **Drivers**, **Field Service**, **Tank Wash**, **Processing**, **Maintenance**, and **Facility Personnel** Positions) fill out an Emergency Contact Form that includes Uniform Sizes to be placed in the **Employee Safety File**, located in **Safety Training File Cabinet** within the **Health, Safety, and Environmental Manager's Office**.

S. The **Health, Safety, and Environmental Manager** will then release the New **Employee** to the **Upper Level Manager** of the Department that the New **Employee** is working in.

Note: Supervisors, **Managers**, and **Directors** should not allow **Employees** to start working until after they have completed this process. Any deviation from this procedure requires the approval from the **President** or **Vice President of Accounting, Finance, Sales, and Administration**.

T. The Hiring **Upper Level Manager** will coordinate with the **Yard and Facilities Supervisor** to obtain the New **Employee** a Locker and Key to the Building; and with the **Human Resources and Support Services Supervisor** to obtain a

Company Cell Phone (if applicable). Reference the Policy on Company Cell Phones.

U. The Hiring **Upper Level Manager** will then ensure that the New **Employee** is Trained on all Policies and all Standard Operating Procedure's relevant to the New **Employee** Position Responsibilities, Universal Employee Mandates Position. A current Position Training Packet for each Position Responsibility will be kept in the **Vice President of Accounting, Finance, Sales, and Administration's Office** within **File Cabinet A**. A Copy of this should be signed and placed in the **Employee File** located in **File Cabinet A** behind the **Vice President of Accounting, Finance, Sales, and Administration's** Desk. The New **Employee** should keep the Position Training Packet for study and future reference. Once all the above has been completed, the New **Employee** should begin on the Job Training.

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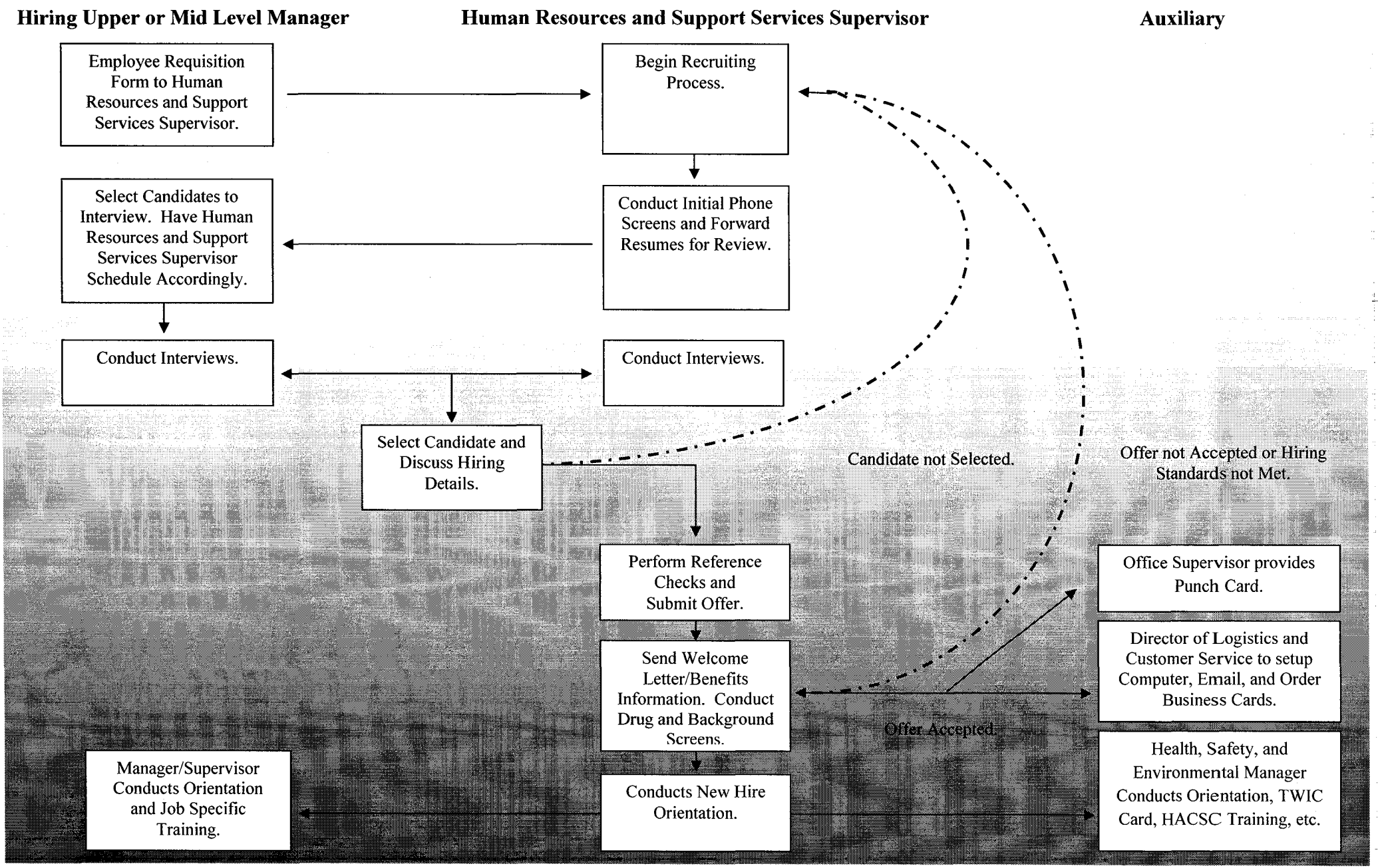
CES Environmental Services, Inc. New Hire Process Flow Chart



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3 Termination Process

As there are several circumstances under which Employment Termination can take place, the following Standard Operating Procedure (SOP) will contain Subsections describing the processes involved in each Form of Termination. Reference the CES Environmental Services, Inc. Termination Process Flow Chart immediately following this Section. The Subsections will be reviewed as follows:

Section 1. Type A Termination: Voluntary Resignation Known to **CES Environmental Services, Inc.**
Section 2. Type B Termination: Voluntary Resignation Unknown to **CES Environmental Services, Inc.**
Section 3. Type C Termination: Involuntary Resignation Known to **Employee.**
Section 4. Type D Termination: Involuntary Resignation Unknown to **Employee.**

1. Subsection 1. Type A Termination: Voluntary Resignation Known to **CES Environmental Services, Inc.**

   A. The Resigning **Employee** will inform their immediate **Supervisor** or **Manager** of his or her desire to Terminate their Employment with **CES Environmental Services, Inc.**
      - The Resignation should be provided in Written Format (Electronically or via Hard Copy) and include the signature of the Resigning **Employee.**

   B. If the first line of reporting is to a **Mid Level Manager**, the **Mid Level Manager** will then Report the Resignation to the Next Level of Management for their Department (e.g. the **Mid Level Manager** will Report the Resignation to their corresponding **Upper Level Manager**), and the **Human Resources and Support Services Supervisor.**
      - The corresponding **Supervisor** or **Manager** can Report the Resignation to the appropriate parties by either forwarding the Resignation Letter via Email or presenting the Resignation Letter in person. The **Human Resources and Support Services Supervisor** must receive an Original Copy of the Resignation Letter (Hard or Soft Copy).
      - The Resignation Letter will then be Filed in the **Employee's Personnel Folder** located in **File Cabinet A** behind the **Vice President of Accounting, Finance, Sales, and Administration's** Desk.

   C. The **Upper and Mid Level Manager** will discuss at this time if they will seek to Back Fill the Resigning **Employee's** Position.
      - If the Position is to be filled, the **Mid Level Manager** will complete an Employee Requisition Form found on the **Shared Drive** in the **Forms and Logos Folder.**
      - The New Hire Process will then be followed as outlined in the Section 2 of this Document.

D. The **Human Resources and Support Services Supervisor** will Schedule an Employee Exit Interview with the Resigning **Employee** on his or her Last Day of Employment.
   - On the Final Day of Employment, the Resigning **Employee's Personnel Folder** will be relocated to **File Cabinet B** Next to the **Human Resources and Support Services Supervisor's** Desk in the Fourth Drawer from the Top.
   - The following Tasks will take place during the Employee Exit Interview.
     - The **Employee** will complete an Employee Exit Interview Form, located on the **Shared Drive** in the **Forms and Logos Folder**.
     - The **Employee** will turn in Uniforms, Company Cell Phone, Gate Opener, Punch Card (and any other Company Property) if applicable.
     - The **Employee** will be provided a COBRA Packet (if applicable).

E. The **Human Resources and Support Services Supervisor** will complete the following Tasks on or within 2 Days of the **Employee's** Last Day of Employment with **CES Environmental Services, Inc.**
   - Inform the **Office Supervisor** that the Resigning **Employee** will be Terminating their Employment with **CES Environmental Services, Inc.**
   - Input Termination Information for the Resigning **Employee** into **QuickBooks**.
   - Inform all **Company Sponsored Benefit Providers**, applicable to the Resigning **Employee**, of his or her Termination via Online Reporting, Phone, Fax or Email.
     - Medical: **Aetna**: www.aetnaezenroll.com.
     - Dental/Vision: **Dental Select**: www.dentalselect.com.
     - Life/ADD: **Lincoln Life**: www.jpfic.com.
     - **Aflac**: Contact Jeanette McCormick.
     - **401k**: www.pai.com.
   - Report Termination to any garnishing Agencies applicable to the Resigning **Employee**.

F. The **Office Supervisor** will distribute the Resigning **Employee's** Final Paycheck on the Next Pay Cycle.

2. Subsection 2. Type B Termination: Voluntary Resignation Unknown to **CES Environmental Services, Inc.**
(e.g. No Call, No Show, Failure to Report, Resignation Called In, etc.)

A. The Resigned **Employee's Mid Level Manager** will Report the Resignation to the Next Level of Management for their Department (e.g. the **Mid Level Manager** will Report the Resignation to their corresponding **Upper Level Manager**), and the **Human Resources and Support Services Supervisor**.

B. The **Upper and Mid Level Manager** will discuss at this time if they will seek to Back Fill the Resigning **Employee's** Position.
   - If the Position is to be Filled, the **Mid Level Manager** will complete an Employee Requisition Form found on the **Shared Drive** within the **Forms and Logos Folder**.
   - The New Hire Process will then be followed as outlined in the Section 2 of this Document.

C. The **Human Resources and Support Services Supervisor** will contact the Resigned **Employee** to obtain Company Property if not previously surrendered.
   - If no contact is made or if the **Employee** fails to oblige, a Certified Letter Titled Retrieval of Company Property, located on the **Shared Drive** within the **Forms and Logos Folder** and it will be Mailed to the **Employee** informing him or her that a Police Report will be Filed in order to retrieve Company Property.
   - If the **Employee** does not respond in Five Days, a Police Report will be Filed with the **Harris County Police Department**.

D. The **Human Resources and Support Services Supervisor** will complete the following Tasks on or within 2 Days of the **Employee's** Last Day of Employment with **CES Environmental Services, Inc.**
   - Inform the **Office Supervisor** that the Resigning **Employee** has Terminated their Employment with **CES Environmental Services, Inc.**
   - Input Termination Information for the Resigning **Employee** into **QuickBooks**.
   - Inform all **Company Sponsored Benefit Providers**, applicable to the Resigning **Employee**, of his or her Termination via Online Reporting, Phone, Fax or Email.
     - Medical: **Aetna**: www.aetnaezenroll.com.
     - Dental/Vision: **Dental Select**: www.dentalselect.com.
     - Life/ADD: **Lincoln Life**: www.jpfic.com.
     - **Aflac**: Contact Jeanette McCormick.
     - **401k**: www.pai.com.
   - Report Termination to any garnishing Agencies applicable to the Resigning **Employee**.
   - Relocate **Employee's Personnel Folder** to **File Cabinet B** next to the **Human Resource and Support Services Supervisor's** Desk in the Fourth Drawer from the Top.
   - COBRA Packet will be Mailed to the Resigned **Employee** (if applicable).
   - The **Office Supervisor** will distribute the Resigning **Employee's** Final Paycheck on the Next Pay Cycle.

3. Subsection 3. Type C Termination: Involuntary Resignation-Lay Off.

A. **Upper Level Manager** and the **Human Resources and Support Services Supervisor** will consult with a contracted **Labor Attorney** to discuss proper procedures for conducting a Lay Off.

B. A Lay Off Plan will be formulated and communicated to the **Mid Level Managers**.
   - The Lay Off Plan should include the following:
     - Consensus and Comprehensive Documentation outlining the reason for the Employment Reduction.
     - The Number of **Employees** to be Laid Off.
     - The process of who will be Laid Off.
     - The Time Line for Completion of Lay Offs.
     - Continued Benefit Coverage or Severance Pay to be issued (if applicable).
     - Process of Communicating the Lay Off to all and affected **Employees**.

C. Universal Communication regarding the plan to Lay Off **Employees** will be issued or presented.

D. Affected **Employees** will be informed of the decision to Terminate their Employment according to the Lay Off Plan details.
   - Affected **Employees** will be informed of their Employment Termination in a private setting by their corresponding **Mid Level Manager**, **Upper Level Manager**, and **Human Resources and Support Services Supervisor**.

E. The **Human Resources and Support Services Supervisor** will Schedule an Employee Exit Interview with the **Employee** to be Laid Off on his or her Last Day of Employment.
   - On the Final Day of Employment, the Terminated **Employee's Personnel Folder** will be relocated to **File Cabinet B** next to the **Human Resources and Support Services Supervisor's** Desk in the Fourth Drawer from the Top.
   - The following Tasks will take place during the Employee Exit Interview.
     - The **Employee** will complete an Employee Exit Interview Form. This Document can be found on the **Shared Drive** in the **Forms and Logos Folder**.
     - The **Employee** will turn in Uniforms, Company Cell Phone, Gate Opener, Punch Card (and any other Company Property) if applicable.
     - The **Employee** will be provided COBRA Packet (if applicable).

F. The **Human Resources and Support Services Supervisor** will complete the following Tasks on or within 2 Days of the **Employee's** Last Day of Employment with **CES Employment Services, Inc.**

- Inform the **Office Supervisor** that the Resigning **Employee** will be Terminating their Employment with **CES Employment Services, Inc.**
- Input Termination Information for the Resigning **Employee** into **QuickBooks**.
- Inform all **Company Sponsored Benefit Providers**, applicable to the Resigning **Employee**, of his or her Termination via Online Reporting, Phone, Fax or Email.
  - Medical: **Aetna**: www.aetnaezenroll.com.
  - Dental/Vision: **Dental Select**: www.dentalselect.com.
  - Life/ADD: **Lincoln Life**: www.jpfic.com.
  - **Aflac**: Contact Jeanette McCormick.
  - **401k**: www.pai.com.
- Report Termination to any garnishing Agencies applicable to the Resigning **Employee**.

G. The **Office Supervisor** will distribute the Resigning **Employee's** Final Paycheck Six Days from the Date of Termination.

4. Subsection 4. Type D Termination: Involuntary Resignation Unknown to **Employee**.

A. Initiating **Upper and/or Mid Level Manager** will consult with the **Human Resources and Support Services Supervisor** before moving forward with Terminating any **Employee**.
   - All applicable Information regarding the **Employee** to be Terminated should be reviewed. This may include some or all of the following. This is not an exhaustive list.
     - **Employee's Personnel Folder** located in **File Cabinet A** behind the Desk of the **Vice President of Accounting, Finance, Sales, and Administration**.
       1. Previous Performance Reviews.
       2. Documented Warnings or Suspensions.
       3. Documentation of Violations of Company Policies.
     - Current Performance and/or Behavior.
     - Log of Absenteeism or Tardiness if available.
   - **Upper Level Manager** will make a Final Decision whether or not to move forward with the **Employee's** Termination.
     - The following items should be discussed prior to carrying out the Termination.
       1. Expected Last Day of Employment if Termination is not immediate.
       2. If the Position will be Back Filled.

B. The initiating **Mid Level Manager** will Draft a Memo outlining the reason for the **Employee's** Termination.

C. As determined by Management (**Mid Level Management**, **Upper Level Management**, and **Human Resources and Support Services Supervisor**), the initiating **Mid Level Manager** (and/or Initial Hiring **Manager**) along with the **Human Resources and Support Services Supervisor** will conduct the Termination Meeting.
   - The Memo outlining the reason for the **Employee's** Termination will be presented by the **Mid Level Manager** or Initial Hiring **Manager**.
   - The **Employee** will be given an opportunity to respond and/or discuss grievances.

D. The **Human Resources and Support Services Supervisor** will Schedule an Employee Exit Interview with the Terminated **Employee** on his or her Last Day of Employment.
   - The following Tasks will take place during the Employee Exit Interview.
     - The **Employee** will complete an Employee Exit Interview Form. This Document can be found on the **Shared Drive** in the **Forms and Logos Folder**.
     - The **Employee** will turn in Uniforms, Company Cell Phone, Gate Opener, Punch Card (and any other Company Property) if applicable.
   - **Employee** will be provided COBRA Packet (if applicable).

E. On the Final Day of Employment, the Terminated **Employee's Personnel Folder** will be relocated to **File Cabinet B** next to the **Human Resources and Support Services Supervisor's** Desk in the Fourth Drawer from the Top.

F. The **Human Resources and Support Services Supervisor** will complete the following Tasks on or within 2 Days of the **Employee's** Last Day of Employment with **CES Environmental Services, Inc.**
   - Inform the **Office Supervisor** that the Resigning **Employee** will be Terminating their Employment with **CES Environmental Services, Inc.**
   - Input Termination Information for the Resigning **Employee** into **QuickBooks**.
   - Inform all **Company Sponsored Benefit Providers**, applicable to the Resigning **Employee**, of his or her Termination via Online Reporting, Phone, Fax or Email.
     - Medical: **Aetna**: www.aetnaezenroll.com.
     - Dental/Vision: **Dental Select**: www.dentalselect.com.
     - Life/ADD: **Lincoln Life**: www.jpfic.com.
     - **Aflac**: Contact Jeanette McCormick.
     - **401k**: www.pai.com.
   - Report Termination to any garnishing Agencies applicable to the Resigning **Employee**.
   - The **Office Supervisor** will distribute the Resigning **Employee's** Final Paycheck Six Days from the Date of Termination.

CES Environmental Services, Inc. Termination Process Flow Chart

Voluntary Resignation Known To CES Environmental Services, Inc.	Voluntary Resignation Unknown To CES Environmental Services, Inc.	Involuntary Resignation-Lay Off	Involuntary Resignation Known To CES Environmental Service, Inc. Employee
CES Environmental Services, Inc. Employee Submits Resignation Letter to their immediate Supervisor or Mid Level Manager of their corresponding Department.	Mid Level Manager informs Upper Level Manager and the Human Resources and Support Services Supervisor of Employee Resignation. Determine if Position will be back Filled.	Upper Level Manager will Consult with a Labor Attorney and the Human Resources and Support Services Supervisor to discuss Lay Off Decision and Process.	Mid Level and/or Upper Level Manager will Consult with the Human Resources and Support Services Supervisor Prior to Terminating any Employee.
Mid Level Manager forwards the Resignation Letter to Upper Level Manager and Human Resources and Support Services Supervisor. Determine if Position will be Back Filled.	Employee is Contacted in Order to Retrieve Company Property. If Company Property is not returned, a Police Report is Filed.	Mid Level Manager and then all Employees are Informed of Company's Decision to Lay Off Personnel.	Mid Level Manager will Draft the Termination Memo to be Given to the Employee and Filed in Their Personnel Folder.
Human Resources and Support Services Supervisor conducts Employee Exit Interview. Company Property are Retrieved and COBRA Information is Provided.	Human Resources and Support Services Supervisor Completes Termination Process. Director of Logistics and Customer Service Removes Computer Access.	Termination and Employee Exit Interview is Conducted by Mid or Upper Level Manager and Human Resources and Support Services Supervisor. Company Property are Retrieved.	Mid Level Manager and/or Upper Level Manager, along with the Human Resources and Support Services Supervisor, Conduct Termination Meeting.
Human Resources and Support Services Supervisor Completes Termination Process. Director of Logistics and Customer Service Removes Computer Access.	Payroll Distributes the Final Paycheck on the Next Scheduled Pay Day.	Human Resources and Support Services Supervisor Completes Termination Process. Director of Logistics and Customer Service Removes Computer Access.	Human Resources and Support Services Supervisor Conducts Employee Exit Interview. Company Property are Retrieved.
Payroll Distributes the Final Paycheck on the Next Scheduled Pay Day.		Payroll Distributes Final Pay Check Within Six Days.	Human Resources and Support Services Supervisor Completes Termination Process. Director of Logistics and Customer Service Removes Computer Access.
			Payroll Distributes Final Pay Check Within Six Days.

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CES Environmental Services, Inc.

Employee Requisition Form

Job Title:	**Department:**
Report To:	**Department Manager:**
Number of Positions to Fill:	
Comments: (Please provide additional Comments to be used in conjunction with the Job Description found on the Shared Drive)	
Anticipated Start:	
Schedule:	**Lunch:**
Pay Scale:	
New Position ☐	**Replacement Position** ☐
Internal Post ☐	**External Post** ☐ **Both** ☐
Requisition Purpose:	**Growth** ☐ **Turnover** ☐ **Project** ☐
Submitted By:	**Print:** **Date:**
Upper Level Management Approval:	**Print:** **Date:**
Human Resource Department Use	
Company Hire:	**Temp Hire:**
Name:	**Name:**
Date Posted:	**Bill Rate:**
Date Offer Accepted:	**Start Date:**
Start Date:	**Recruiting Firm:**

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

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CES ENVIRONMENTAL SERVICES, INC.

EMPLOYMENT APPLICATION

Equal Opportunity Employer

POSITION APPLYING FOR

Position: _____

Date Available: _____

How did you hear about this Position? _____

_____

_____

- Complete this Application in its entirety.
- Type or Print in Blue or Black Ink.
- Specify the Position for which you are applying.
- Sign your Name on the back of the Application. All Information provided is subject to Verification.
- Applications that are not completed in their entirety will not be considered for Employment reasons.
- **Note:** You may be required to complete a Post-Offer Medical Examination and/or Drug Screen as a condition of Employment.
- Applications for Employment are retained in CES Environmental Services, Inc. Active File for 60 Days only.
- Applicants must reapply after that time if they are interested in specific posted openings.

Personal Information

Name _____ Social Security Number _____

Other Names Used _____

City _____ County _____ State _____ Zip Code _____

Home Phone _____ Business Phone _____ Cell Phone _____

Email Address _____

If you have lived at your Current Address for Less Than Seven Years, please provide Previous Address(es):

_____

_____

Are you Seeking Full-Time Position ☐ Part-Time Position ☐ Temporary Position ☐

When will you be available for Employment? _____

Will you Travel? Yes ☐ No ☐ Relocate? Yes ☐ No ☐

Indicate any Travel or Relocation Limitations: _____

Are you at least 18 Years of Age? Yes No

Are you currently authorized to work in the United States? Yes ☐ No ☐

Have you ever worked for or applied for work at CES Environmental Services, Inc. previously? Yes ☐ No ☐

If Yes, When, What Position, and for Which Department? _____

Do you have any Relatives working for CES Environmental Services, Inc.? Yes ☐ No ☐

If Yes, please state Name and Relationship: _____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

Personal Information (*Continued from First Page*)

Do you have a Pending Criminal Charge against you and/or have you ever been Convicted of a Crime, excluding Misdemeanors and Offenses which have been Annulled, Expunged or Sealed by the Court?
Yes ☐ No ☐ If Yes, please explain below. You may attach another Sheet if necessary. **Note:** A Conviction Record will not automatically Bar Employment with CES Environmental Services, Inc.

Nature of Charge Disposition Date

Nature of Charge Disposition Date

Education

School	Address	Study	Dates	Graduate?	Degree
High School					
College/University					
Business School					
Other					

Job Related Skills, Training and/or Qualifications

Please list any Job related Skills, Certifications or Training you have:

What Language(s) do you Speak?

At what Proficiency Level?

Military Service History

Are you currently or have you been a Member of the U.S. Armed Forces? Yes No
If so, which Branch of Service? Army ☐ Navy ☐ Air Force ☐ Marines ☐ Coast Guard ☐
What was your Discharge Status? Honorable ☐ Other Than Honorable ☐

Service Entry Date Discharge Date

Comments (Note any Special Training or Recognition received):

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

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List each Position held, starting with your most recent. Account for all periods of time, including Full-Time, Part-Time, and Temporary Employment as well as periods of Unemployment. List the Duties you performed and identify Product Lines, Processes, Equipment, Materials, and Financial Responsibilities. Please use additional paper if necessary.

Previous Employment

Name of Present or Previous Employer _____ / to / Dates (Month/Year)

Starting Title _____ Present/Last Title _____ Starting Pay _____ Ending Pay _____

Supervisor _____ Supervisor's Title _____ Phone _____

Address _____ City _____ State _____ Zip Code _____

Duties _____

Reason for Leaving _____

May we Contact this Employer? Yes ☐ No ☐

Previous Employment

Name of Present or Previous Employer _____ / to / Dates (Month/Year)

Starting Title _____ Present/Last Title _____ Starting Pay _____ Ending Pay _____

Supervisor _____ Supervisor's Title _____ Phone _____

Address _____ City _____ State _____ Zip Code _____

Duties _____

Reason for Leaving _____

May we Contact this Employer? Yes ☐ No ☐

Previous Employment

Name of Present or Previous Employer _____ / to / Dates (Month/Year)

Starting Title _____ Present/Last Title _____ Starting Pay _____ Ending Pay _____

Supervisor _____ Supervisor's Title _____ Phone _____

Address _____ City _____ State _____ Zip Code _____

Duties _____

Reason for Leaving _____

May we Contact this Employer? Yes ☐ No ☐

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

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References (Please list Three References)

Name Relationship

Title Telephone # Work Home

Name Relationship

Title Telephone # Work Home

Name Telephone # Work Home

Title Relationship

Authorization for Background Check

As part of our procedure for Processing your Employment Application and determining your eligibility for a Position with CES Environmental Services, Inc., Criminal Records and other Background Checks may be obtained regarding you for Employment purposes. I hereby Consent to and Authorize CES Environmental Services, Inc. or its Designated Agent to obtain One or More Consumer/Investigative Reports in connection with my Application for Employment. Such Reports may include, but are not limited to Information regarding my Criminal Record, Driving Record, Credit, Employment History, and Performance or other Investigative Reports, from such Agencies which may include, but are not limited to, Criminal Records Search Agencies and Consumer Information/Credit Bureaus.

I acknowledge that I have read the Information contained on this Form carefully and Certify that all of the Information on the attached Data Sheet and in my Application for Employment are true and complete to the best of my knowledge. I also hereby release CES Environmental Services, Inc. and its Officers, Directors, Shareholders, Employees, and other Agents and all other Persons, Companies, Schools, Consumer Information Agencies, Records Search Firms and other Entities of and from any and all potential liability arising from inquiries by CES Environmental Services, Inc. and its Agents in connection with the Background Checks and/or Compilation or use of such Reports regarding me.

Signature: Date:

Printed Name:

Acknowledgements

I certify that all the Information contained in this Application (and/or accompanying Resume, if any) is true and correct. It is understood and agreed that any misrepresentation made in this Application (and/or accompanying Resume) will be sufficient cause for separation from CES Environmental Services, Inc. if I have been Employed. Furthermore, I understand that I am free to Resign at any time, and CES Environmental Services, Inc. reserves the right to Terminate my Employment at any time, with or without notice, and that no Representative of CES Environmental Services, Inc. has the authority to make assurances to the contrary. Further, I understand that neither this Application nor any Handbook for Employees is intended to be or shall be construed to be an offered Contract or a Contract between CES Environmental Services, Inc. and any of its Employees. If Employed by CES Environmental Services, Inc., I agree to conform to the Company's Policies and Procedures. I acknowledge and understand that I am Required to Sign the Universal Mandates Acknowledgement upon Hire.

Date: Signature:

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

DOT Regulated Positions

If you are applying for a Position that is governed by DOT Regulation, please complete the following Information.

Social Security Number_____ Driver License Number_____ State_____

Name as it appears on your License_____

_____

Please Print any other Names you have used

Gender Male ☐ Female ☐
Race Asian ☐ Black (Non-Hispanic) ☐ Hispanic White ☐ Other ☐

Have you applied to or been Employed with a Department of Transportation (DOT) Regulated Employer(s) in a Safety Sensitive Position during the Two Years prior to the Date of this Application or Transfer? Yes ☐ No ☐

If Yes, please complete Section A of this Application. If No, please Sign below.
I hereby Certify that the Information set forth in this Application is true and may be verified. I understand that Falsified Statements or Omissions from this Form shall be considered sufficient reason for Rejection of my Application for Employment. If already Employed, such Falsification shall be considered sufficient cause for Dismissal.

Signature: _____ Date: _____

SECTION A

Please list all DOT Regulated Employers you have either applied to or been Employed with in a Safety Sensitive Position during the Two Years prior to this Date of Application:

_____
Company Name
_____
Address
_____
Phone Position Dates of Employment

_____
Company Name
_____
Address
_____
Phone Position Dates of Employment

_____
Company Name
_____
Address
_____
Phone Position Dates of Employment

Please turn this Page over to complete Section Two of this Application.

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

DOT Regulated Positions (*Continued*)

Have you Violated any of the DOT Drug/Alcohol Violations listed below with any DOT Regulated Employer(s) that you have either applied to or been Employed with during the past Two Years prior to the Date of this Application?

DOT Drug/Alcohol Violations
1. Alcohol Test with a result of .04 or Higher Alcohol Concentration.
2. Verified Position Drug Test.
3. Refusals to be Tested (including Verified Adulterated or Substituted Drug Results).
4. Other Violations of DOT Agency Drugs and Alcohol Testing Regulations.

Yes ☐ No ☐

If Yes, please complete Section B of this Application. If No, please Sign below.

Signature: _____ Date: _____

SECTION B

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

I hereby Certify that the Information set forth in this Application is true and may be verified. I understand that Falsified Statements or Omissions from this Form shall be considered sufficient reason for Rejection of my Application for Employment. If already Employed, such Falsification shall be considered sufficient cause for Dismissal.

Signature: _____ Date: _____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

Reference Verification: Authorization for Release of Information DOT Regulated Positions

This Section to be completed by prospective Employer and Signed by the Applicant.

Employee Printed or Typed Name: _____

Employee SS or ID Number: _____

I hereby authorize the release of Information from my Department of Transportation regulated Drug and Alcohol Testing Records by my previous Employer(s). This release is in accordance with DOT Regulation 49 CFR Part 40, Section 40.25. I understand that Information to be released is limited to the following DOT Regulated Items:

- **Alcohol Tests with a result of 0.04 or Higher.**
- **Verified Position Drug Tests.**
- **Refusals to be Tested.**
- **Other Violations of DOT Agency Drug and Alcohol Testing Regulations.**
- **Information obtained from previous Employers of a Drug and Alcohol Rule Violation.**
- **Documentation if any, of completion of the return to Duty Process following a Rule Violation.**

Employee Signature: _____ **Date:** _____

Prospective Employer:

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Office: 713-676-1460
Fax: 713-676-1676
Attn: Human Resource

Previous Employer Name: _____

Address: _____

_____

Phone: _____ **Fax:** _____

This Section to be completed by the Previous Employer and Transmitted by Mail or Fax to Prospective Employer.

1. **Did the Employee have Alcohol Tests with a result of 0.04 or Higher?**
2. **Did the Employee have verified Position Drug Tests?**
3. **Did the Employee Refuse to be Tested?**
4. **Did the Employee have other Violations of DOT Agency Drug and Alcohol Testing Regulations?**
5. **Did a previous Employer Report a Drug and Alcohol Rule Violation to you?**
6. **If you answered "Yes" to any of the above Items, did the Employee complete the return to Duty Process?**

NOTE: If you answered "Yes" to Item 5, you must provide the previous Employer's Report. If you answered "Yes" to Item 6, you must also Transmit the appropriate return to Duty Documentation (e.g. follow up Testing Record).

Name of the Person providing the Verification Information: _____

Title: _____ **Phone:** _____

Date: _____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

Reference Verification: Authorization for Release of Information
Non-DOT Regulated Positions

This Section to be completed by prospective Employer and Signed by the Applicant.

Employee Printed or Typed Name: _____

Employee SS or ID Number: _____

I hereby consent to and authorize CES Environmental Services, Inc. or its designated Agent to obtain One or More Consumer/Investigative Reports in connection with my Application for Employment. Such Reports may include, but are not limited to Information regarding my Criminal Record, Driving Record, Credit, Employment History, and Performance or other Investigative Reports, from such Agencies which may include, but are not limited to, Criminal Records search Agencies and Consumer Information/Credit Bureaus. I acknowledge that I have read the Information contained on this Form carefully and Certify that all of the Information on the attached Data Sheet and in my Application for Employment are true and complete to the best of my knowledge. I also hereby release CES Environmental Services, Inc. and its Officers, Directors, Shareholders, Employees, and other Agents and all other Persons, Companies, Schools, Consumer Information Agencies, Records Search Firms and other Entities of and from any and all Potential Liability arising from inquiries by CES Environmental Services, Inc. and its Agents in connection with the Background Checks and/or compilation or use of such Reports regarding me.

_____
Signature Date

_____
Printed Name

Prospective Employer:

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Office: 713-676-1460
Fax: 713-676-1676
Attn: Human Resource

Previous Employer Name: _____

Address: _____

_____

Phone: _____ **Fax:** _____

This Section to be completed by the Previous Employer and Transmitted by Mail or Fax to Prospective Employer.

1. **Please verify Dates of Employment**_____**Title**_____
2. **Please provide Description of Duties**_____
3. **Was this Employee timely and dependable?** Yes ☐ No ☐ **Honest?** Yes ☐ No ☐
4. **Is this Employee eligible for Rehire?** Yes ☐ No ☐

Name of the Person providing the Verification Information: _____

Title: _____ **Phone:** _____ **Date:** _____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

CES Environmental Services, Inc.

HR NEW HIRE ORIENTATION CHECKLIST

Employee: _____
Date: _____

		DISCUSSED & COMPLETED
1. FACILITY & STAFF ORIENTATION		*Manager's Initial*
Company Overview		
Tour of Front Office, Introduction to Office Team Members, and discuss Company History.		
2. NEW HIRE PAPERWORK AND POLICY OVERVIEW		*Manager's Initial*
Complete all New Hire Paperwork		
Benefits		
Review and Enrollment		
• Medical/Vision/Dental • 401K • Life • Aflac		
3. TRAINING		*Manager's Initial*
Ensure employee receives		
• Harassment Training (Include Video Training Materials)		
4. ADDITIONAL RESPONSIBILITIES		*Manager's Initial*
Provide Cell Phone (if applicable)	IMEI	

Note: Upon completion, the Original should be Filed in the **Employee's Personnel File** located in **File Cabinet A** behind the Desk of the **Vice President of Accounting, Finance, Sales, and Administration.**

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder within the New Hire Forms Folder.

CES Environmental Services, Inc.

SAFETY NEW HIRE ORIENTATION CHECKLIST

Employee: _____
Date: _____

	DISCUSSED & COMPLETED
1. FACILITY & STAFF ORIENTATION	*Manager's Initial*
Company Overview	
Safety to provide a Tour of the Plant.	
2. TRAINING	*Manager's Initial*
Ensure Employee Receives:	
• Job Specific Video Training. • Safety Manual/Handbook. • Hazard Communication Manual.	

Note: Upon completion, the Original should be forwarded to the **Human Resources and Support Services Supervisor** for Filing in the **Employee's Personnel File** located in **File Cabinet A** behind the Desk of the **Vice President of Accounting, Finance, Sales, and Administration**.

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder within the New Hire Forms Folder.

4904 Griggs Road, Houston, TX 77021; Phone: (713)-676-1460; Fax: (713)-676-1676

Enter Date Here

Job Offer to Mr./Mrs. _____

Dear _____,

This confirms the offer we made to you verbally for the position of _____ for CES Environmental Services, Inc. The Base Salary is $_____ annually (less taxes), individual monthly sales commissions (for sales people only), plus _____of monthly distributed profits paid on first dollar of profit (Net Income less investment in land, plant, and equipment). Our offer also includes one week of paid vacation during the first calendar year. As a member of CES Environmental Services, Inc. you are also eligible for a number of benefits including life, medical, dental, vision, and cancer insurance plans. You will also have a cellular phone and an expense account.

In accordance with our Drug Free Workplace Policy, this offer is contingent upon you passing the pre-employment drug test. Please contact Mrs. Anissa Wright at 713-676-1460 for information on the closest drug-testing site.

Life at CES Environmental Services, Inc. is fun, exciting, challenging, and rewarding. I know you want to make an impact. The role we are asking you to accept is extremely important and will offer tremendous opportunities to contribute to the success of our organization. With the financial stability of our company and the continued plans for growth, we feel that CES Environmental Services, Inc. provides excellent opportunities for you.

We want you to begin full-time employment at the earliest possible date; therefore, projected start is Enter Day/Date Here. We look forward to your arrival. If you have any questions, please feel free to contact me at work (713-676-1460), home (281-225-2225) or mobile (713-826-1329).

Sincerely,

Matt Bowman
President & Owner
CES Environmental Services, Inc.

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

CES Environmental Services, Inc.

EMPLOYEE EXIT INTERVIEW

Name: _____ Date: _____

We would appreciate your taking the time to answer the following questions as honestly as possible. Your Individual Responses are treated as Confidential, and will not become part of your Personnel File. We believe that the Information is of vital importance and will assist in Analyzing the Factors attributing to turnover. Thank you for your cooperation.

1. What did you like most about your Job and/or the Company?

2. What did you like Least about your Job and or the Company?

3. Did you know what was expected of you at work?

4. Did you have the Materials and Equipment to do what you did best every day?

5. In a typical Week, did you receive recognition or praise for doing good work?

6. Did your Supervisor, or someone at work, seem to care about you as a Person?

7. Was there someone at work who encouraged your development?

8. At work, did your Opinions seem to count?

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

9. Did the Mission/Purpose of the Company make you feel your Job was Important?

10. Were your Co-Workers committed to doing Quality Work?

11. Did you have a Best Friend at work?

12. In the last Six Months, has someone at work talked to you about your progress?

13. This last year, have you had opportunities at work to learn and grow?

14. What does your New Job Offer that your Job with us does not (if applicable)?

15. Would you recommend working at Company to a Friend? If not, why?

16. What are the Three (or more) most important changes you would recommend for your Department/this Organization to make it better?

17. Are there any other Benefits you feel should have been offered? __Yes __No

If "Yes," what?_____

18.Any other Comment? _____

_____

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

CES Environmental Services, Inc.

Date: xx/xx/xxxx

Attn: John/Jane Smith
123 Stone St.
Houston, TX 77777

Re: Retrieval of Company Property

Dear Mr. or Ms. Smith,

This letter is to inform you that several attempts have been made to contact you in order to retrieve the Company issued Equipment and/or Uniforms you still possess. These items include the following:

_____	Cell Phone		
_____	Gate Opener		
_____	Uniform	Type_____	Number____
_____	Other	Item_____	Number____

Please be advised that this communication will serve as our Final attempt to collect these items without Legal Enforcement. Should we not recover these items within the next Five Business Days (or make other arrangements to do so), they will be reported as Stolen and Law Enforcement will be engaged.

If you have any questions or concerns regarding this information, please do not hesitate to give me a call at 713-676-1460.

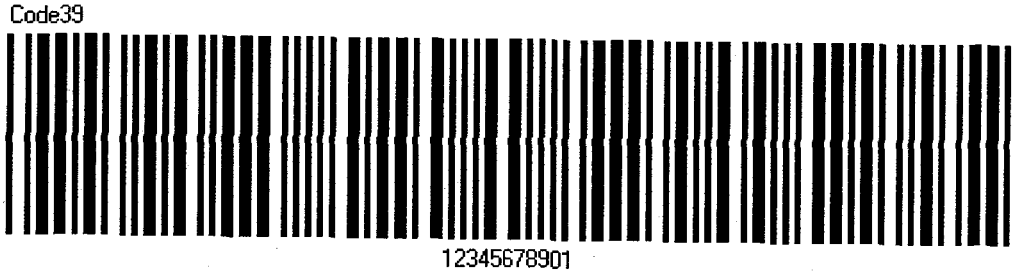
Thank you,

Anissa Wright
Human Resources and Support Services Supervisor
CES Environmental Services, Inc.

Note: This Form can be found on the Shared Drive under the Forms and Logos Folder.

Document Break

Code39



STEPHEN DICKER
79440
MAIN/ROOM K/K-2 #2

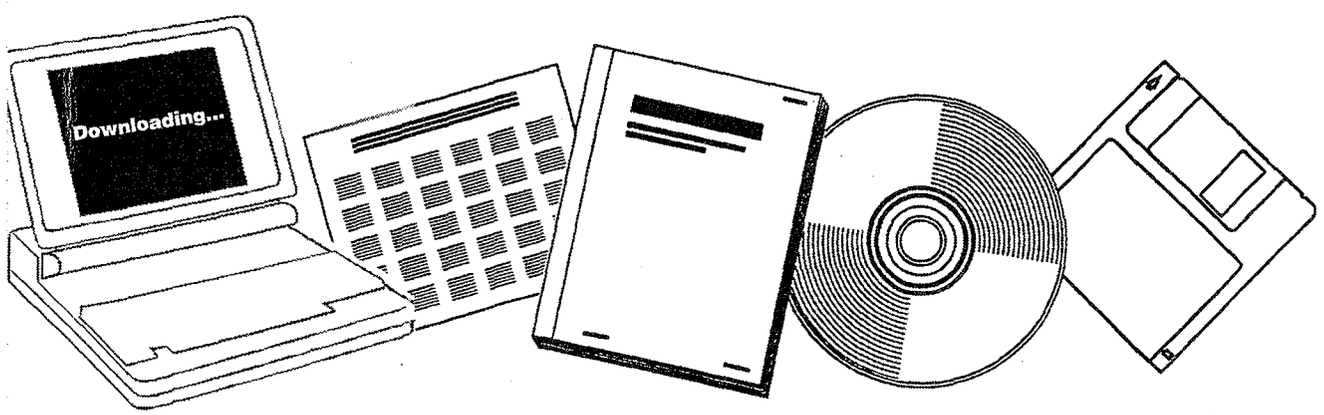
PB80221005

NTIS
One Source. One Search. One Solution.

A METHOD FOR DETERMINING THE COMPATIBILITY OF HAZARDOUS WASTES

CALIFORNIA DEPT. OF HEALTH SERVICES,
BERKELEY

APR 1980



U.S. Department of Commerce
National Technical Information Service

EPAHO044000660

U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Technical Information Service
Springfield, VA 22161 (703) 605-6000

PB80221005

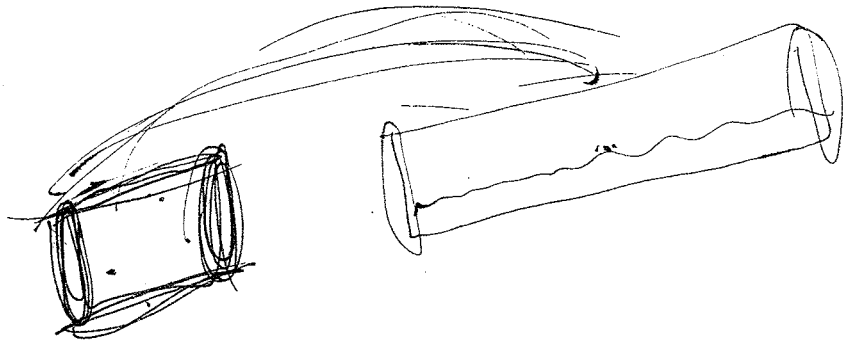
PO

BIN: M18 07-25-05
INVOICE: 1441411
SHIPTO: 1*980009
PAYMENT: CSH*CP

EPAHO044000661

CONSTRUCTION

EPAHO04400662



3,573,000

16,761,600

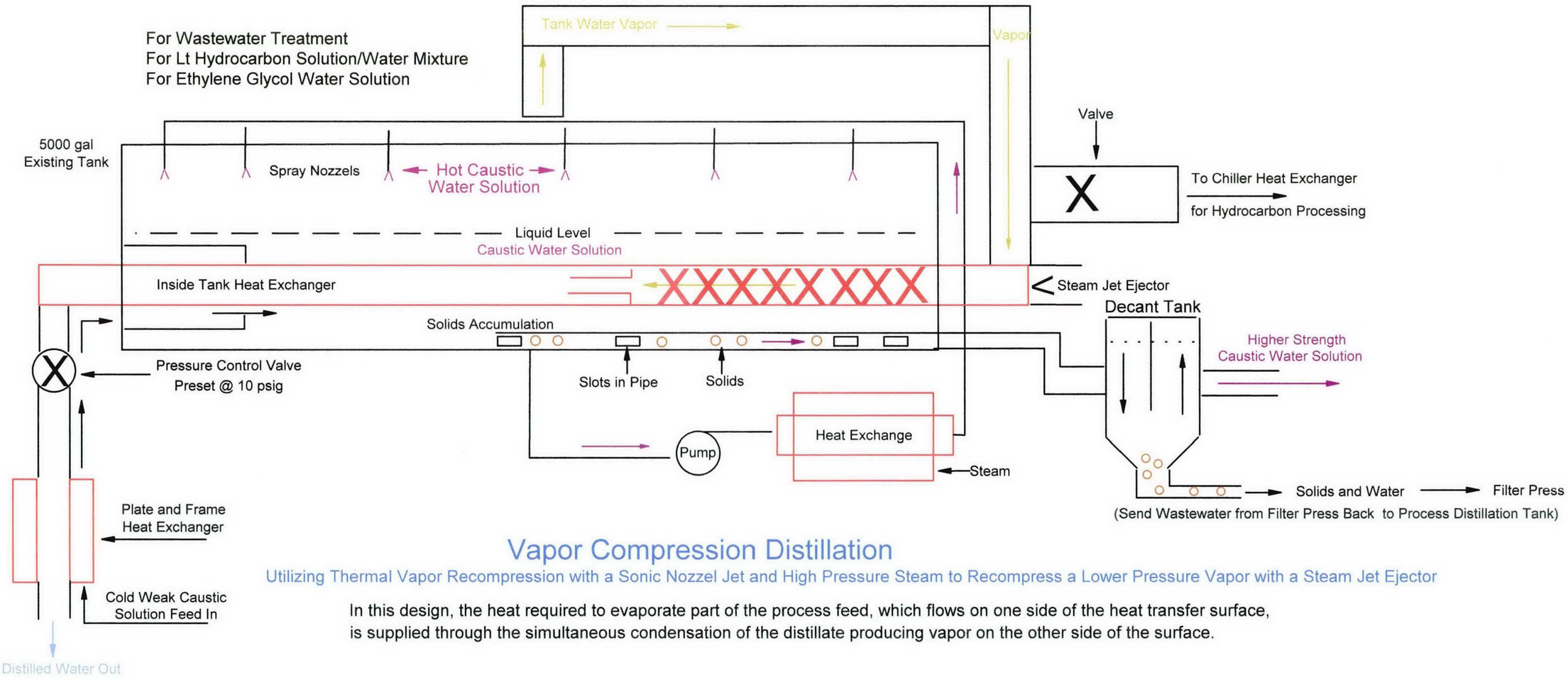
$265 ea.
Julie Ayala

B2-260
7621
Mike Green
Don Wilcox

4,490,000

CES ENVIRONMENTAL
LIQUID CONCENTRATOR

Multi Liquid Concentrator
for
Caustic Water Solution
November 5, 2007



Vapor Compression Distillation

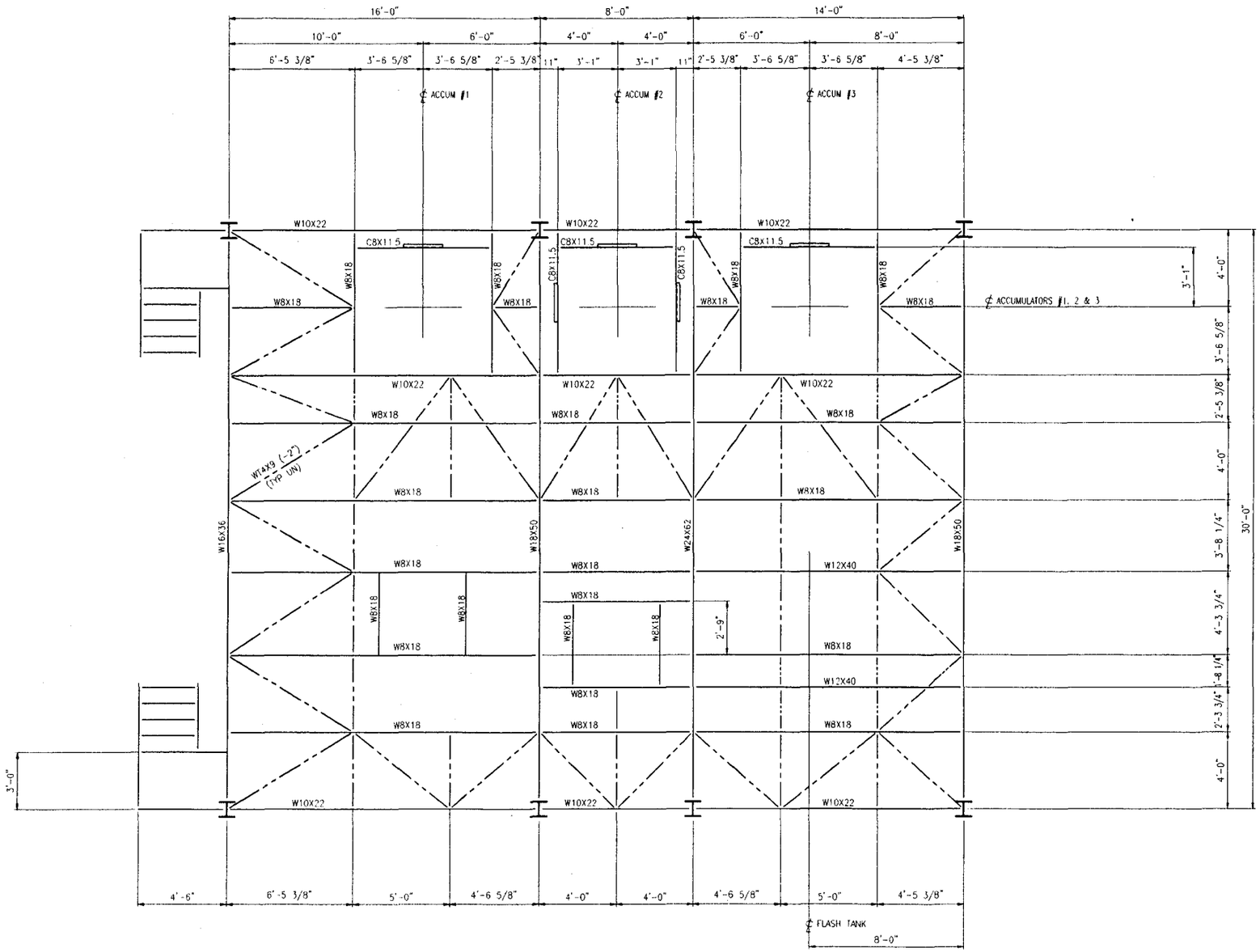
Utilizing Thermal Vapor Recompression with a Sonic Nozzel Jet and High Pressure Steam to Recompress a Lower Pressure Vapor with a Steam Jet Ejector

In this design, the heat required to evaporate part of the process feed, which flows on one side of the heat transfer surface, is supplied through the simultaneous condensation of the distillate producing vapor on the other side of the surface.

CES Environmental Services
Caustic Distillation System

Drawing by: CLM
Date: November 5, 2007

EPAHO04400064



NOTES:

REF DRAWINGS	NO	REVISION	DATE	BY	APR
	0				

CLIENT JOB NO

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 122'-0"

SCALE 3/8" = 1'-0"

		DATE
ENG. RECORD		
DRAWN BY		
CHECKED		
APPROVED		
APPROVED		

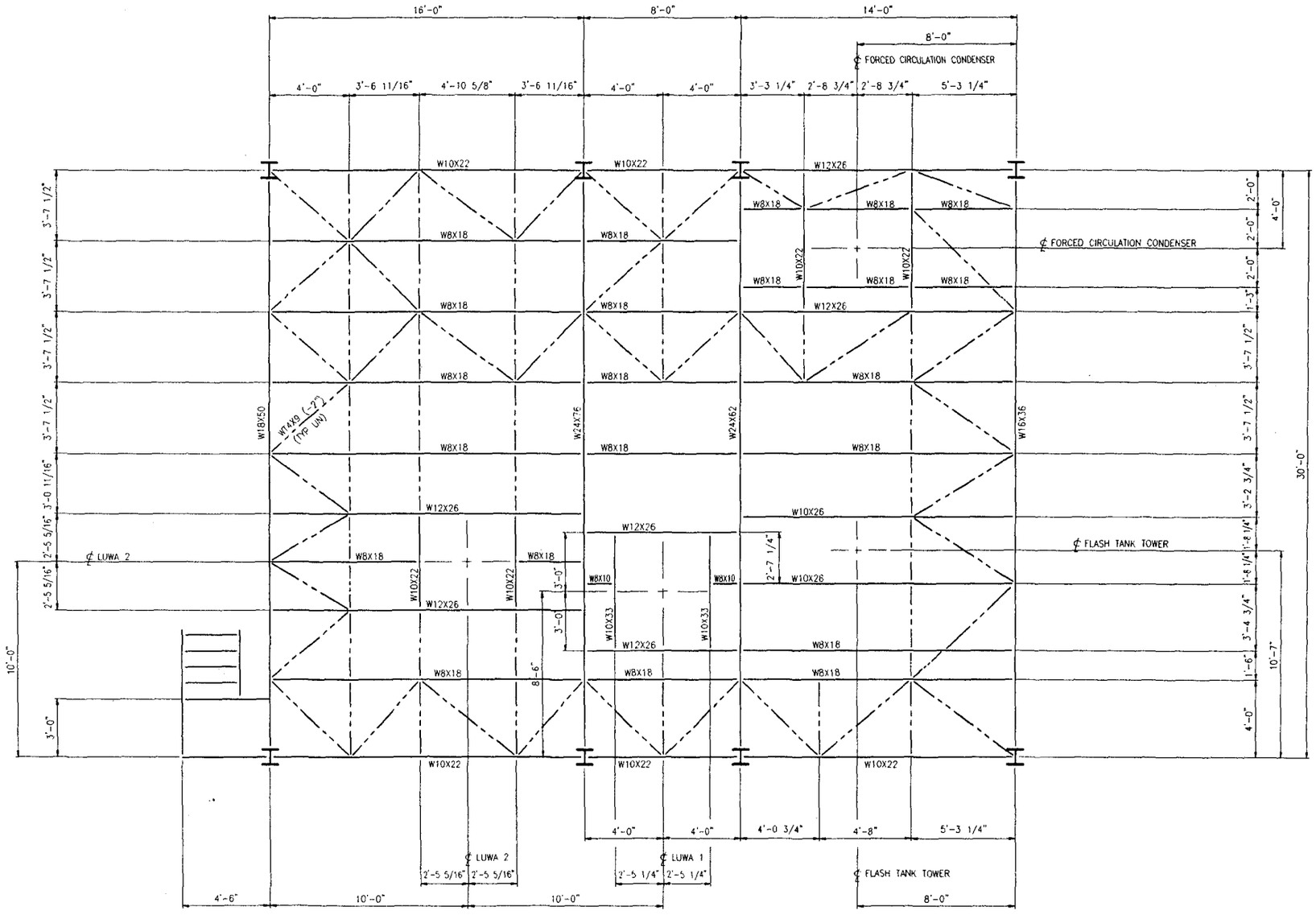
TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

EPAHO044000665

REF. DWG. NO.



NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR	CLIENT JOB NO.
	0					

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 140'-0"

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	
SCALE 3/8" = 1'-0"	

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.
DRAWING NO. REV. A

EPAHO04400066

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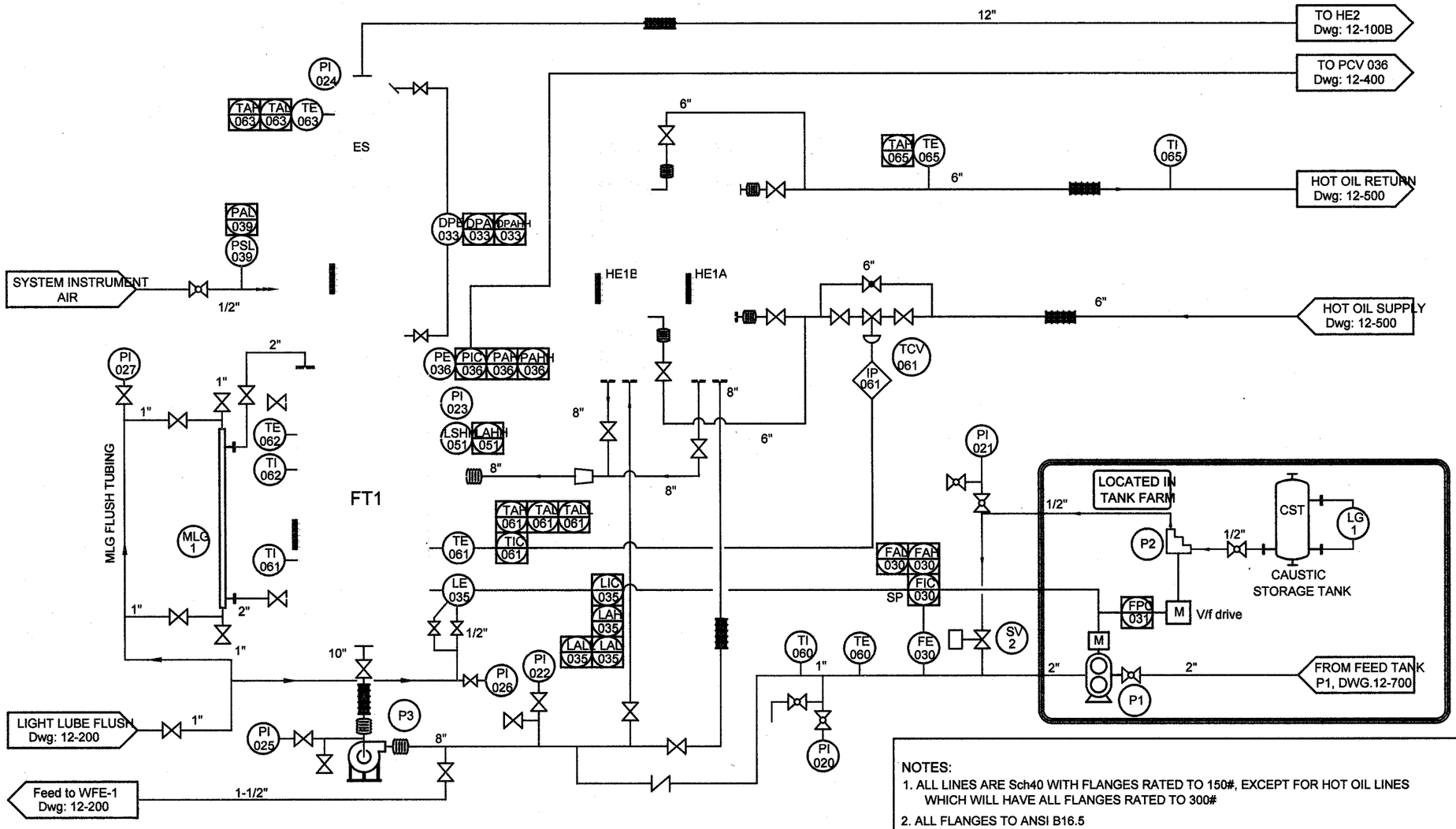


FT 1
FLASH TANK 1
2500 US Gal
6'Dia x 13'1-1/2" Ht

ES
Entrainment Separator
33" OD x 9'10.11" Ht
2" SS 304 Pall Rings

HE1 A/B
FC REBOILER
2 Pass
HTA: 1400 Sq.ft
TUBES: 1" OD x16BWG x18' Lg
300Nos (SS 304)

CST
Caustic storage tank
2000-4000 US Gallons

P 1
SYSTEM FEED PUMP
TYPE: Gear Pump
40 US GPM at 170' HEAD
__HP, __RPM
Variable Frequency Drive

P 2
CAUSTIC DOSING PUMP
0.5 US GPM at 8 bar
Variable Frequency Drive

P 3
FLASHER RECIRCULATION PUMP
TYPE: Centrifugal Pump
2000 US GPM at 70' HEAD
__HP, __RPM

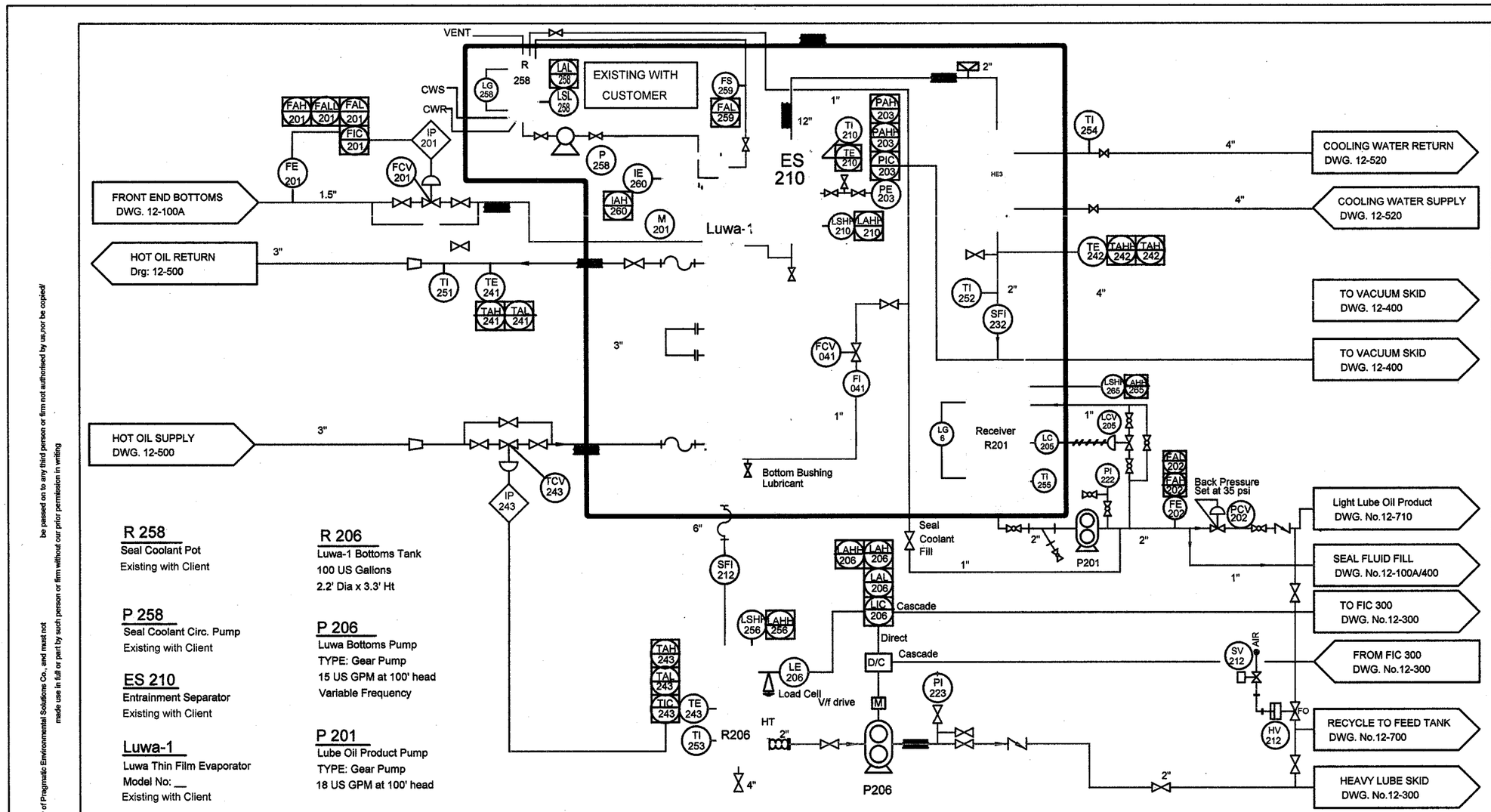
NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF. :	--
SCALE: NTS	P&ID FRONT END 'A' [Capacity; 1000GPH]		JOB No:	--
SHEET: 1 of 2			ORDER REF.:	--
DRN: Sara	CLRD:	DRG NO : 12-100A	REV: -0-	DATE: 30/Oct/07

EPAHO04400667



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R 258
Seal Coolant Pot
Existing with Client

P 258
Seal Coolant Circ. Pump
Existing with Client

ES 210
Entrainment Separator
Existing with Client

Luwa-1
Luwa Thin Film Evaporator
Model No: __
Existing with Client

R 201
Lube Product Receiver
Existing with Client

HE3
Condenser
Existing with Client

R201
Light Lube Receiver
Existing with Client

R 206
Luwa-1 Bottoms Tank
100 US Gallons
2.2' Dia x 3.3' Ht

P 206
Luwa Bottoms Pump
TYPE: Gear Pump
15 US GPM at 100' head
Variable Frequency

P 201
Lube Oil Product Pump
TYPE: Gear Pump
18 US GPM at 100' head

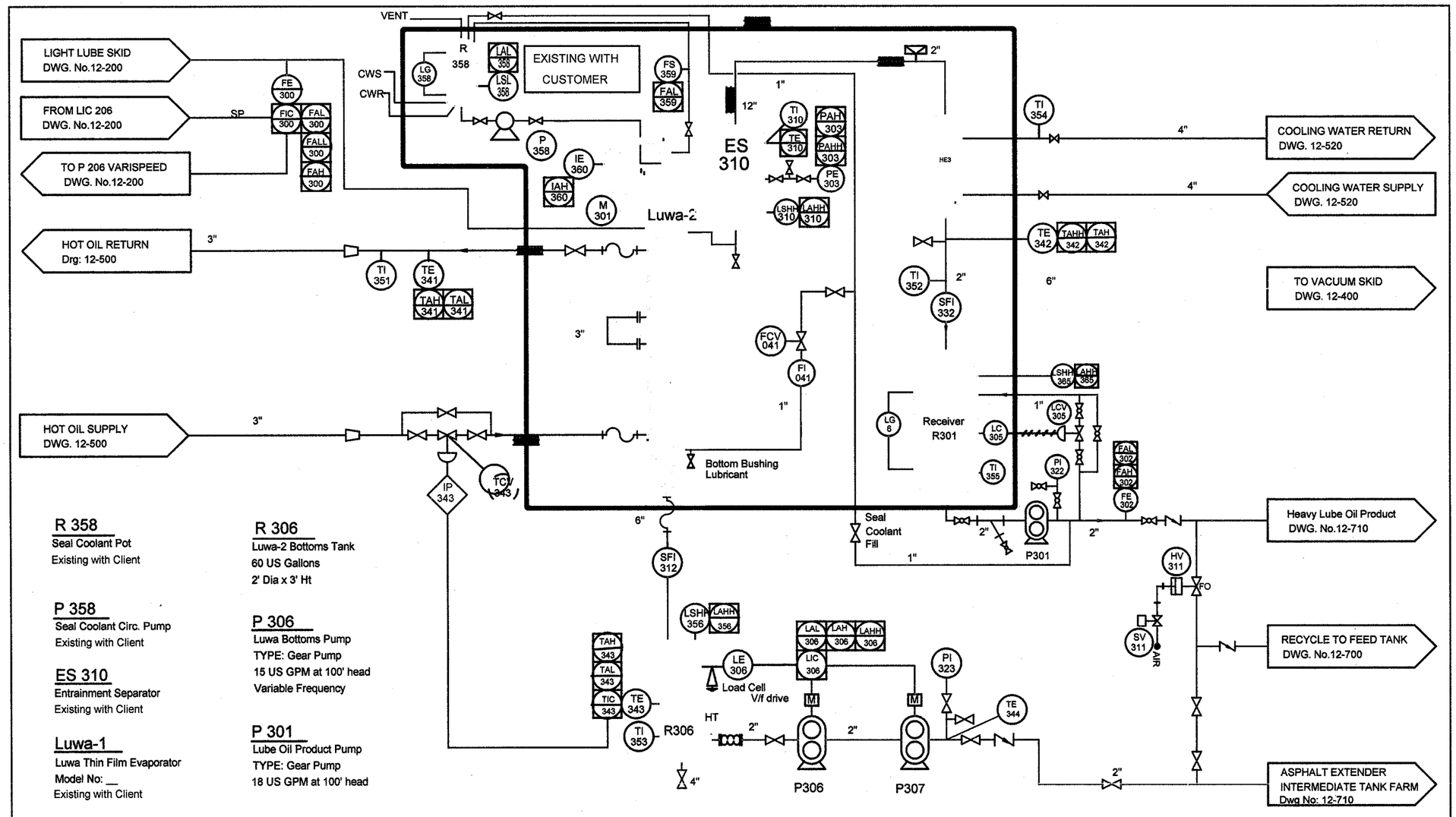
NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:				REF. DRG. : --
SCALE: NTS	P& ID - LIGHT LUBE SKID (Capacity: 1000GPH)			JOB NO: --
SHEET: 1 OF 1	DRN	CLRD	DRG NO :	ORDER REF.: --
	Sara		12-200	REV: -0- DATE: 31/Oct/07

EPAHO04400668



R 358
Seal Coolant Pot
Existing with Client

P 358
Seal Coolant Circ. Pump
Existing with Client

ES 310
Entrainment Separator
Existing with Client

Luwa-1
Luwa Thin Film Evaporator
Model No: __
Existing with Client

R 301
Lube Product Receiver
Existing with Client

HE3
Condenser
Existing with Client

R301
Light Lube Receiver
Existing with Client

R 306
Luwa-2 Bottoms Tank
60 US Gallons
2' Dia x 3' Ht

P 306
Luwa Bottoms Pump
TYPE: Gear Pump
15 US GPM at 100' head
Variable Frequency

P 301
Lube Oil Product Pump
TYPE: Gear Pump
18 US GPM at 100' head

NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:				REF. DRG. : --
SCALE: NTS	P& ID - HEAVY LUBE SKID [Capacity: 1000GPH]			JOB NO: --
SHEET: 1 OF 1	DRN	CLRD	DRG NO :	ORDER REF.: --
	Sara		12-300	REV: -0- DATE: 31/Oct/07

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q2

CES Environmental Services, Inc.

CES Construction, Repairs, and Upgrades Meeting Agenda

Note: CES Project Financial Viability Evaluation Form Must be completed and approved prior to listing on this Agenda

Subproject	Subproject Description	Mgr.	Status Update	Est. Project $	Spent / Commit $	Major Funding Source	Black Book Coding
Wayland Facility (New Shop and Maintenance Building)	This facility will be used to perform all the fabrication and staging/storage of all equipment.	SS / BW	We still lack the following: Drainage grates and piping, major electrical in warehouses, grading the back parking area and front (including addition of white rocks), repair of overhead cranes, wireless network systems, furniture for all offices, wash sump and cinderblock wall, setting up storage racks and segregated storage areas	~~$60,000~~ 100K	135,802	Bank of America - Motor Oil Plant	7.5, 7.6, 7.7
Hydrocarbon Processing Facility Scrubber and Piping	The scrubber will scrub vapors off all tanks, tankwash bays 3, 4, and 5, and the centrifuge	BW	We still lack most of the major header piping, all the piping for the tanks and scrubber, all the butterfly valves to each scrubber drop	$70,000	124,074	Bank of America - Motor Oil Plant	
Boiler 100HP	Boiler will be used to help heat oil tanks that need emulsion breaking or water removal	BW	Complete	$50,000		Bank of America - Motor Oil Plant	

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Concrete Containment	Tank farm, Process Area, Tank truck loading and unloading area	MM	Complete	$150,000		Bank of America - Motor Oil Plant	
Storage Tanks	Storage tanks to store Feed and finished products	MB	Complete	$115,000		Bank of America - Motor Oil Plant	
Clay System Repair	Clay system needs to have the manifods reworked, the computer system fixed, and the burner moved to the outside of the container	CH / Rick	Under review for repair. Waiting for electrician to do conference call for Clay system engineers. They will be scheduled to visit to review the system and suggest all modifications	$50,000		Bank of America - Motor Oil Plant	
Stuctural Assembly	Structural Assembly, Tank Farm Catwalks, Structural Catwalks, and Tank Farm Piping	CH	Tank Farm Catwalks are complete. Still lack catwalk from tank farm to structure.	$110,000		Bank of America - Motor Oil Plant	
P& IDs for Plant	Piping and Insturmentation drawings	CH	First Editions complete, under review to send comments back to Pesco	$75,000		Bank of America - Motor Oil Plant	
Engineering / Structural Design	This is engineering done for structural design or other Misc. Engineering items	CH	Structural drawings to be completed by end of November. Drawings to go out for bid immediately	$35,000		Bank of America - Motor Oil Plant	
Power and Gas Utilities	Gas and Electrical supply to the project	SS	This has not been started	$40,000		Bank of America - Motor Oil Plant	
Forced circulation evaporator, flash tank	Flash tank, tower, condenser, accumulator	CH / SS	Still lack tower and rehab/inspection/cleaning of equipment	$20,000		Bank of America - Motor Oil Plant	

EPAHO04400067 1

129 Sqare Foot Luwa (Wipe thin film evaporator)	Second Luwa repair, rehab, and inspection (replace rotor and rebuild body). This unit produces the heavy, 300N oil	CH	Luwa will have this unit ready by the middle of January	$220,000		Bank of America - Motor Oil Plant	
200 Square Foot Luwa (Wipe thin film evaporator)	First Luwa repair, inspection, and rehab (replace spider bearing and rebuild the body, repair rotor). This is the unit that produces the light, 100N Oil	CH	Luwa will have this unit ready by the middle of January	$180,000		Bank of America - Motor Oil Plant	
Purchase of pumps and motors for moving fluid from tanks and in the process area	Purchase Approximately 8-10 positive displacement and centrifugal pumps and motors	CH/ SS / BW	We have not started purchasing any of this equipment yet. Will not start until P & IDs are finalized	$16,000		Bank of America - Motor Oil Plant	
Purchase of liquid ring vacuum system with booster	Purchase of Main vacuum pump and booster system for the entire plant	CH	We have not started purchasing any of this equipment yet. Will not start until P & IDs are finalized	$45,000		Bank of America - Motor Oil Plant	
Level, flow, pressure, and temperature monitors, controllers, and alarms	Purchase of all the instrumentation for the plant	CH / SS / BW	We have not started purchasing any of this equipment yet. Will not start until P & IDs are finalized	$50,000		Bank of America - Motor Oil Plant	

EPAHO04400067 2

PLC with computer	Purchase and installation, and programming of software package to run the plant, tie in instuments, and motor control system	CH	To be defined and ordered at a later date	$25,000		Bank of America - Motor Oil Plant	
Valves and control valves with high heat packing and seals	These are all the control valves for entire plant	CH	We have not started purchasing any of this equipment yet. Will not start until P & IDs are finalized	$50,000		Bank of America - Motor Oil Plant	
Insulation of all linesand equipment associate with the hot oil heating system	This includes the following: All lines associated with the system, the hot oil heater, the flash tank heat exchanger, the flash tank, Luwa 1, and Luwa 2 (asphault tank already insulated)	SS / BW	We will not insulate until all equipment and piping is in place	$50,000		Bank of America - Motor Oil Plant	
Thermic Fluid heating system with expansion tank, dump tank, and circulation pump	This is to repair, rebuild, and refurbish the system and buy the circulation pump	SS / BW	This system is at the repair facility now. We will need to buy the circulation pump separate	$100,000		Bank of America - Motor Oil Plant	

EPAHO04000673

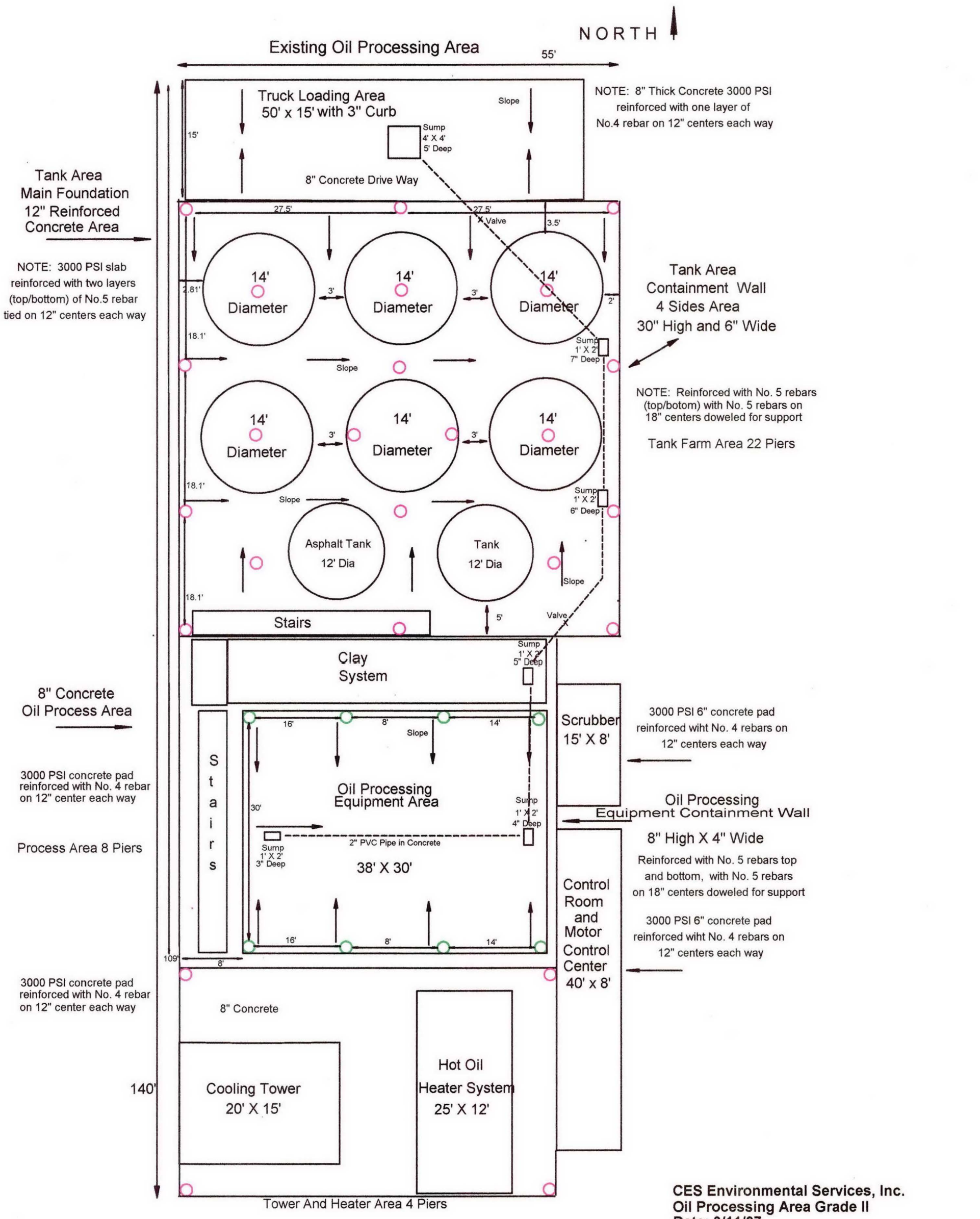
Evaporative cooling tower and circulation pump	This should be between 300 tons and 750 tons. It will chiil the water used to condense vapors from the flash tank condenser, Luwa 1 condenser, and Luwa 2 condenser. The circulation pump will be purchased separately.	CH / SS	This system will not be purchase until the P & IDs have been complete.	$25,000		Bank of America - Motor Oil Plant	
Air Compressor and air dryer with 20 CFM capacity at 7 atm pressure	This system will supply dry and clean air to all the process instruments	SS	Not yet specified by P & IDs	$10,000		Bank of America - Motor Oil Plant	
Complete Piping of entire system	This includes all piping for the process facility, tank farms, and interconnecting piping between them. This also includes all fittings	CH / BW / SS	Will not be started until completion of P &IDs	$150,000		Bank of America - Motor Oil Plant	
Process Electrical Equipment and Motor Control Center	This is the motor control center and electrical distribution lines	CH / Rick	This will completed toward the end of the project	$200,000		Bank of America - Motor Oil Plant	

EPAHO04400067 4

Tank Farm Pumps	This is for pumps inside the motor oil tank farm	CH / SS / BW	This equipment will not be purchased until the P & IDs are complete	$20,000		Bank of America - Motor Oil Plant	
Spare Parts	Key Spare parts that have long lead time on orders	CH	This will completed toward the end of the project	$35,000		Bank of America - Motor Oil Plant	
Puchase of all major equipment from Texas Oil and Gathering	This includes all major items for the process	MB	Complete				
Purchase of Clay system from Pesco	This is the clay polishing system	MB	Complete				

Totals:	$1,971,000	0

EPAHO04400067S

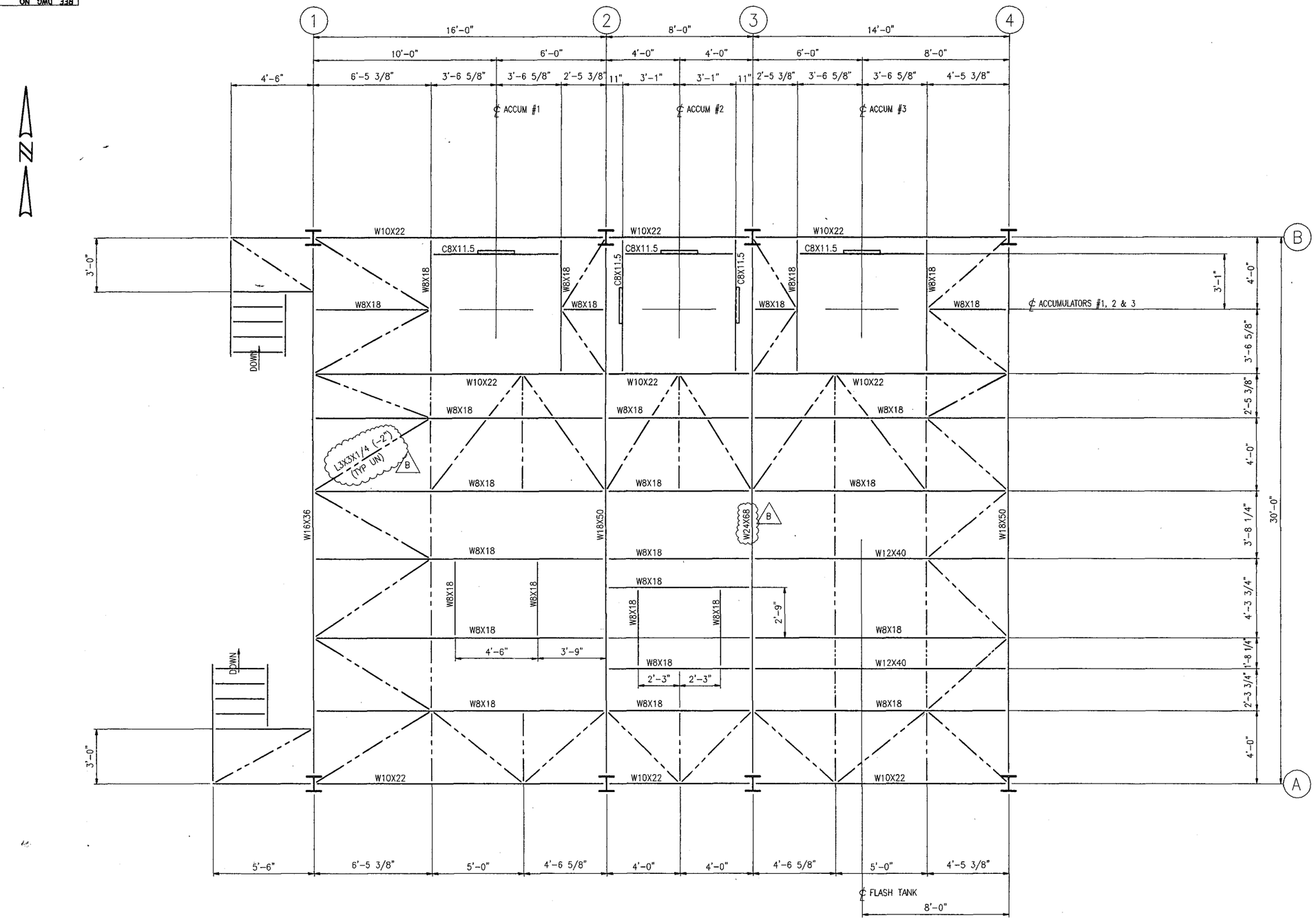


Motor Oil Processing Area Grade II

CES Environmental Services, Inc.
Oil Processing Area Grade II
Date: 3/11/07
By: CLM Office Services
Version 16

○ Top View of Foundation Bell-Bottom Pier
○ Top View of Straight Shaft Pier
Scale 1 Inch = 12.2 Feet

REF. DWG. NO.



NOTES:

NO.	REVISION	DATE	BY	APR
B		11/26/07		

REF. DRAWINGS

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 122'-0"

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY JGY	11/26/07
CHECKED	
APPROVED	
APPROVED	
SCALE 3/8" = 1'-0"	

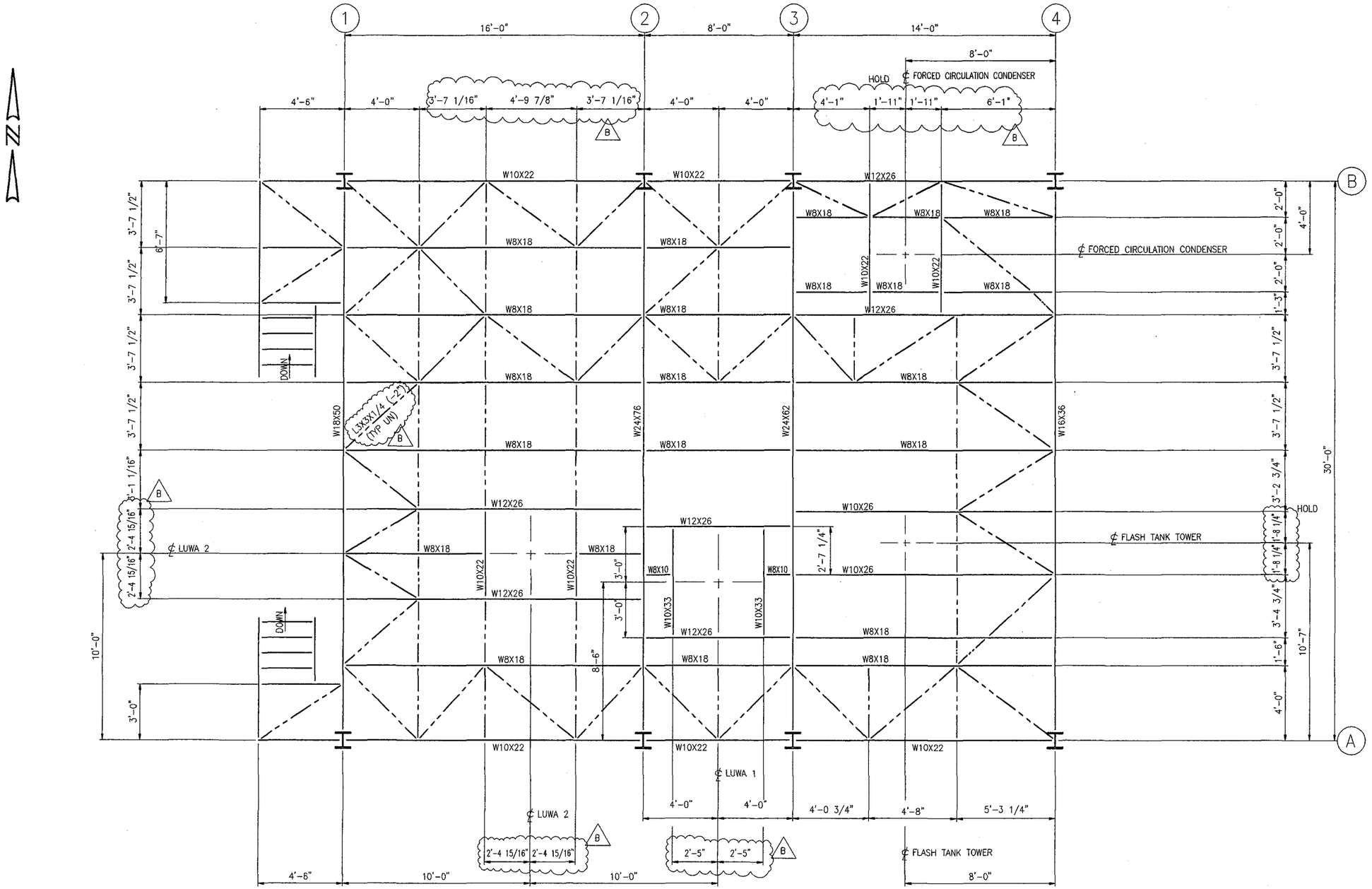
TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. B

EPAHO04400067

REF. DWG. NO.



NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	B		11/26/07		

CLIENT JOB NO.

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 140'-0"

		DATE
ENG. RECORD		
DRAWN BY	JGY	11/26/07
CHECKED		
APPROVED		
APPROVED		

SCALE 3/8" = 1'-0"

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. B

EPAHO04400067S

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	B		11/26/07		

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 152'-7"

CLIENT JOB NO.

ENG. RECORD		DATE
DRAWN BY	JGY	11/26/07
CHECKED		
APPROVED		
APPROVED		
SCALE 3/8" = 1'-0"		

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO.

REV. B

EPAHO04400679

REF. DWG. NO.

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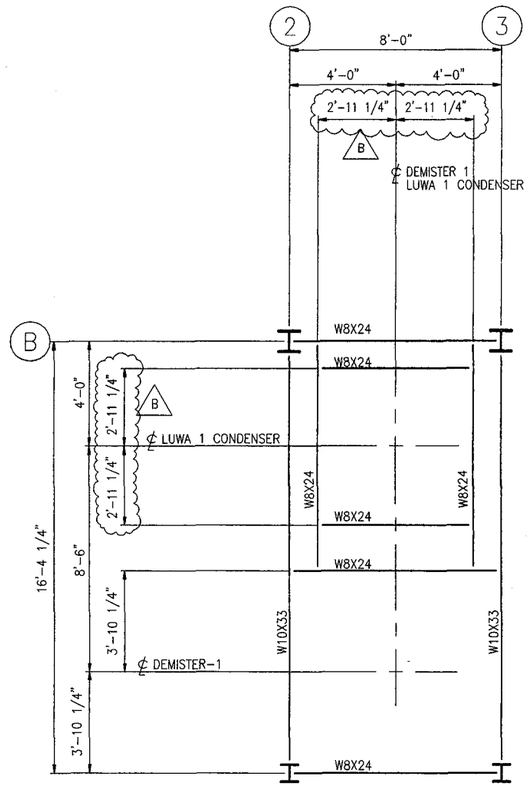


NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	8		11/26/07		

CLIENT JOB NO.

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 157'-4"

ENG. RECORD		DATE
DRAWN BY	JGY	11/26/07
CHECKED		
APPROVED		
APPROVED		
SCALE 3/8" = 1'-0"		

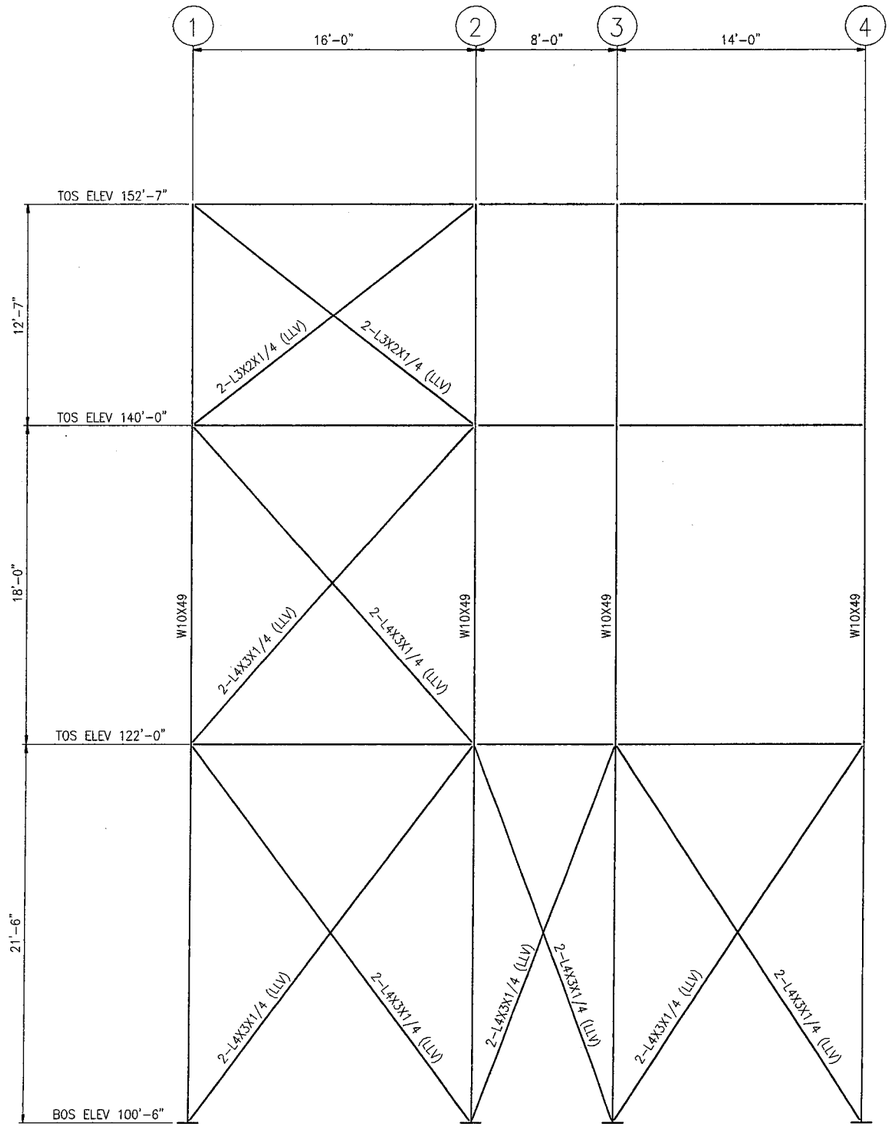
TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. B

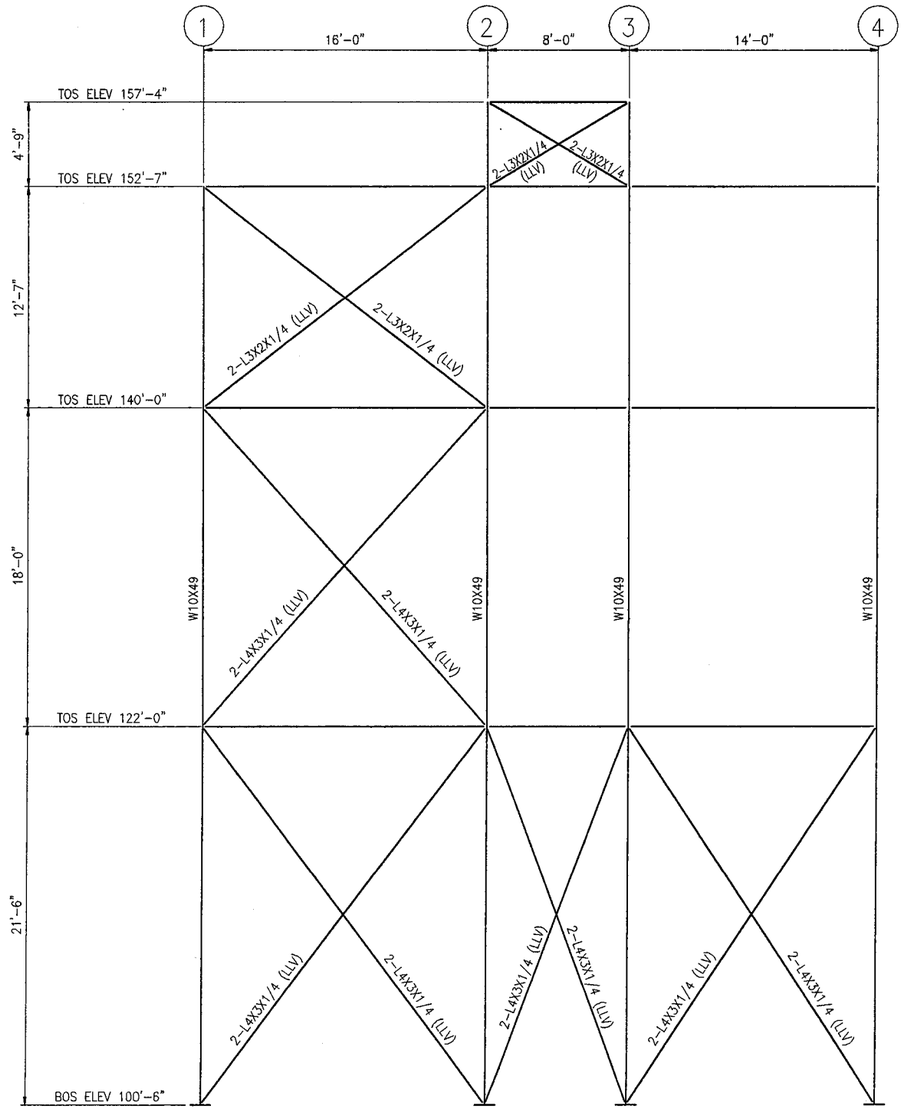
EPAHO04400680

REF. DWG. NO.



ELEVATION AT COL LINE A

(LOOKING NORTH)



ELEVATION AT COL LINE B

(LOOKING NORTH)

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	A		11/28/07		

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES A & B

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY JGY	11/26/07
CHECKED	
APPROVED	
APPROVED	
SCALE 1/4" = 1'-0"	

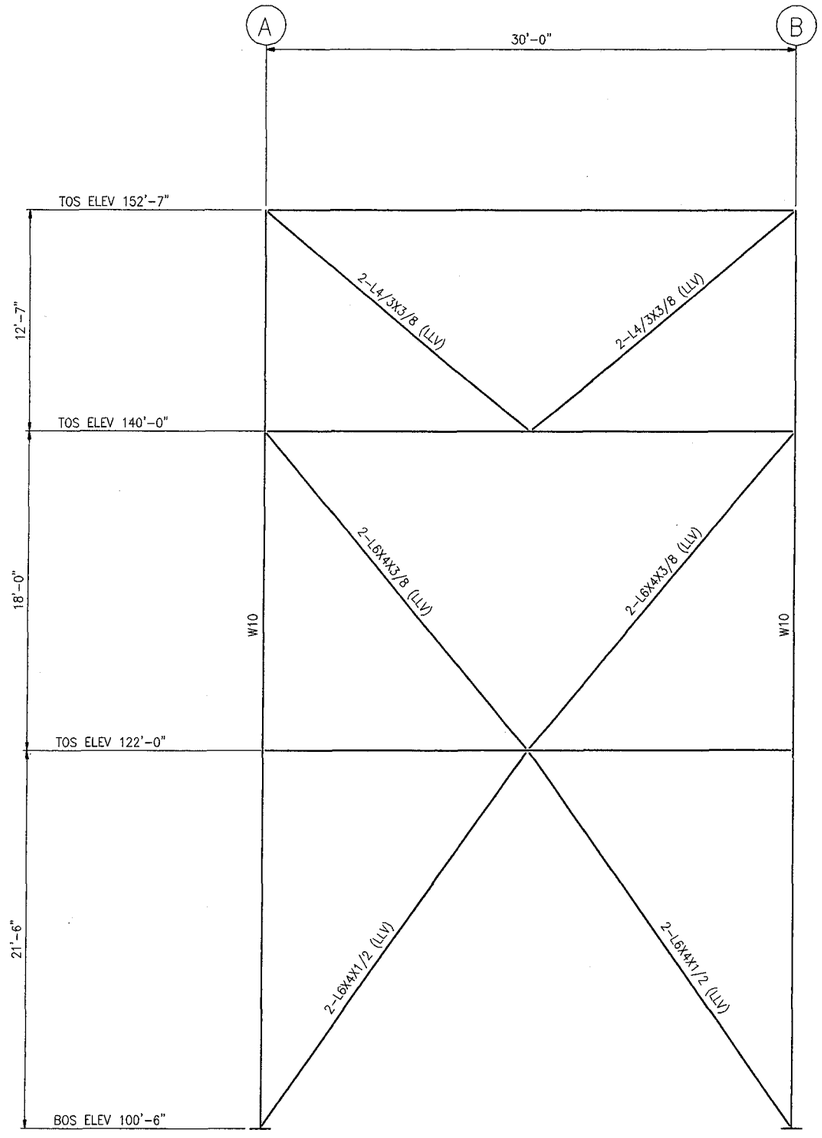
TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

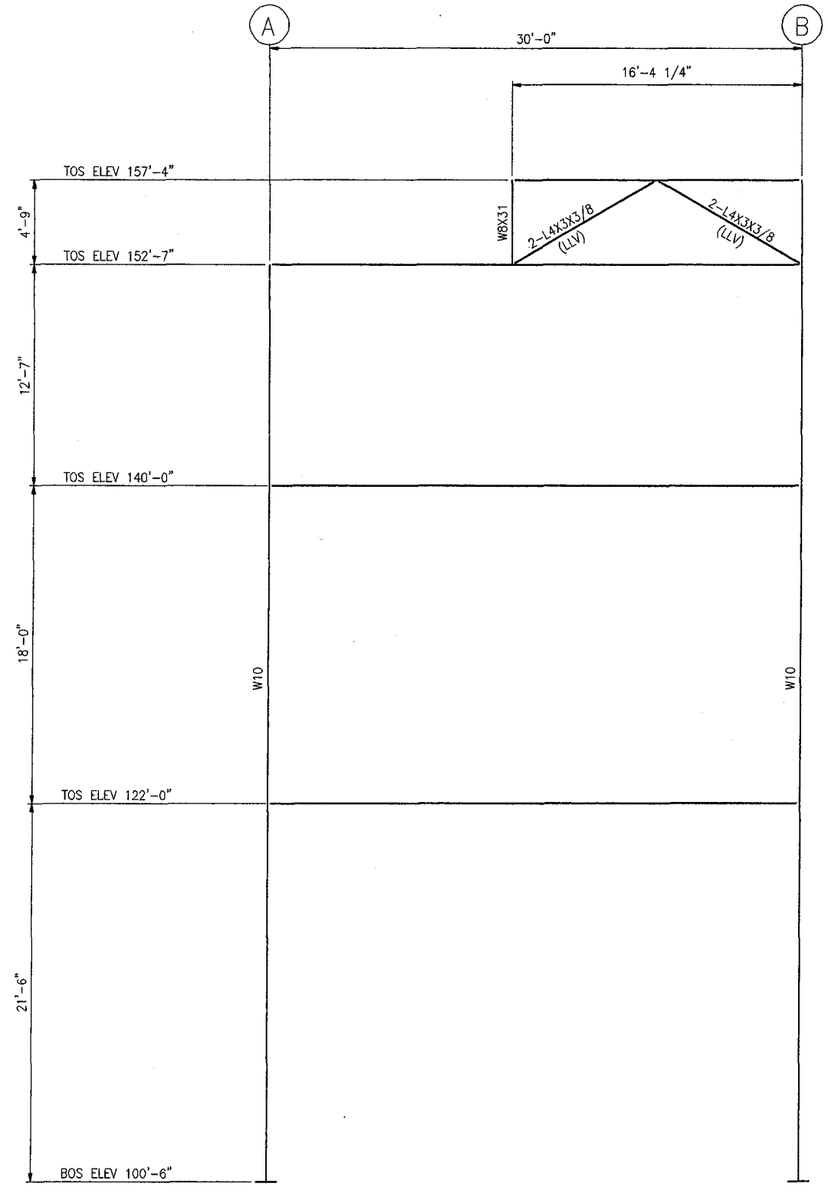
EPAHO04400681

REF. DWG. NO.



ELEVATION AT COL LINE 1

(LOOKING WEST)



ELEVATION AT COL LINE 2

(LOOKING WEST)

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	A		11/26/07		

CLIENT JOB NO.

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES 1 & 2

ENG. RECORD	DATE
DRAWN BY JGY	11/26/07
CHECKED	
APPROVED	
APPROVED	
SCALE 1/4" = 1'-0"	

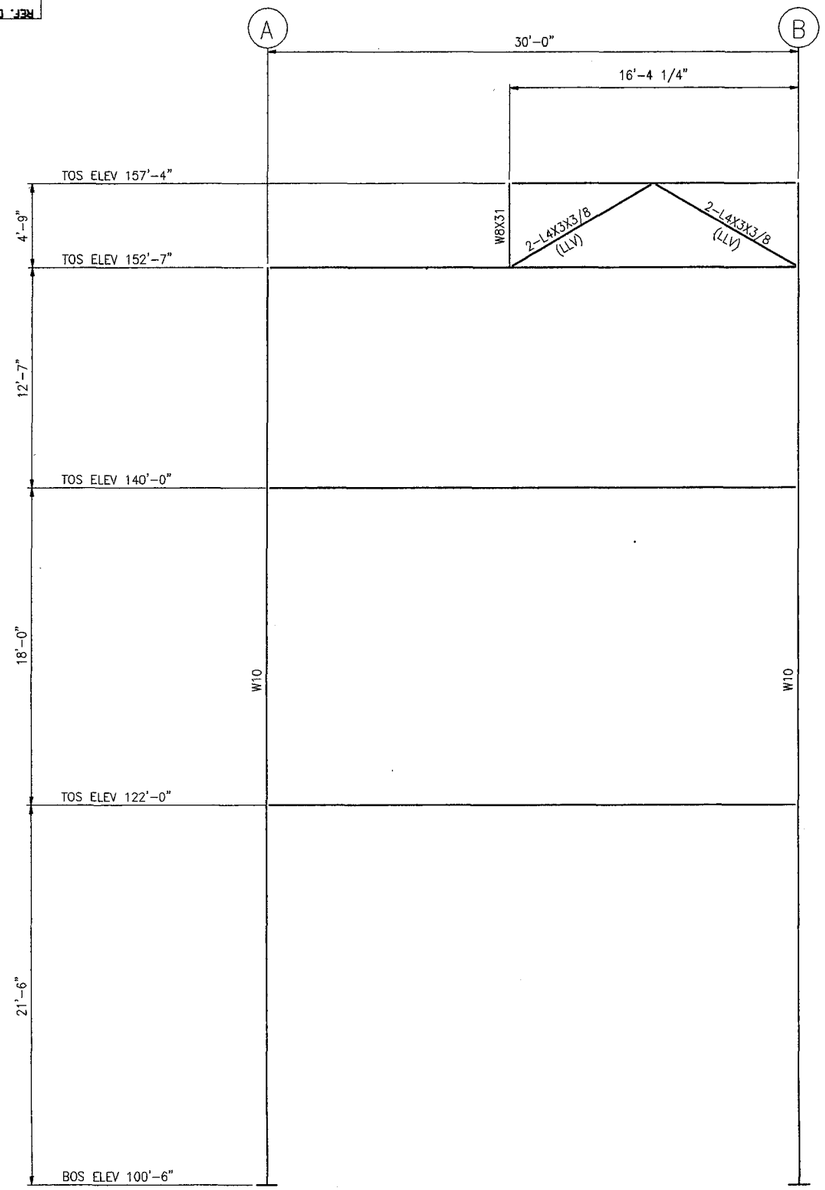
TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

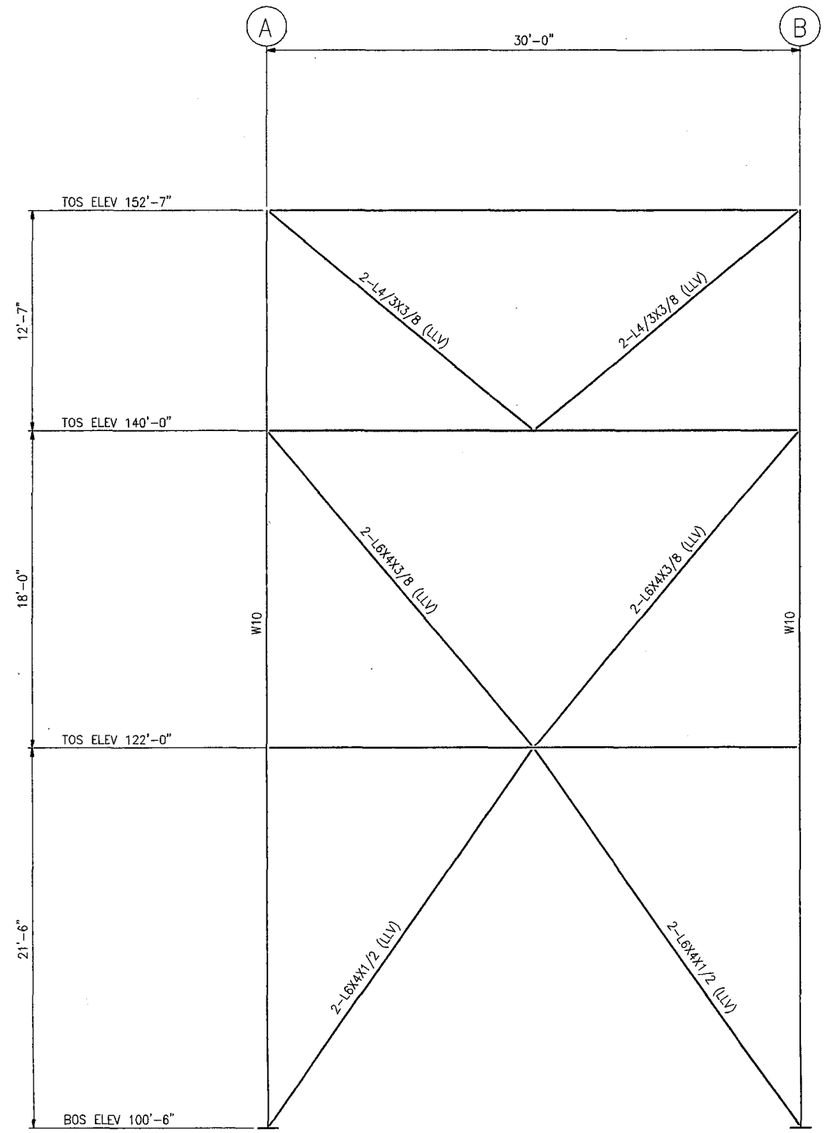
EPAHO04400682

REF. DWG. NO.



ELEVATION AT COL LINE 3

(LOOKING WEST)



ELEVATION AT COL LINE 4

(LOOKING WEST)

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	A		11/26/07		

CLIENT JOB NO.

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES 3 & 4

ENG. RECORD	DATE
DRAWN BY JCY	11/26/07
CHECKED	
APPROVED	
APPROVED	
SCALE 1/4" = 1'-0"	

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

EPAHO04400683

REF. DWG. NO.

1.0 CODES & STANDARDS

ALL STEELWORK DESIGN, FABRICATION, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
1. AMERICAN INSTITUTE OF STEEL CONSTSRUCTION (AISC):
   SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS – ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN
   CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
   MANUAL OF STEEL CONSTRUCTION, 9TH EDITION
   SPECIFICATION FOR STRUCTURAL STEEL JOINTS USING ASTM A325 OR A490 BOLTS
2. AMERICAN WELDING SOCIETY (AWS):
   STRUCTURAL WELDING CODE, AWS D1.1
3. ASTM STANDARDS FOR THE MATERIALS SPECIFIED
4. AISI STANDARDS FOR THE MATERIALS SPECIFIED
5. STEEL JOIST INSTITUTE RECOMMENDED PRACTICE FOR STEEL JOISTS

2.0 MATERIAL SPECIFICATIONS

2.1 STRUCTURAL STEEL:
WIDE FLANGES & WT'S: ASTM A572 GR 50 OR ASTM A992
ALL OTHER STRUCTURAL SHAPES & PLATES: ASTM A36

2.2 MACHINE BOLTS, NUTS AND WASHERS: ASTM A307

2.3 HIGH STRENGTH BOLTS: ASTM A325, TYPE 1

2.4 STRUCTURAL PIPE: ASTM A53, GRADE B

2.5 WELDING FILLER METAL: PER AWS D1.1
ELECTRODE STRENGTH: 70 KSI MINIMUM TENSILE STRENGTH
58 KSI MINIMUM YIELD STRENGTH

3.0 CONNECTIONS

3.1 ALL BOLTED FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS WITH THE EXCEPTIONS NOTED IN 3.3.

3.2 ALL HIGH STRENGTH BOLTS SHALL BE 3/4" DIAMETER UNLESS NOTED OTHERWISE.

3.3 FIELD CONNECTIONS FOR PURLINS, GIRTS, LADDERS AND HANDRAILS SHALL USE 5/8" DIAMETER ASTM A307 BOLTS UNLESS NOTED OTHERWISE.

3.4 BOLTED CONNECTIONS SHALL BE MADE WITH A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

3.5 ALL HOLES FOR BOLTS SHALL BE 1/16" LARGER THAN BOLT DIAMETER UNLESS NOTED OTHERWISE.

3.6 BOLTS SHALL BE BEARING TYPE UNLESS NOTED OTHERWISE.

3.7 THREADS OF HIGH STRENGTH BOLTS SHALL BE EXCLUDED FROM THE SHEAR PLANE.

3.8 HIGH STRENGTH BOLTS SHALL BE TIGHTENED ACCORDING TO AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

3.9 ALL SHOP CONNECTIONS SHALL BE WELDED.

3.10 ALL WELDED CONNECTIONS SHALL BE SEAL WELDED WITH 1/8" FILLET WELDS FOR GALVANIZING.

3.11 IF THE SIZE OF A FILLET WELD IS NOT SHOWN ON THE DRAWINGS, PROVIDE THE MINIMUM FILLET WELD AS SHOWN IN TABLE J2.4 OF THE AISC SPECIFICATION.

3.12 FRAMED BEAM CONNECTIONS NOT DETAILED ELSEWHERE SHALL COMPLY WITH DETAIL 1 AND SCHEDULE 1.

3.13 BRACING CONNECTIONS SHALL HAVE TWO BOLT CONNECTIONS AT EACH END UNLESS NOTED OTHERWISE ON THE DRAWINGS. BRACING CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR CAPACITY OF THE BOLTS WITH THE BRACING MEMBER IN TENSION. THE WORK POINT SHALL BE AT THE CENTERLINE OF THE BEAM AND COLUMN UNLESS NOTED OTHERWISE.

3.14 ALL GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS UNLESS NOTED OR DETAILED OTHERWISE.

3.15 GUSSET PLATES FOR VERTICAL DIAGONAL BRACING SHALL CONNECT TO BOTH THE BEAM AND COLUMN UNLESS NOTED OR DETAILED OTHERWISE.

4.0 GALVANIZING

4.1 ALL STRUCTURAL STEEL SHALL BE GALVANIZED PER ASTM A123, A143, A153, A384, A385, AND A386 AS APPLICABLE.

4.2 REPAIR DAMAGE TO GALVANIZED SURFACES WITH ZRC COLD GALVANZING COMPOUND OR APPROVED EQUAL.

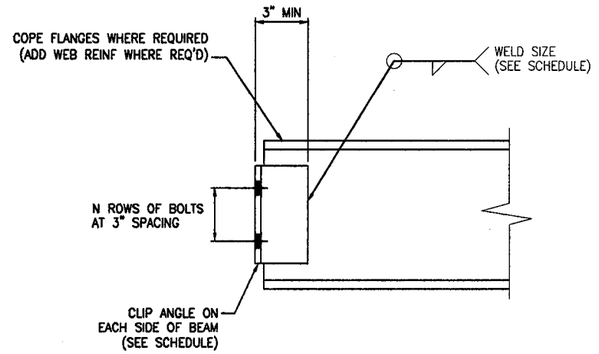
5.0 GRATING

5.1 GRATING SHALL BE GALVANIZED WELDED STEEL GRATING WITH 1 1/4"x3/16" SERRATED BEARING BARS AT 1 3/16" SPACING WITH TRANSVERSE BARS AT 4" SPACING UNLESS OTHERWISE NOTED.

5.2 GRATING SHALL BE FASTENED TO STRUCTURAL STEEL WITH HOT DIP GALVANIZED, SADDLE TYPE FASTENERS SECURED WITH 1/4" STAINLESS STEEL HEX HEAD SCREWS. TWO CONNECTIONS PER GRATING SUPPORT BEAM PER SECTION SHALL BE USED.

6.0 ERECTION MARKS

6.1 STRUCTURAL STEEL MEMBERS SHALL BE IDENTIFIED WITH ERECTION MARKS THAT ARE CLEARLY DISCERNIBLE THROUGH SHOP GALVANIZING OR PAINTING.



DETAIL 1
FRAMED BEAM CONNECTION

BEAM SIZE	MIN N	MIN CLIP ANGLE THICKNESS (IN)	MIN WEB WELD (IN)
C8, W8 C9, C10, W10	2	5/16	3/16
C12, W12 C14, W14	3	5/16	3/16
W16, W18	4	5/16	1/4
W21	5	5/16	1/4
W24	6	5/16	1/4
W27	7	5/16	1/4
W30	8	5/16	1/4
W33, W36	9	5/16	1/4

SCHEDULE 1
FRAMED BEAM CONNECTION SCHEDULE

NOTES:

NO.	REVISION	DATE	BY	APR
A		11/27/07	JY	

REF. DRAWINGS

OIL PROCESSING STRUCTURE
GENERAL NOTES
STRUCTURAL STEEL

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY JGY	11/27/07
CHECKED	
APPROVED	
APPROVED	
SCALE	

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

EPAHO04400684

Oil Purification Project (Oil Project)
Construction Priority Line Item List
December 26, 2007

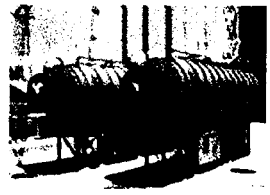
Assigned To	Item	Amount	Status	Amount to be Expended
BW	1. Boiler 300HP (gas fired)	$ 50,000	F – 8/31	
Completed	2. Concrete Containment Oil Storage/Processing Area (Foundation and Walls Included) A. Tank Farm Area – 3,000 sq/ft B. Process Area – 4,000 sq/ft C. Tank-Truck Loading/Unloading Area – 750 sq/ft	$150,000	F	
KG & BW	3. New Shop and Maintenance Building A. Field Construction Office B. Repair of Shop Building C. Repair of Field Office	$ 30,000		
KG & BW	4.A. Site Stabilization of Area Parking and Roadway Around New Shop and Construction Office	$ 30,000	Hold	
CH	4.B. Clay System Repair Final Payment	$ 50,000 $ 40,000	Under Review	$ 50,000 $ 40,000
_____	5. New Shop Fences	$ 20,000	Hold	
BW, SS & CH	6. Tanks (8)	$115,000		
BW, SS & CH	7. Scrubber System and Piping	$ 70,000		
BW, SS & CH	8. Structural and Assembly A. Tank Farm (Catwalk and Piping) B. Process Area (Eq Support) Purchase/Deliver Install	 $ 50,000 $ 240,000 $ 40,000		 $ 25,000 $240,000 $ 40,000
CH	9. PESCO Engineering (PID/Process Piping Diagram)	$ 75,000	Started	$ 60,000
CH	10. Engineering/Stuctural Design Drawings	$ 35,000		$ 10,000
BW, SS & CH	11. Utilities (Power for site and operational areas)	$ 40,000	Oct-Nov	$ 40,000
CH & PESCO	12. OPS Process Equipment (A-Q)	$882,000	Total for All 12	
	A. Forced circulation evaporator, fraction column and related equipment (TOG).	$ 20,000		$ 20,000
	B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG) and ES.	$235,000	In Shop for Repairs	$130,000
	One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment and ES.	$195,000	In Shop for Repairs	$105,000
	C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing.	$ 40,000		$ 40,000

EPAHO044000685

Assigned To	Item	Amount	Status	Amount to be Expended
	D. Liquid ring vacuum system.			
	E. Vacuum skid, controls, tank cooler.			
	F. Positive displacement vacuum booster. **(D,E, & F)**	$ 50,000		$ 50,000
	G. Pipe and fittings (covered by #13).			
	H. Level, flow, pressure and temperature monitors, controllers and alarms.	$ 65,000		$ 65,000
	I. Motor control panel(s) (See #14).			
	J. PLC inclusive of the computer. Software Purchase/Install	$ 25,000 $ 12,000		$ 25,000 $ 12,000
	K. Valves and control valves with high temperature packing and seals.	$ 50,000		$ 50,000
	L. All flameproof electrical components (See #14).			
	M. Metal skids, finish painted (See #8).			
	N. Insulation of the system with high temperature insulation.	$ 50,000		$ 50,000
	O. Thermic fluid heating system (10 mill BTU per hr) complete with expansion tank and circulation pump.	$100,000	Undergoing Evaluation	$ 20,000
	P. Evaporative cooling tower with 500T capacity as cooling water with its circulation pump.	$ 30,000		$ 30,000
	Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure.	$ 10,000		$ 10,000
BW & CH	**13.** Piping Process System (Interconnecting Piping Between Areas) A. Tank Farm B. Process Area	$150,000		$150,000
CH	**14.** Process Electrical Equipment (Motor and Process Controls Including Distribution)	$200,000		$200,000
BW, SS & CH	**15.** Pumps (Oil Tank Farm)	$ 20,000		$ 20,000
CH	**16.** Spare Parts	$ 35,000		$ 35,000
	TOTAL	**$2,322,000**		**$1,517,000**

EPAHO044000686

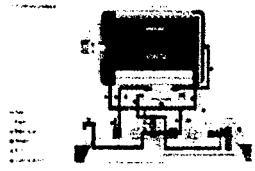
Mechanical Vapor Compression



Enlarge

IDE's MVC Highlights:

- Low Temperature Seawater Distillation
- Electrically Driven
- Superior Reliability and Availability
- Simple and Economical Operation & Maintenance
- High Quality Product (2ppm)
- Capacities: 100 - 3,000 cubic-meter/day per unit



Enlarge

IDE's MVC units are the units of choice where electricity from the grid or diesel generator is the available power source, because they utilize the highly efficient evaporative condensers in single or multiple effect configurations.

A unique, self-developed centrifugal compressor, integrally mounted on the evaporator vessel, is the source of the heat input to the unit. IDE MVCs are available in capacities ranging from 100 to 5,000 cu.m/day in a single unit with larger plants being realized by multiple unit installations.

THE PROCESS

Vapor Compression Distillation is inherently the most efficient distillation process. It achieves its high efficiency in a simple manner, without the need for a complex design based on a large number of stages or effects.

Application of the heat pump principle continuously recycles and maintains the latent heat exchanged in the evaporation condensation process within the system. In this scheme, the heat required to evaporate part of the processed feed, which flows on one side of a heat transfer surface, is supplied through the simultaneous condensation of the distillate-producing vapor on the other side of the surface.

A compressor, acting as the heat pump, is the driving force for this heat transfer, and provides the energy required to separate the solution and overcome dynamic pressure drop losses and other irreversible factors. The vapor generated from the solution is pumped to the higher pressure-enthalpy level required on the condensing side.

This work, plus the fraction required for liquid pumping, is the only energy consumed by the process. No additional heat is required.

The low energy requirement for the IDE MVC is further reduced to a minimum by adopting a highly efficient horizontal tube, falling film, evaporative condenser. Large heat transfer areas are incorporated, and parasitic pressure drop losses are reduced by integrating the compressor within the evaporator. Due to this evaporator design, the pumping head of the compressor is low - only 2.5^0C (5^0F).

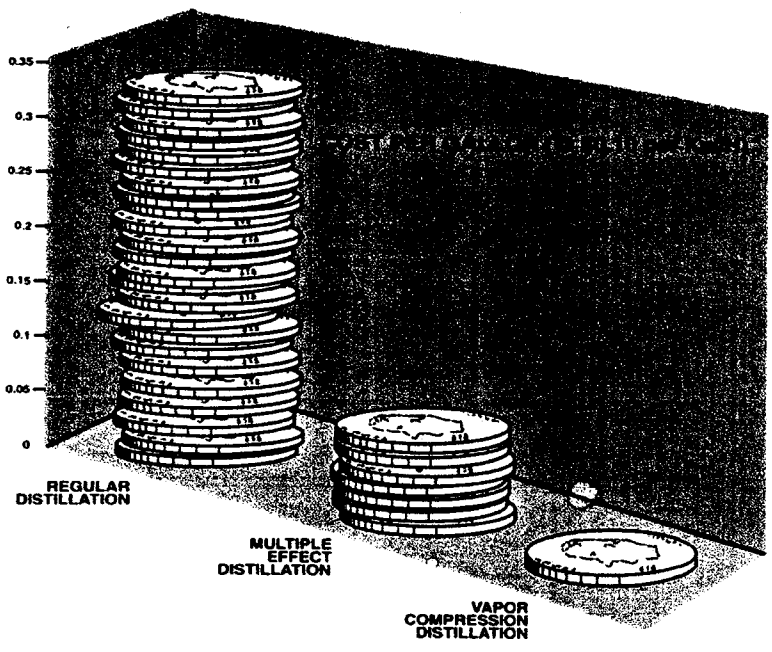
EPAHO044000687

COST EFFECTIVENESS OF

VAPOR COMPRESSION WATER DISTILLATION SYSTEMS

Vapor compression processes produce water 5 to 10 times more cost effectively than multiple effect distillers(see below) and 25-40 times more cost effectively than conventional, single-stage distillers.

In real dollars and cents, at 10 cents per kilowatt hour, this translates into less than 1/2¢ per gallon for vapor compression versus 7-8 cents per gallon for a multiple-effect distiller and 30-35 cents per gallon for a conventional, single-stage, home-use steam distillation system.

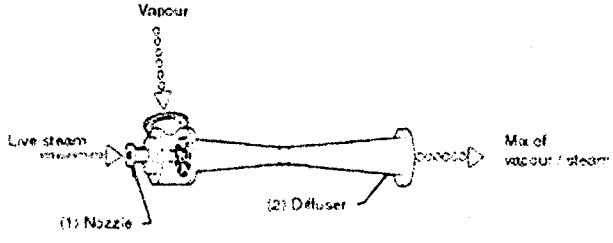


When one considers these cost savings in a bottling operation, the clear advantages of vapor compression systems(volume of water and production cost per gallon) become very clear as shown on the diagram above.

Vapor recompression relies upon a mechanical compressor or steam jet ejector to increase the temperature of the latent heat in steam to render it usable for process duties. Recompression typically requires only 5% to 10% of the energy required to raise an equivalent amount of steam in a boiler.

MVR = Mechanical Vapor Recompression uses a compressor and drive to compress the vapor, much like any air or natural gas compressor.

TVR = Thermal Vapor Recompression uses a sonic nozzle jet and high pressure steam to recompress a lower pressure steam/vapor. In the live steam nozzle (1) the pressure of the in-flowing steam is converted into velocity. A jet is created which draws in the low pressure vapor. In the diffuser (2) a fast flowing mixture of live steam and vapors is formed, the speed of which is converted into pressure (temperature increase) by deceleration.



Oil Purification Project
Construction Priority Line Item List
With Projected Cost
August 15, 2007

TIME LINE CHART

	Item Assigned To:	AUGUST 12th – 18th	AUGUST 19th – 25th	AUG & SEP 26th – 1st	SEPT 2nd – 8th	SEPT 9th – 15th	SEPT 16th – 22nd	SEPT 23rd – 29th	SEP & OCT 30th – 6th	OCTOBER 7th – 13th	OCTOBER 14th – 20th	OCTOBER 21st – 27th	OCT & NOV 28th – 3rd
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: $30,000 Field Construction Office Repair of Shop Building Repair of Field Office	BW KG		START	– –	– –	– –	– –	– –	END				
4. A. Site Stabilization of Area Parking and Roadway around New Shop and Construction Office: $30,000	BW KG				START	– –	– –	– –	END				
4. B. Repair of Filter Vac Clay Unit $50,000	CH				START	– –	– –	– –	– –	– –	– –	– –	END
5. New Shop Fences: $20,000	BW & SS												
6. Tanks (7): $115,000	BW & CH	7 Tanks	Completed										
7. Scrubber System and Piping: $70,000	BW, CH SS	– –	– –	– –	– –	– –	– –	– –	– –	– –	END		
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW, CH SS	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	END
8.B. Structural and Assembly in Process Area: $60,000	BW, CH SS			Start Drawings	– –	– –	– –	– –	– –	– –	Drawings to Fab Shop	– –	– –
9. PESCO Engineering: $75,000	CH	START	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
10. Engineering /Structural Design Drawings: $35,000	CH			Start Drawings	– –	– –	– –	– –	– –	– –	END		
11. Utilities (Power for site and operational areas): $40,000	BW SS & CH								START	– –	– –	– –	– –

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

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Oil Purification Project
Construction Priority Line Item List
With Projected Cost
August 15, 2007

TIME LINE CHART

Item / Assigned To:	AUGUST 12th – 18th	AUGUST 19th – 25th	AUG & SEP 26th – 1st	SEPT 2nd – 8th	SEPT 9th – 15th	SEPT 16th – 22nd	SEPT 23rd – 29th	SEP & OCT 30th – 6th	OCTOBER 7th – 13th	OCTOBER 14th – 20th	OCTOBER 21st – 27th	OCT & NOV 28th – 3rd
12. OPS Process Equipment (A-Q below): Combined Total $791,000 / CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG). $20,000 / BW CH SS				Evaluate Design	– –	– –	– –	– –	Modify Design	– –	– –	– –
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $220,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $180,000 / BW CH SS	Shop Repair Luwas	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing: $16,000 / BW CH SS						Confirm Size and Number	– –	– –	– –	– –	Order	– –
12.D. Liquid ring vacuum system. / BW, CH, SS						Confirm Size	– –	– –	– –	– –	– –	Order
12.E. Vacuum skid, controls, tank cooler. / BW, SS								Confirm Design	– –	– –	– –	– –
12.F. Positive displacement vacuum booster (2): (Total for D.E.F.) $45,000						Confirm Design	– –	– –	– –	– –	– –	Order
12.G. Pipe and fittings (covered by #13). / BW, CH, SS												
12.H. Level, flow, pressure and temperature monitors, controllers and alarms: $50,000 / BW CH SS						Confirm Type & Number	– –	– –	– –	– –	– –	Order
12.I. Motor control panel(s) (covered by #14). / BW, CH SS												
12.J. PLC inclusive of the computer: $25,000 / BW, CH, SS						Specify	– –	– –	– –	– –	– –	Order
12.K. Valves and control valves with High temperature packing and Seals: $50,000 / BW SS						Confirm Type & Number	– –	– –	– –	– –	– –	Order

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

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S.S. – Steve Stricker

EPAHO044000690

Oil Purification Project
Construction Priority Line Item List
With Projected Cost
August 15, 2007

TIME LINE CHART

	Item Assigned To:	AUGUST 12th – 18th	AUGUST 19th – 25th	AUG & SEP 26th – 1st	SEPT 2nd – 8th	SEPT 9th – 15th	SEPT 16th – 22nd	SEPT 23rd – 29th	SEP & OCT 30th – 6th	OCTOBER 7th – 13th	OCTOBER 14th – 20th	OCTOBER 21st – 27th	OCT & NOV 28th – 3rd
12.L. All flameproof electrical components (see #14).	BW CH, SS							Confirm Design	– –	– –	– –	– –	Order
12.M. Metal skids, finish painted (covered by #8).	BW SS												
12.N. Insulation of the system with high temperature insulation: $50,000	BW SS							Confirm Design	– –	– –	– –	– –	Order
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump: $100,000	BW SS	Shop Evaluate Hot Oil Heater System	– –	– –	– –	Shop Repair System	– –	– –	– –	– –	– –	– –	– –
12.P. Evaporative cooling tower with 750T capacity as cooling water with its circulation pump: $25,000	BW SS											Confirm Design	Order
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS												Confirm Design
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS					Start Design	– –	– –	– –	– –	– –	– –	End Design
14. Process Electrical Equipment: $200,000 (motor and process controls including distribution)	BW CH SS					Start Design	– –	– –	– –	– –	– –	– –	– –
15. Pumps (Oil Tank Farm): $20,000	BW, SS							Confirm Needs	Confirm	Order	– –	– –	– –
16. Spare Parts: $35,000	CH												

B.W. – Brian Weathers
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S.S. – Steve Stricker

EPAHO04400691

Oil Purification Project
Construction Priority Line Item List
With Projected Cost
August 15, 2007

TIME LINE CHART

	Item Assigned To:	November 4th – 10th	November 11th – 17th	November 18th – 24th	Nov & Dec 25th – 1st	December 2nd – 8th	December 9th – 15th	December 16th – 22nd	December 23rd – 29th	Dec & Jan 30th – 5th	January 6th – 12th	January 13th – 19th	January 20th – 26th
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: $30,000 Field Construction Office Repair of Shop Building Repair of Field Office	BW KG												
4.A. Site Stabilization of Area Parking and Roadway: $30,000 Around New Shop and Construction Office	BS KG												
4.B. Repair of Filter Vac Clay Unit: $50,000	CH												
5. New Shop Fences: $20,000	BW & SS												
6. Tanks (7): $115,000	BW, CH, SS												
7. Scrubber System and Piping: $70,000	BW CH, SS												
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW, CH SS												
8.B. Structural and Assembly in Process Area: $60,000	BW, CH SS	--	--	--	--	--	--	Install	--	--	--	--	END
9. PESCO Engineering: $75,000	CH	--	--	--	--	--	--	--	--	--	--	--	--
10. Engineering/Structural Design Drawing: $35,000	CH												

B.W. – Brian Weathers
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EPAHO04000692

Oil Purification Project Construction Priority Line Item List With Projected Cost August 15, 2007	**TIME LINE CHART**

	Item Assigned To:	November 4th – 10th	November 11th – 17th	November 18th – 24th	Nov & Dec 25th – 1st	December 2nd – 8th	December 9th – 15th	December 16th – 22nd	December 23rd – 29th	Dec & Jan 30th – 5th	January 6th – 12th	January 13th – 19th	January 20th – 26th
11. Utilities (Power for site and operational areas): $40,000	BW SS	--	--	--	--	--	--	--	--	END			
12. OPS Process Equipment (A-Q below): Combined Total $791,000	CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG): $20,000	BW CH SS	--	--	--	--	Deliver Equip.	Install	--	--	--	--	--	--
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $220,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $180,000	BW CH SS	--	--	--	--	--	--	--	--	--	--	--	--
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing: $16,000	BW CH SS	--	--	--	--	--	--	Deliver To CES	Install	--	--	--	--
12.D. Liquid ring vacuum system.	BW, CH, SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.E. Vacuum skid, controls, tank cooler.	BW, SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.F. Positive displacement vacuum booster (2).(Totals for D.E.F.) $45,000	BW, CH SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.G. Pipe and fittings (covered by #13).	BW, CH, SS												
12.H. Level, flow, pressure and temperature monitors, controllers and alarms: $50,000	BW CH SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.I. Motor control panel(s) (covered by #14).	BW CH, SS												

B.W. – Brian Weathers
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Oil Purification Project Construction Priority Line Item List With Projected Cost August 15, 2007	**TIME LINE CHART**

	Item Assigned To:	November 4th – 10th	November 11th – 17th	November 18th – 24th	Nov & Dec 25th – 1st	December 2nd – 8th	December 9th – 15th	December 16th – 22nd	December 23rd – 29th	Dec & Jan 30th – 5th	January 6th – 12th	January 13th – 19th	January 20th – 26th
12.J. PLC inclusive of the computer: $25,000	BW, CH,SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.K. Valves and control valves with High temperature packing and Seals: $50,000	BW SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12. L. All flameproof electrical components (see #14).	BW CH, SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.M. Metal skids, finish painted (covered by #8).	BW SS												
12.N. Insulation of the system with high temperature insulation: $50,000	BW SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump: $100,000	BW SS	--	--	--	--	--	--	--	--	--	--	--	--
12.P. Evaporative cooling tower with 750T capacity as cooling water with its circulation pump: $25,000	BW SS												
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS	--	--	--	--	--	--	--	--	Deliver	Install	--	--
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS	Order Materials	and Field Fab	--	--	--	--	--	--	--	--	--	END
14. Process Electrical Equipment: $200,000 (motor and process controls including distribution)	BW CH SS	--	END	Order Materials	--	--	--	--	--	--	--	--	--
15. Pumps (Oil Tank Farm): $20,000	BW & SS												
16. Spare Parts: $35,000	CH												

B.W. – Brian Weathers
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Oil Purification Project
Construction Priority Line Item List
With Projected Cost
August 15, 2007

TIME LINE CHART

	Item Assigned To:	Jan & Feb 27th – 2nd	February 3rd – 9th	February 10th – 16th	February 17th – 23rd	Feb &March 24th – 1st	March 2nd – 8th	March 9th – 15th	March 16th – 22nd	March 23rd – 29th	Mar & Apr 30th – 5th	April 6th – 12th	April 13th – 19th
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: $30,000 Field Construction Office Repair of Shop Building Repair of Field Office	BW KG												
4.A. Site Stabilization of Area Parking and Roadway: $30,000 Around New Shop and Construction Office	BW KG												
4.B. Repair of Filter Vac Clay Unit: $50,000	CH												
5. New Shop Fences: $20,000	BW & SS												
6. Tanks (7): $115,000	BW, CH, SS												
7. Scrubber System and Piping: $70,000	BW CH, SS												
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW CH, SS												
8.B. Structural and Assembly in Process Area: $60,000	BW CH, SS												
9. PESCO Engineering: $75,000	CH	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	END
10. Engineering /Structural Design Drawings: $35,000	CH												

B.W. – Brian Weathers
C.H. – Clark Hickman
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Oil Purification Project Construction Priority Line Item List With Projected Cost August 15, 2007	**TIME LINE CHART**												
	Item Assigned To:	**Jan & Feb 27th – 2nd**	**February 3rd – 9th**	**February 10th – 16th**	**February 17th – 23rd**	**Feb &March 24th – 1st**	**March 2nd – 8th**	**March 9th – 15th**	**March 16th – 22nd**	**March 23rd – 29th**	**Mar & Apr 30th – 5th**	**April 6th – 12th**	**April 13th – 19th**
11. Utilities (Power for site and operational areas): $40,000	BW, CH, SS												
12. OPS Process Equipment (A-Q below): Combined Total $791,000	CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG): $20,000	BW CH SS	– –	– –	– –	– –	END							
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $220,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $180,000	BW CH SS	– –	Delivered	Place Large Luwa in Structure	– –	Finish Piping and Electrical	Place Small Luwa in Structure	– –	Finish Piping and Electrical	– –	Start up Test Units with Liquid	Repair Any Issues	Repair Any Issues
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing: $16,000	BW CH SS												
12.D. Liquid ring vacuum system.	BW, CH, SS												
12.E. Vacuum skid, controls, tank cooler.	BW, SS												
12.F. Positive displacement vacuum booster (2). (D.E.F. Totals) $45,000													
12.G. Pipe and fittings (covered by #13).	BW, CH, SS												
12.H. Level, flow, pressure and temperature monitors, controllers and alarms: $50,000	BW CH SS												
12.I. Motor control panel(s) (covered by #14).	BW CH, SS												
12.J. PLC inclusive of the computer: $25,000	BW, CH,SS												

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Oil Purification Project Construction Priority Line Item List With Projected Cost August 15, 2007	**TIME LINE CHART**

	Item Assigned To:	Jan & Feb 27th – 2nd	February 3rd – 9th	February 10th – 16th	February 17th – 23rd	Feb &March 24th – 1st	March 2nd – 8th	March 9th – 15th	March 16th – 22nd	March 23rd – 29th	Mar & Apr 30th – 5th	April 6th – 12th	April 13th – 19th
12.K. Valves and control valves with High temperature packing and Seals: $50,000	BW SS												
12. L. All flameproof electrical components (see #14).	BW CH, SS												
12.M. Metal skids, finish painted (covered by #8).	BW SS												
12.N. Insulation of the system with high temperature insulation: $50,000	BW SS												
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump: $100,000	BW SS	– –	Field Installed System	– –	– –	Liquid Test	– –	– –	Liquid Test	Repair any Issues	– –	– –	– –
12.P. Evaporative cooling tower with 750T capacity as cooling water with its circulation pump: $25,000	BW SS												
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS												
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS	Start In Structure	– –	– –	– –	– –	– –	– –	– –	END			
14. Process Electrical Equipment: $200,00 (motor and process controls including distribution)	BW CH SS	– –	Install Electrical & Controls	– –	– –	– –	– –	– –	– –	– –	END	Debug Fix / Repair	Debug Fix / Repair
15. Pumps (Oil Tank Farm): $20,000	BW & SS												
16. Spare Parts: $35,000	CG												

B.W. – Brian Weathers
C.H. – Clark Hickman
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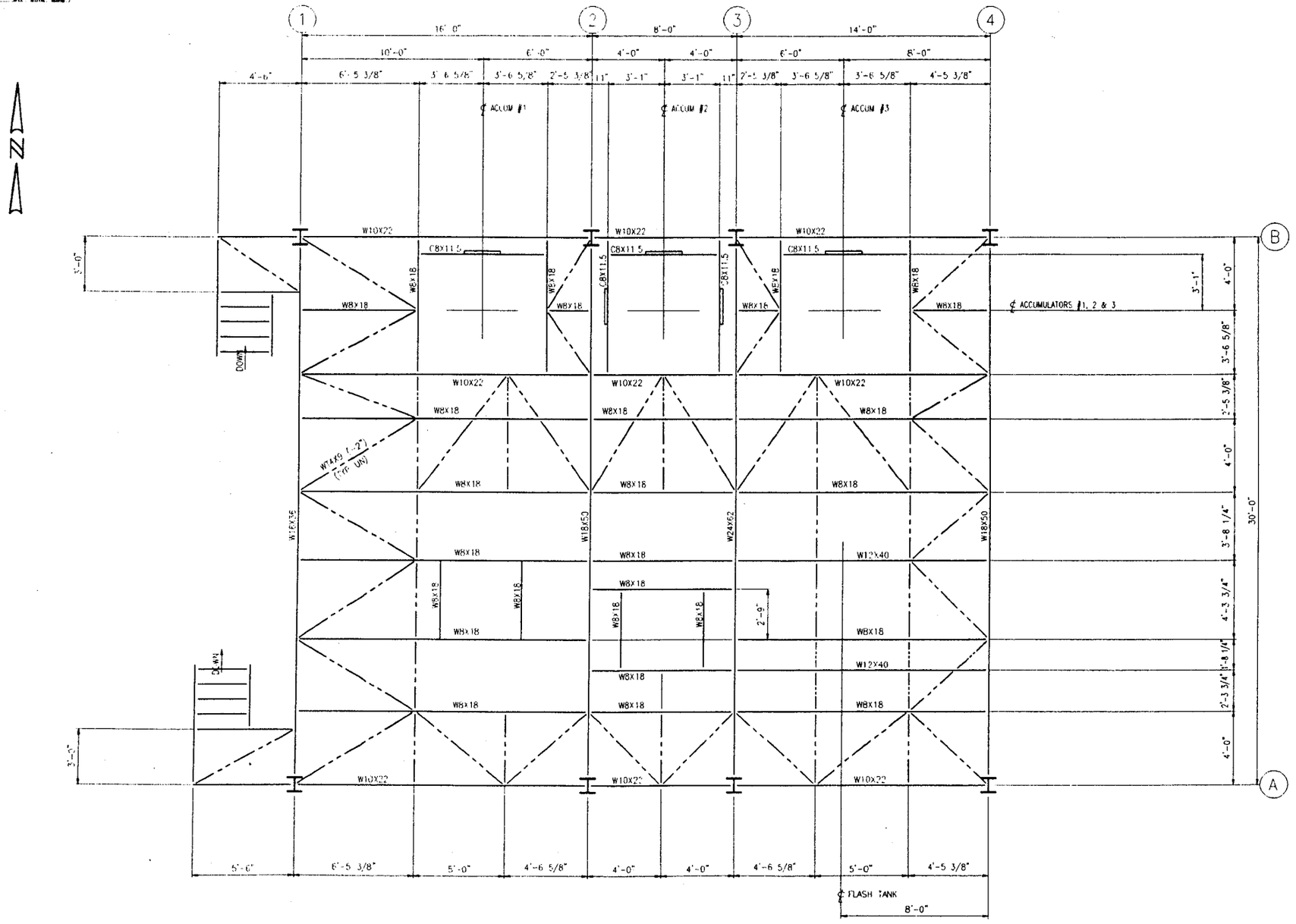
S.S. – Steve Stricker

EPAHO04400697



NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	0				

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 122'-0"

CLIENT JOB NO.

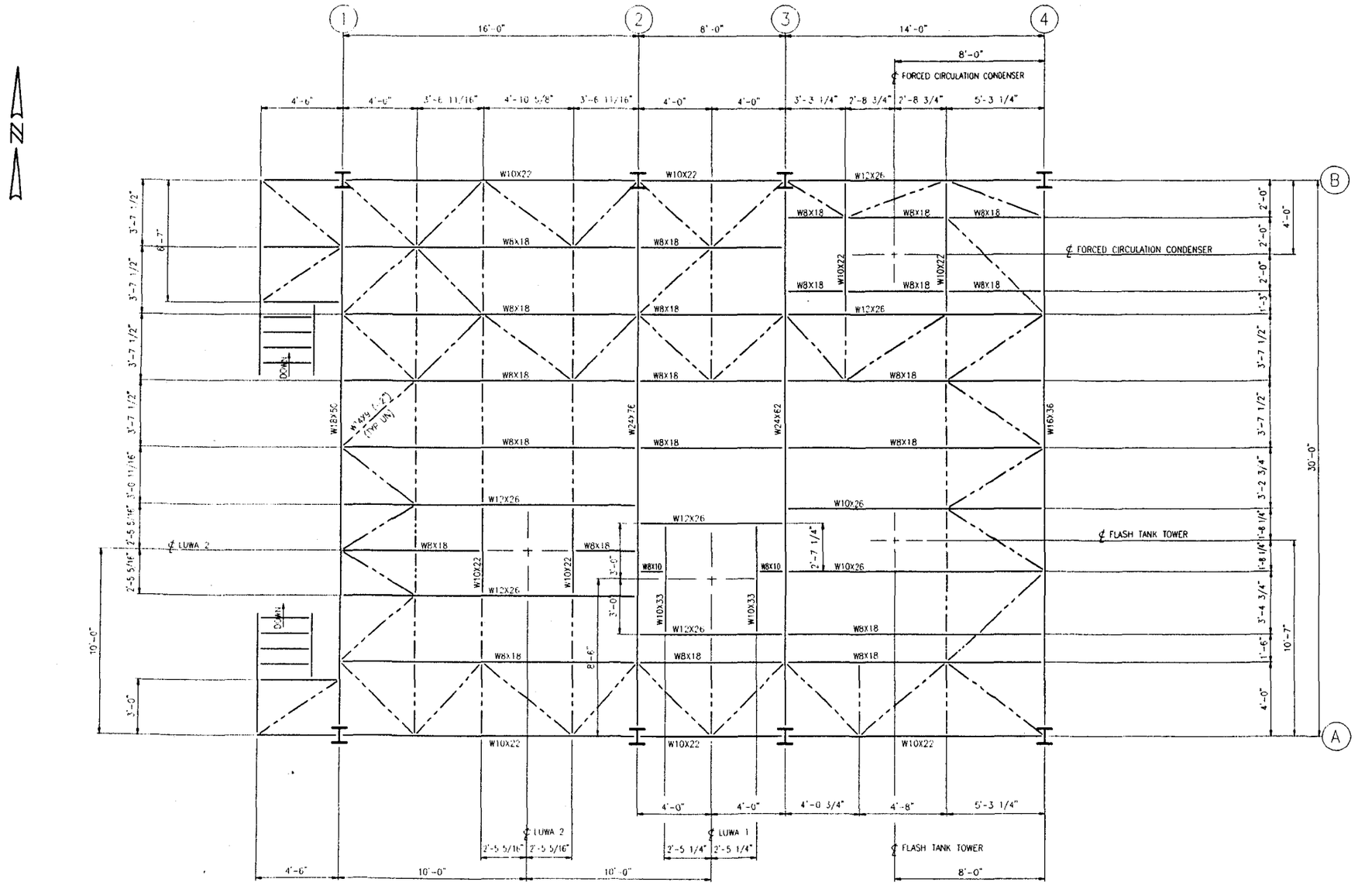
		DATE
ENG RECORD		
DRAWN BY		
CHECKED		
APPROVED		
APPROVED		
SCALE 3/8" = 1'-0"		

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

EPAHO04400698



NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	0				

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 140'-0"

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	

SCALE 3/8" = 1'-0"

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO. REV. A

EPAHO04400699

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	0				

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 152'-7"

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	
SCALE 3/8" = 1'-0"	

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

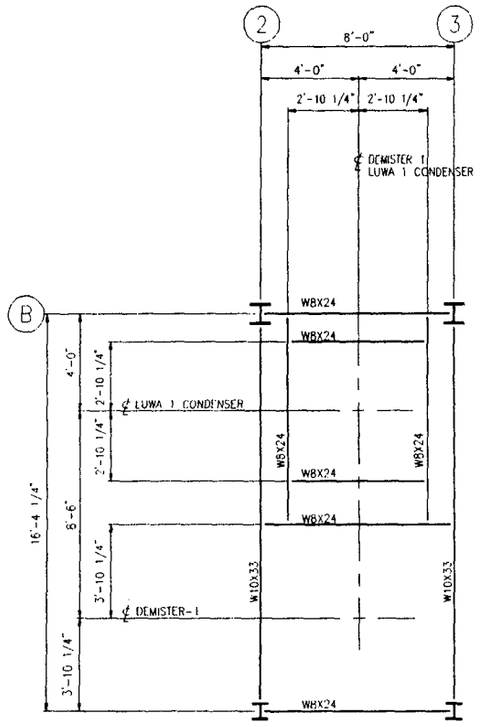
DRAWING NO.

REV. A

EPAHO04400700

REF. DWG. NO.

N



NOTES:

REF. DRAWINGS	NO	REVISION	DATE	BY	APR
	0				

CLIENT JOB NO.

OIL PROCESSING STRUCTURE
PLAN AT TOS ELEVATION 157'-4"

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	

SCALE 3/8" = 1'-0"

TEXAS GULF COAST ENGINEERS
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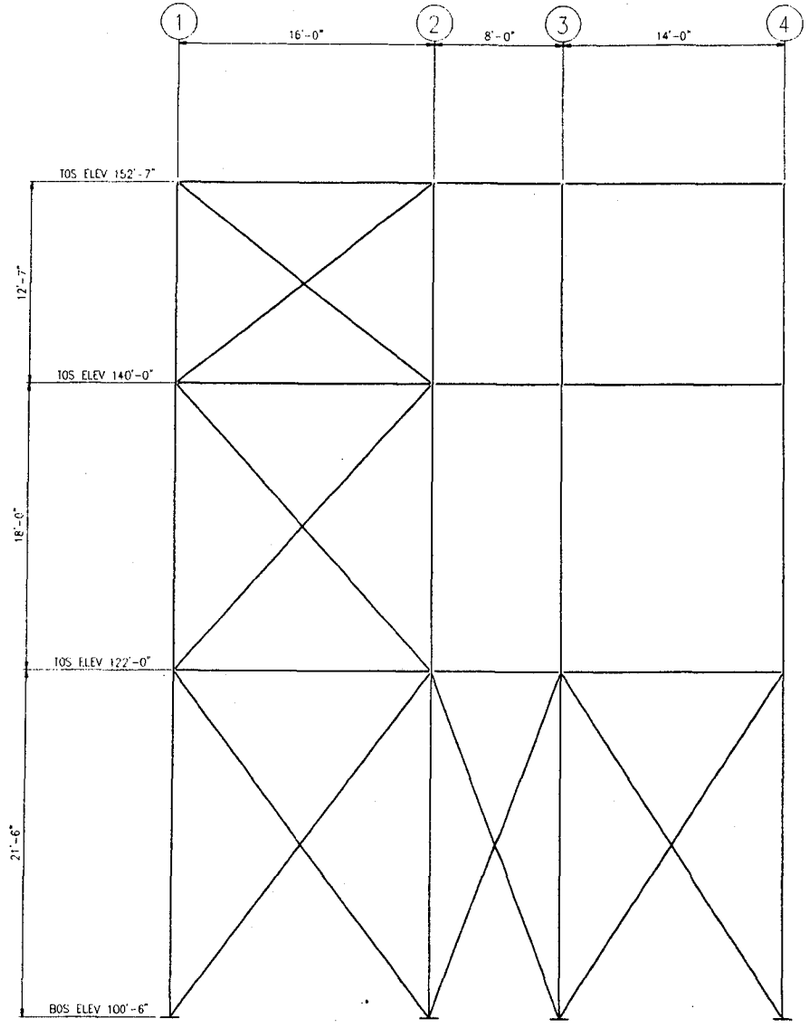
Houston, Texas

JOB NO.

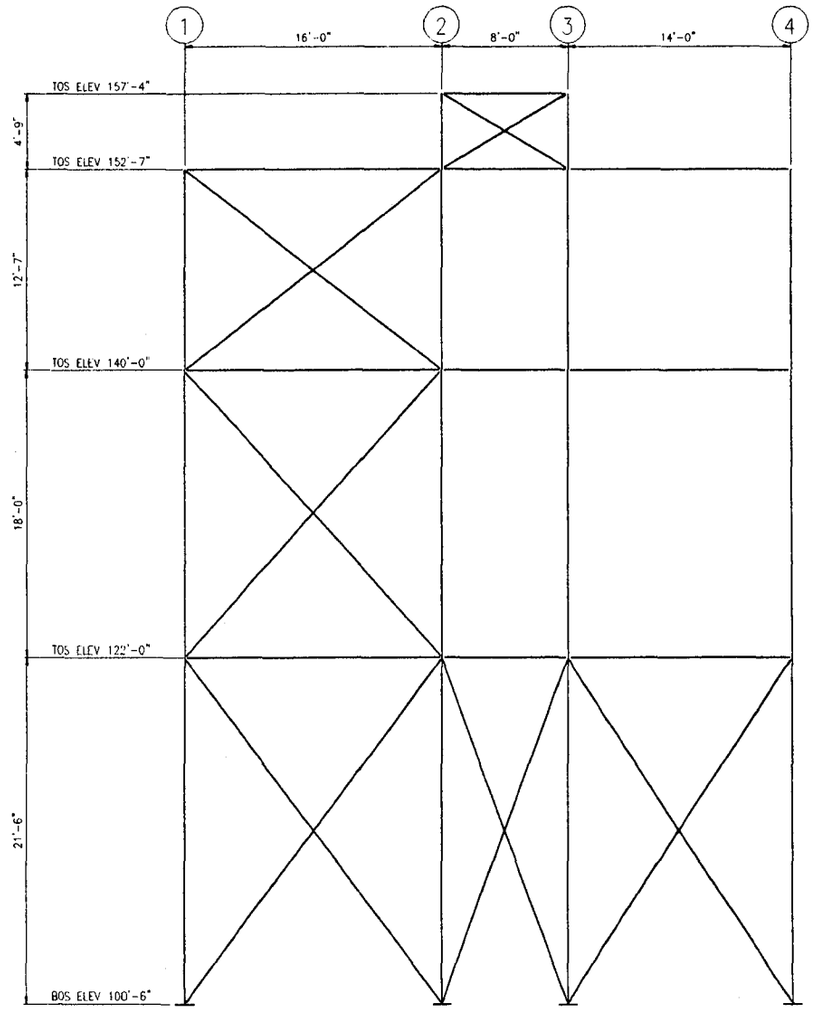
DRAWING NO. REV. A

EPAHO04400701



ELEVATION AT COL LINE A

(LOOKING NORTH)



ELEVATION AT COL LINE B

(LOOKING NORTH)

NOTES:

NO.	REVISION	DATE	BY	APR
0				

REF. DRAWINGS

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES A & B

CLIENT JOB NO.

		DATE
ENG. RECORD		
DRAWN BY		
CHECKED		
APPROVED		
APPROVED		

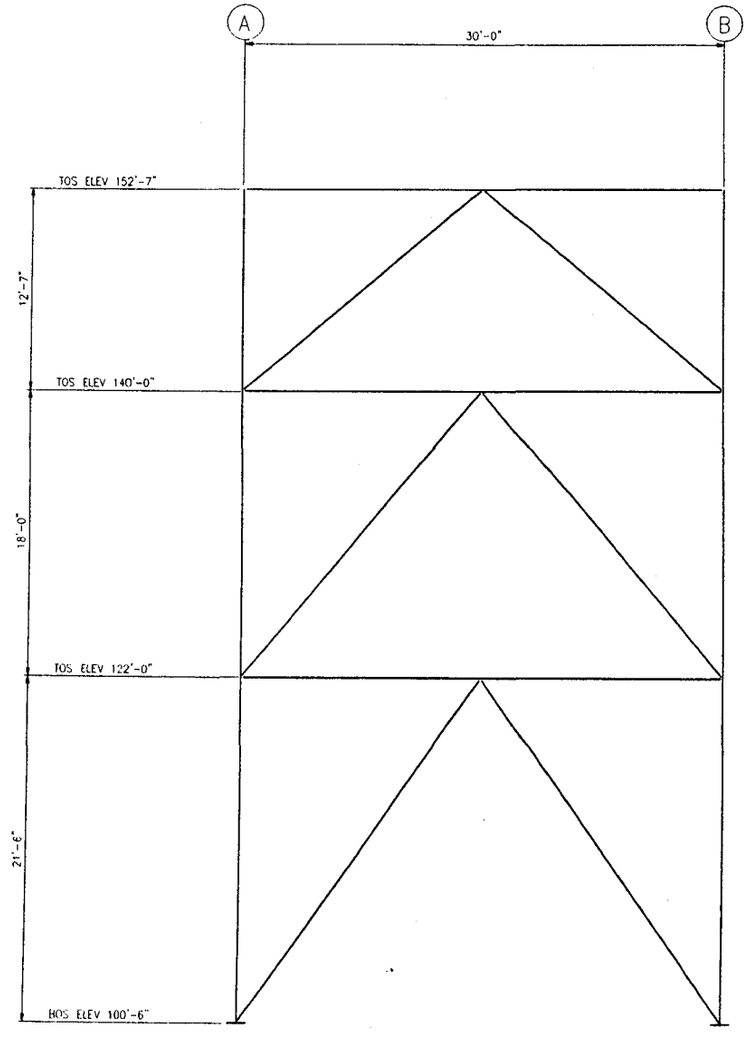
SCALE 1/4" = 1'-0"

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

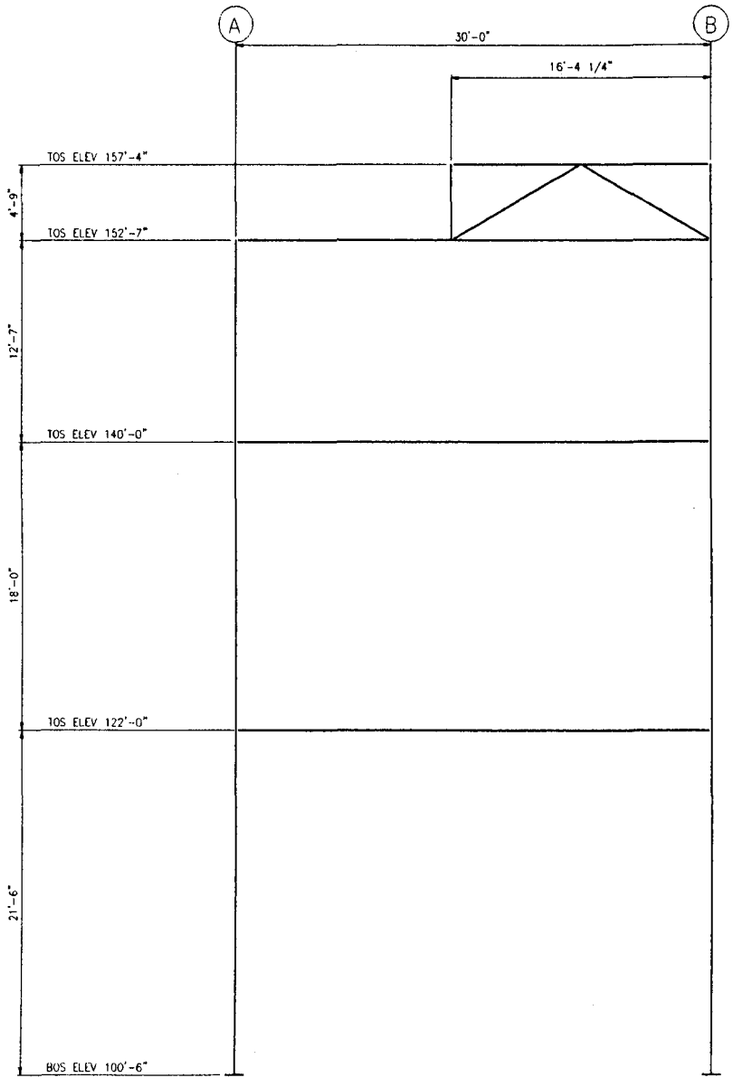
DRAWING NO. REV. 0

EPAHO044000702



ELEVATION AT COL LINE 1

(LOOKING WEST)



ELEVATION AT COL LINE 2

(LOOKING WEST)

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APP
	0				

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES 1 & 2

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	

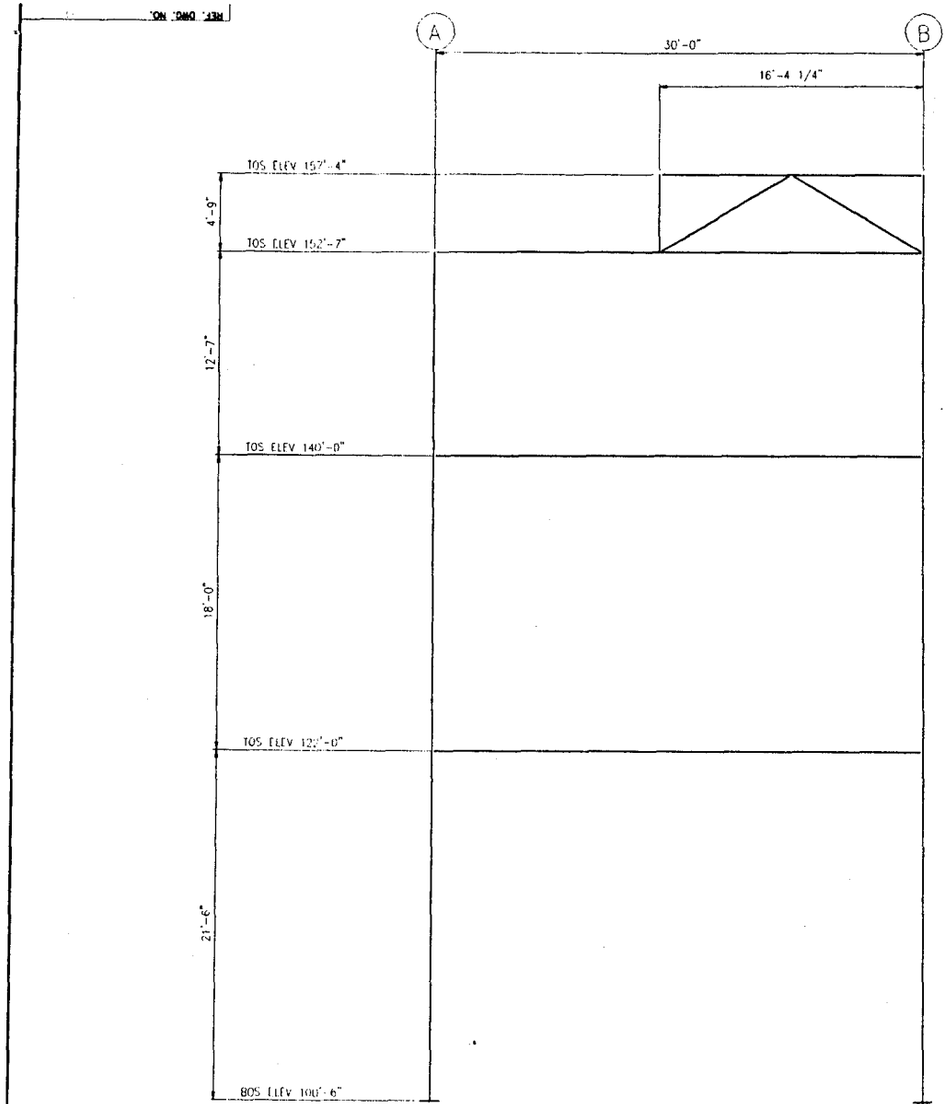
SCALE 1/4" = 1'-0"

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

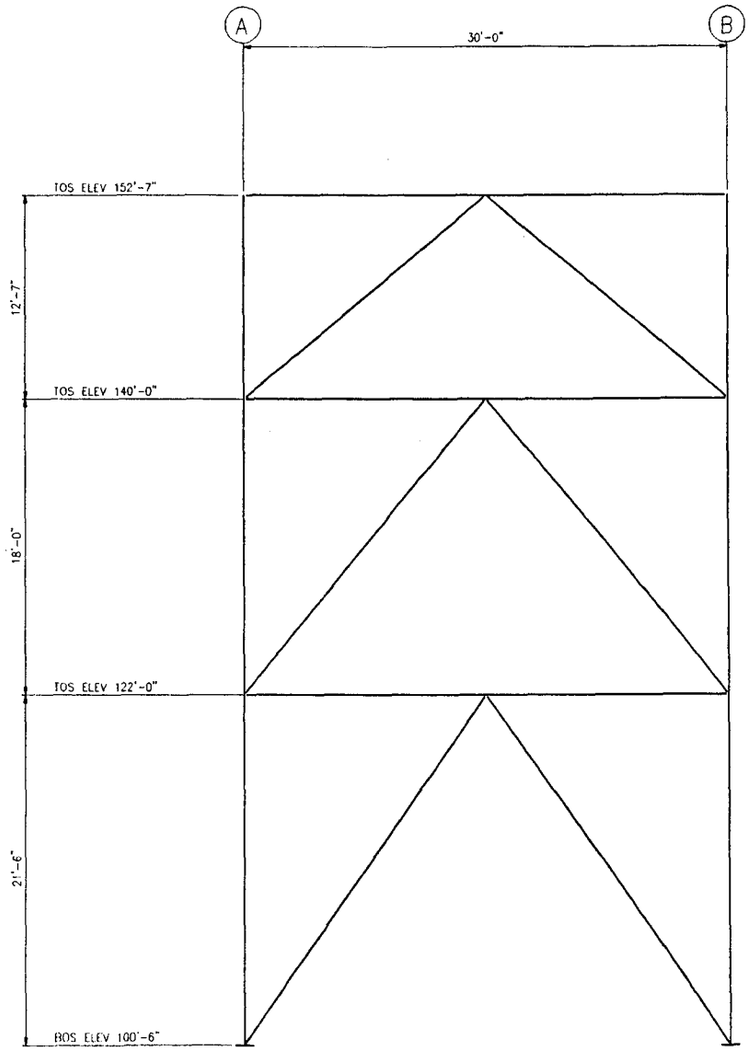
DRAWING NO. REV. 0

EPAHO04400703



ELEVATION AT COL LINE 3

(LOOKING WEST)



ELEVATION AT COL LINE 4

(LOOKING WEST)

NOTES:

REF. DRAWINGS	NO.	REVISION	DATE	BY	APR
	0				

OIL PROCESSING STRUCTURE
ELEVATIONS AT COL LINES 3 & 4

CLIENT JOB NO.

ENG. RECORD	DATE
DRAWN BY	
CHECKED	
APPROVED	
APPROVED	

SCALE 1/4" = 1'-0"

TEXAS GULF COAST ENGINEERS
Engineering, Design & Measurement Services
Houston, Texas

JOB NO.

DRAWING NO.

REV. 0

EPAHO04400704

TEXAS GULF COAST ENGINEERS
Engineering, Design and Measurement Services

John Yonkers
Project Manager, P.E.

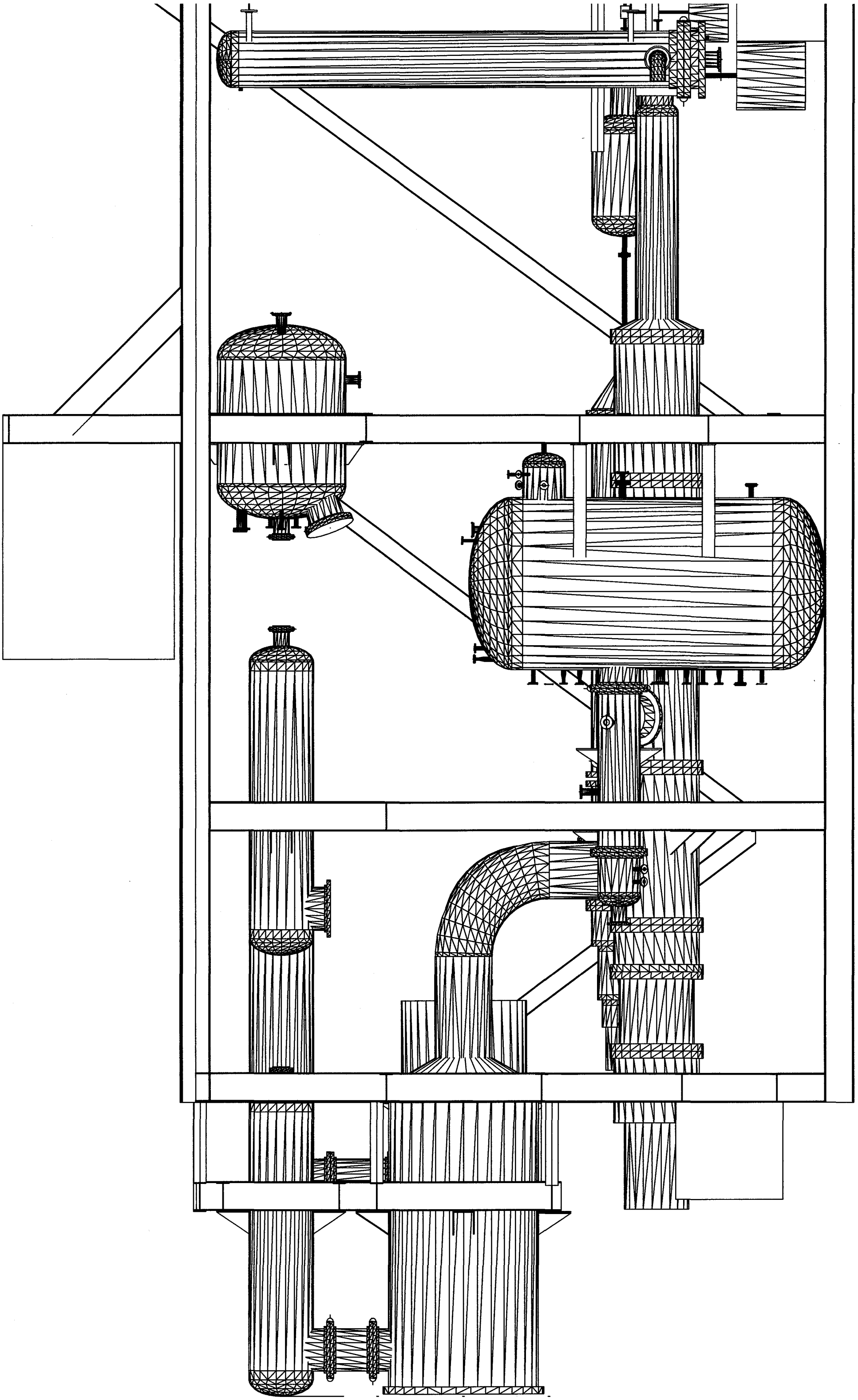
2900 Woodridge, Suite 240
Houston, Texas 77087
(b) (6) Office (713) 477-8682
Cell ~~(713) 256-3805~~
Fax (713) 477-8657
E-mail: jyonkers@tgcengineers.com

DRAGON PRODUCTS, LTD.
A Modern Group Company

Kevin Alley
Product /Systems Designer

205 FM 1909
Liberty, TX 77575
Email: kevin.alley@modernusa.com
Website: www.modernusa.com

Phone: 936-334-0182
Fax: 936-334-0614
Toll Free: 866-914-8198
409-299-2519:



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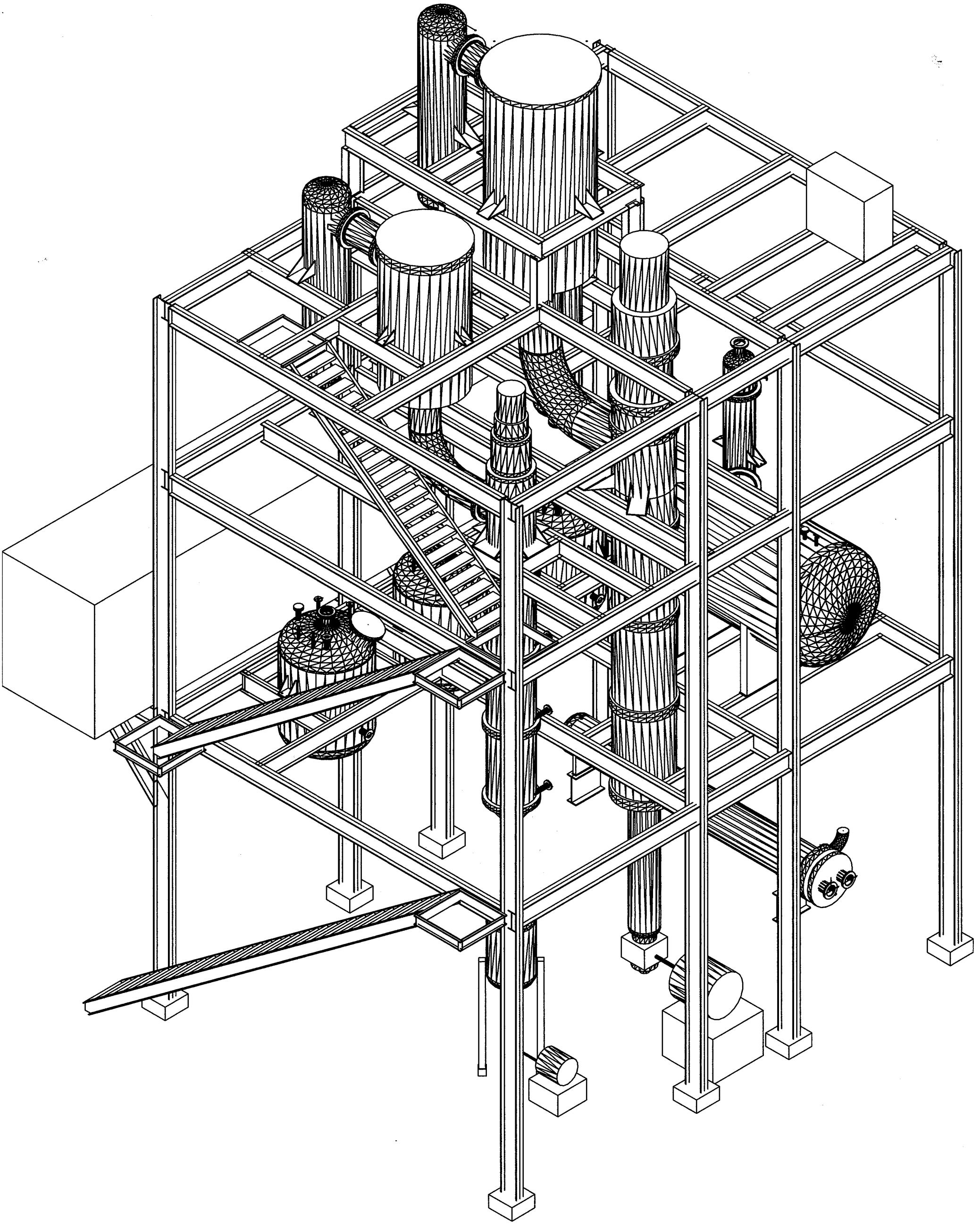

EPAHO044000707

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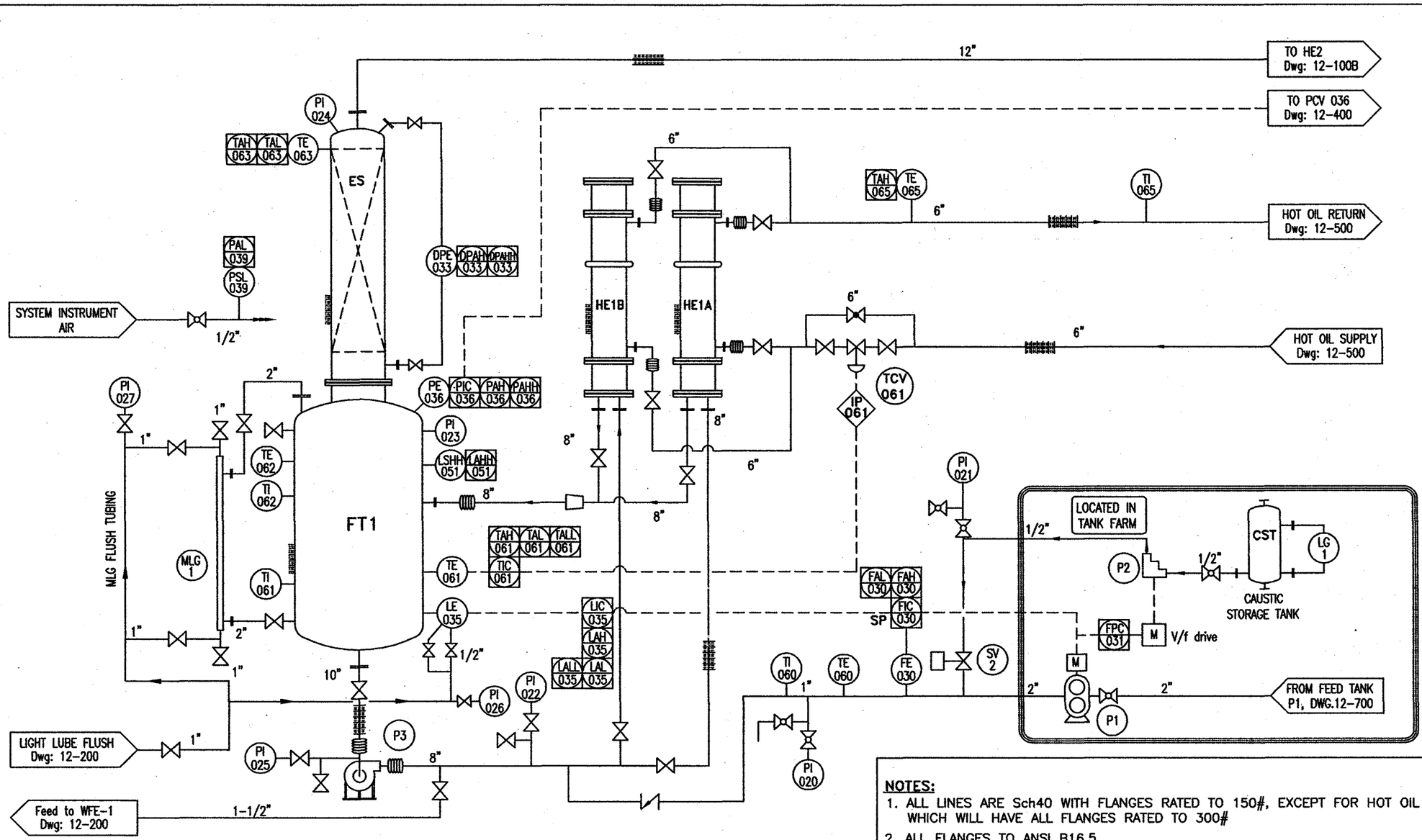

NOTES:

1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

FT 1
FLASH TANK 1
2500 US Gal
6'Dia x 13'1-1/2" Ht

ES
Entrainment Separator
33" OD x 9'10.11" Ht
2" SS 304 Pall Rings

HE1 A/B
FC REBOILER
2 Pass
HTA: 1400 Sq.ft
TUBES: 1" OD x16BWG x18' Lg
300Nos (SS 304)

CST
Caustic storage tank
2000-4000 US Gallons

P 1
SYSTEM FEED PUMP
TYPE: Gear Pump
40 US GPM at 170' HEAD
__HP, __RPM
Variable Frequency Drive

P 2
CAUSTIC DOSING PUMP
0.5 US GPM at 8 bar
Variable Frequency Drive

P 3
FLASHER RECIRCULATION PUMP
TYPE: Centrifugal Pump
2000 US GPM at 70' HEAD
__HP, __RPM

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:				REF. : --
SCALE: NTS	P&ID FRONT END 'A' [Capacity; 1000GPH]			JOB No: --
SHEET: 1 of 2				ORDER REF.: --
	DRN	CLRD	DRG NO :	REV: -0- DATE: 30/Oct/07
	Sara		12-100A	

EPAHO04400708

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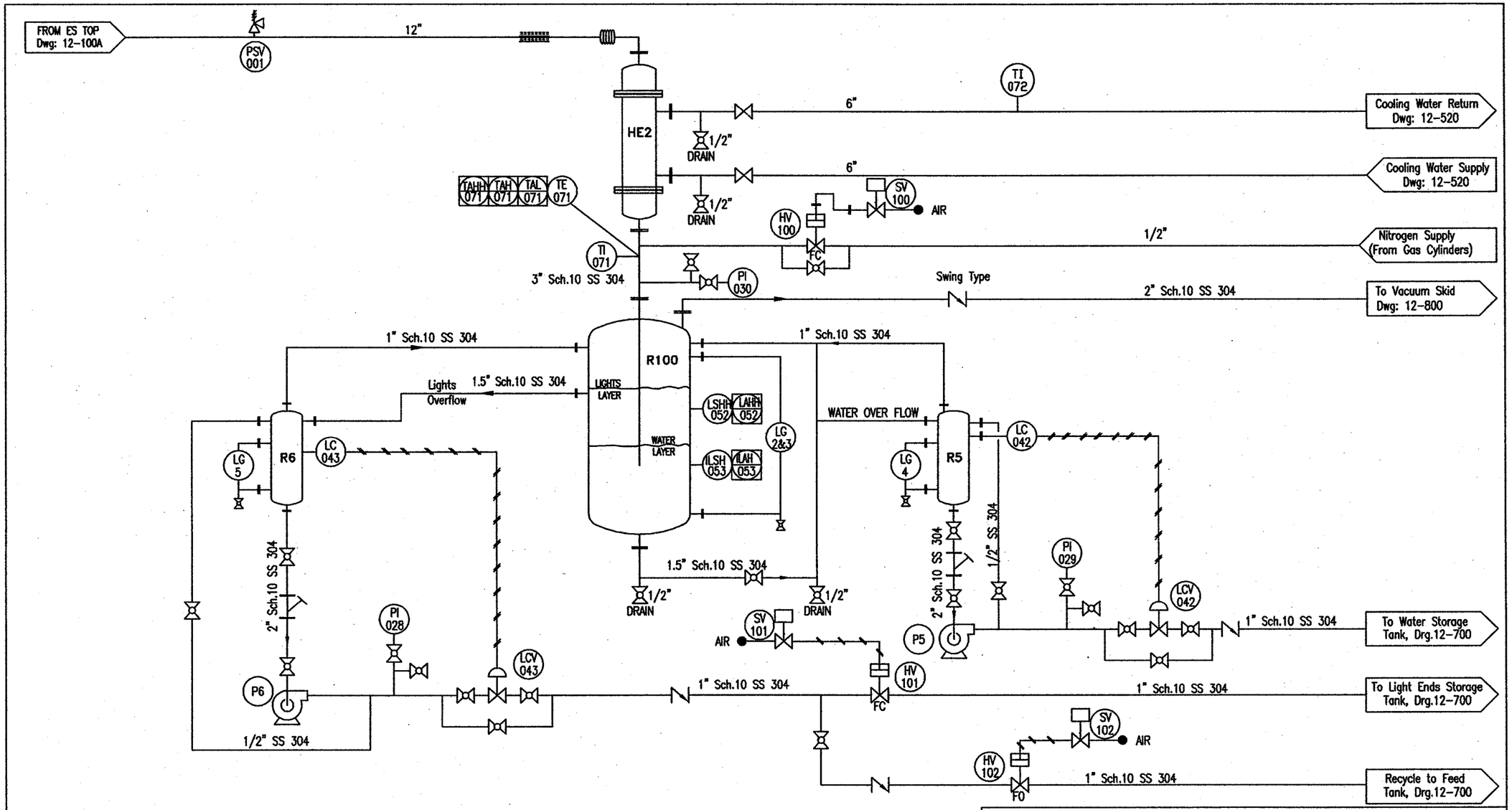

R 100
WATER/LIGHTS RECEIVER
250 US Gallons
33" Dia x 7' Ht
MOC : SS 304

R 6
LIGHTS RECEIVER
30 US Gallons
16" Dia x 3'3" Ht
MOC : SS 304

P 5
WATER PRODUCT PUMP
TYPE: Centrifugal Pump
16 US GPM at 100' HEAD
__HP, __RPM

R 5
WATER RECEIVER
30 US Gallons
16" Dia x 3'3" Ht
MOC : SS 304

HE 2
FRONT END CONDENSER
SHELL &TUBE / 1 Pass
HTA: 570 Sq ft
TUBE SIDE: 1" OD x16BWG x 9' 10" Lg
222Nos (SS 304)

P 6
LIGHTS PRODUCT PUMP
TYPE: Centrifugal Pump
16 US GPM at 100' HEAD
__HP, __RPM

NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF.: --
SCALE: NTS	P & ID FRONT END B [Capacity: 1000GPH]		JOB NO: --
SHEET: 2 OF 2			ORDER REF.: --
	DRN: Sara	CLRD:	DRG NO : 12-100B
			REV: -0- DATE: 30/Oct/07

EPAHO04400709

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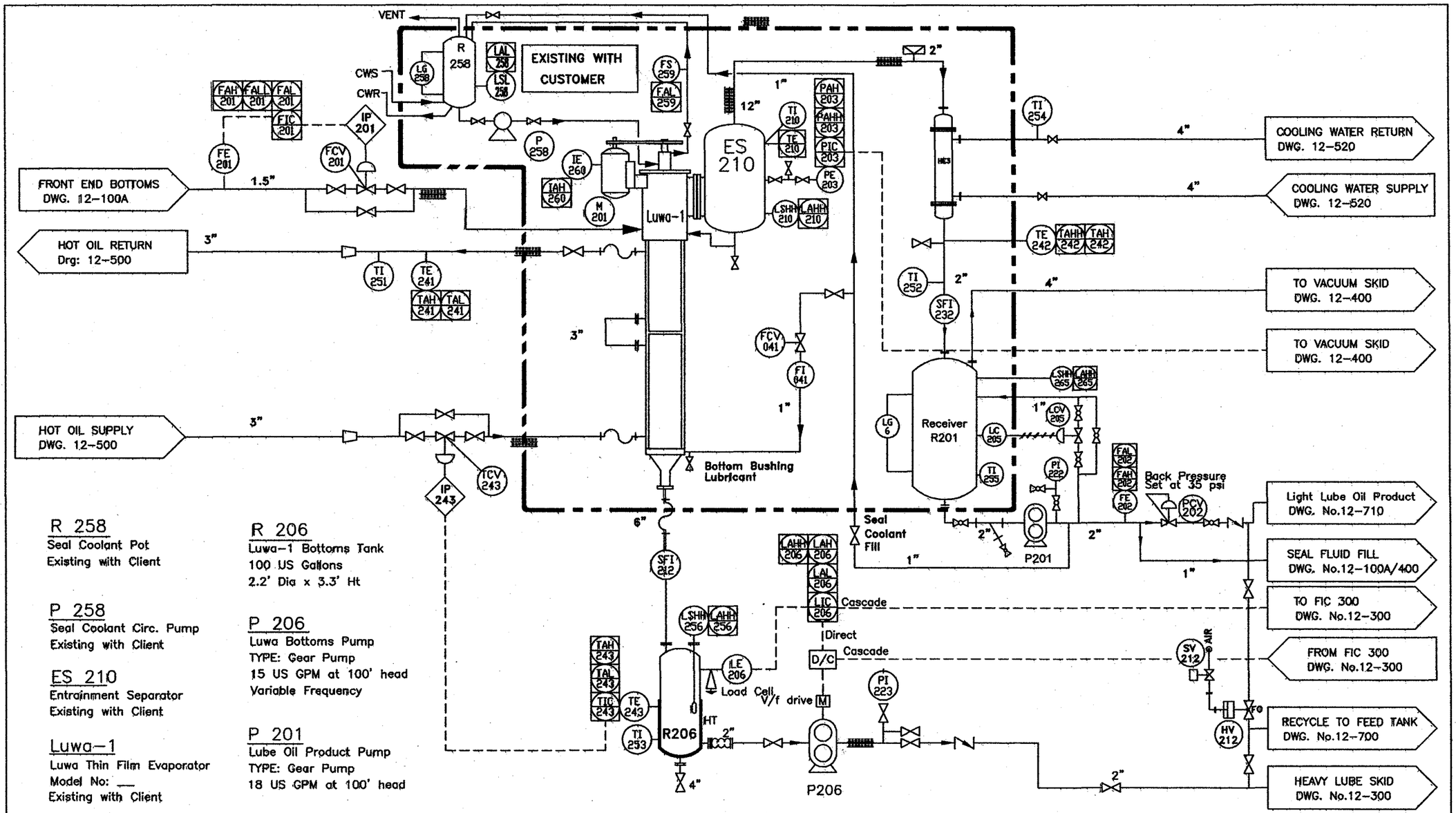


R 258
Seal Coolant Pot
Existing with Client

P 258
Seal Coolant Circ. Pump
Existing with Client

ES 210
Entrainment Separator
Existing with Client

Luwa-1
Luwa Thin Film Evaporator
Model No: ___
Existing with Client

R 201
Lube Product Receiver
Existing with Client

HE3
Condenser
Existing with Client

R201
Light Lube Receiver
Existing with Client

R 206
Luwa-1 Bottoms Tank
100 US Gallons
2.2' Dia x 3.3' Ht

P 206
Luwa Bottoms Pump
TYPE: Gear Pump
15 US GPM at 100' head
Variable Frequency

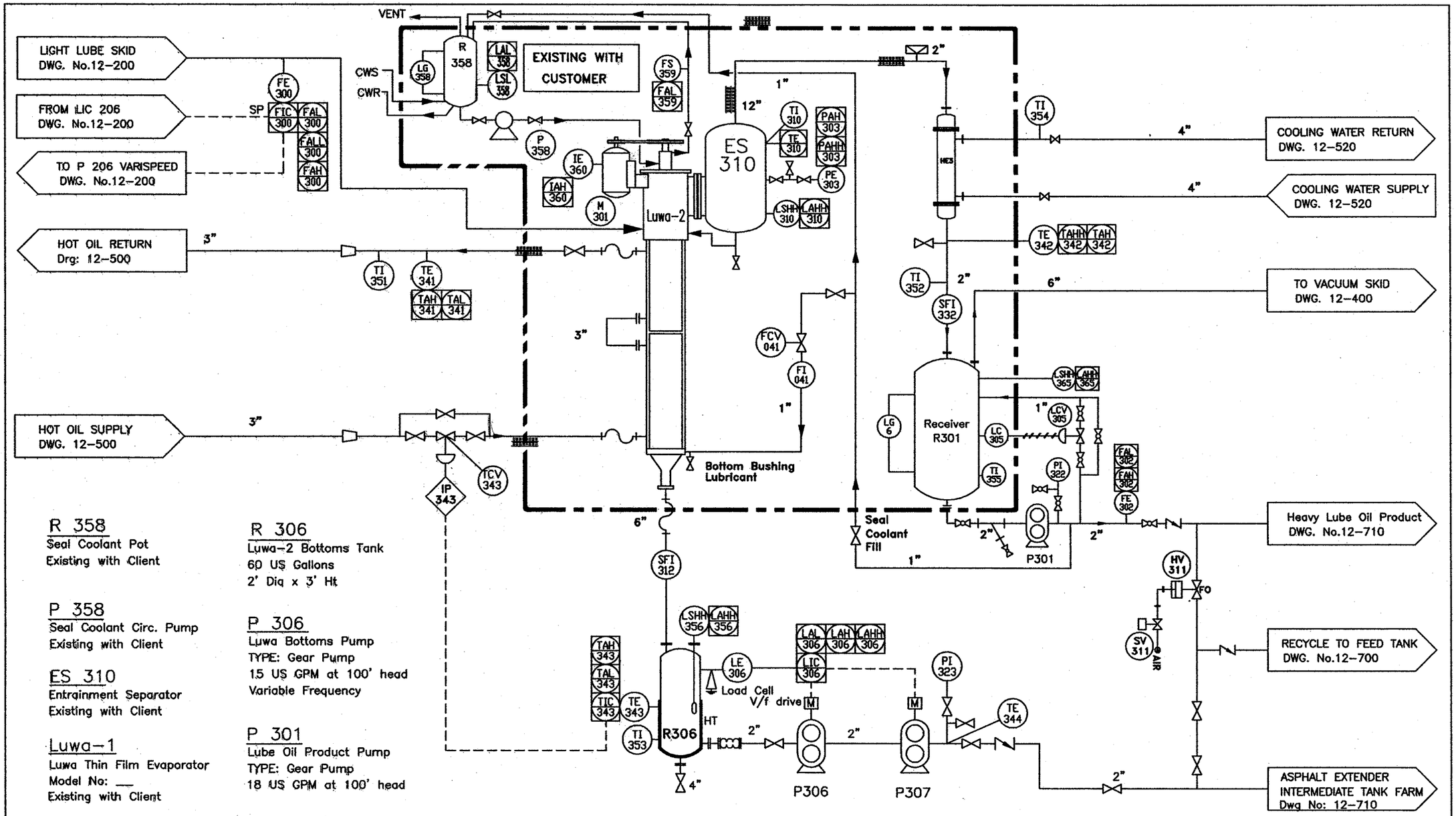
P 201
Lube Oil Product Pump
TYPE: Gear Pump
18 US GPM at 100' head

NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO
Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:				REF. DRG. : --
SCALE: NTS	P& ID – LIGHT LUBE SKID (Capacity: 1000GPH)			JOB NO: --
SHEET: 1 OF 1	DRN	CLRD	DRG NO :	ORDER REF.: --
	Sara		12-200	REV: -0- DATE: 31/Oct/07

EPAHO044000710



R 358
Seal Coolant Pot
Existing with Client

P 358
Seal Coolant Circ. Pump
Existing with Client

ES 310
Entrainment Separator
Existing with Client

Luwa-1
Luwa Thin Film Evaporator
Model No: ___
Existing with Client

R 301
Lube Product Receiver
Existing with Client

HE3
Condenser
Existing with Client

R301
Light Lube Receiver
Existing with Client

R 306
Luwa-2 Bottoms Tank
60 US Gallons
2' Dia x 3' Ht

P 306
Luwa Bottoms Pump
TYPE: Gear Pump
1.5 US GPM at 100' head
Variable Frequency

P 301
Lube Oil Product Pump
TYPE: Gear Pump
18 US GPM at 100' head

NOTES:
1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:				REF. DRG. : --
SCALE: NTS	P& ID – HEAVY LUBE SKID [Capacity: 1000GPH]			JOB NO: --
SHEET: 1 OF 1				ORDER REF.: --
	DRN	CLRD	DRG NO :	REV: -0- DATE: 31/Oct/07
	Sara		12-300	

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EPAHO04400711

P 401
Vacuum Blower 1
MODEL: Kinney KMBD 1200
800 cfm @ 1mm Hg
10HP, 3550 RPM

P 403
Vacuum Blower 2
MODEL: Kinney KMBD 400
160 cfm @ 5 mm Hg.
3HP, 1750 RPM

P 404
Liquid Ring Vac. Pump
Kinney KLRC 100
37 cfm
7.5HP, 1750 RPM

P 410
Liquid Ring Vac. Pump
Kinney KLRC 100-FA2
100 cfm
7.5HP, 1750 RPM

P419
Gear Pump
2.6 US GPM 50' Head
Air Operated Motor

P 420
R 420 Drain Pump
MODEL:KSB-CPK E m 32-125
3HP, 3460RPM

R 405
Seal Fluid Tank
20 US Gallons

R 411
Seal Fluid Tank
50 US Gallons

P 415
Autofilter Pump
TYPE: Gear Pump

HE 406, HE 412A &412B
Seal Fluid Cooler
15 Sq.Ft.

HE402
Interstage Cooler
20 Sq. Ft.
SS U tube Bundle

R 420
Receiver
100 US Gallons

NOTES:

1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE
4. BLOWER & VACUUM PUMP COOLING WATER TUBING CONNECTIONS LEFT OFF OF DRAWING FOR CLARITY.

PESCO **Pragmatic Environmental Solutions Co.,**
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF.: Email of Oct 31, 2007
SCALE: NTS	P &ID–VACUUM SKID		JOB NO:
			ORDER REF.:
SHEET: 1 OF 1	DRN: Sara	CHKD:	DRG NO: 12–400
			REV: –0– DATE: 31Oct,07

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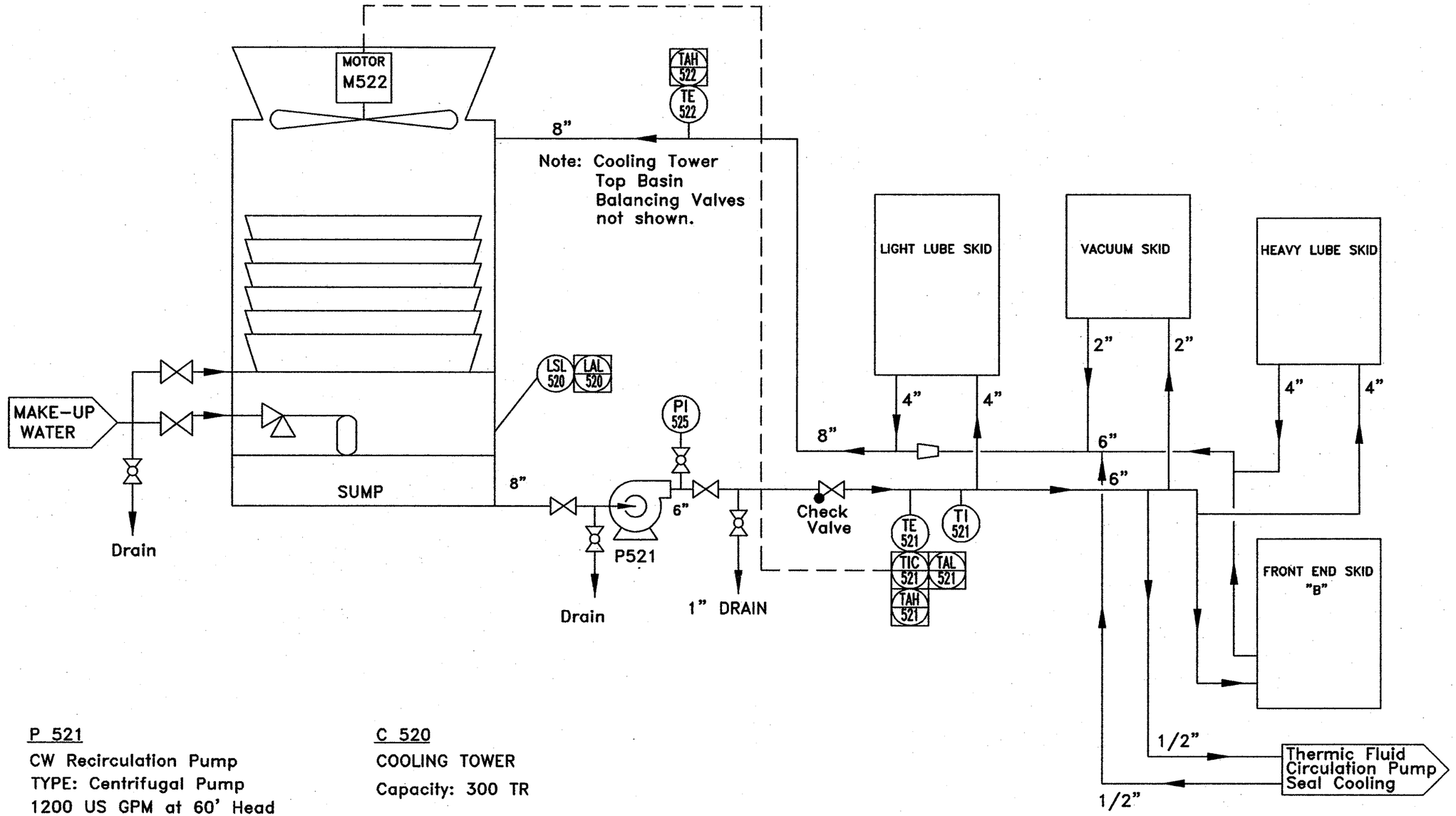
EPAHO044000712

COOLING TOWER – C 520



P 521
CW Recirculation Pump
TYPE: Centrifugal Pump
1200 US GPM at 60' Head
Soft Start

C 520
COOLING TOWER
Capacity: 300 TR

NOTE:
1. Cooling Water Blowdown connection not shown.
2. All Pump Capacity are in US GPM: Unless Specified Otherwise

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF.: --
SCALE: NTS	P &ID – COOLING TOWER [Capacity; 1000GPH]		JOB NO: 446
SHEET: 1 OF 1			ORDER REF.:
DRN: Sara	CLRD:	DRG NO: 12–520	REV: –0– DATE: 31Oct,07

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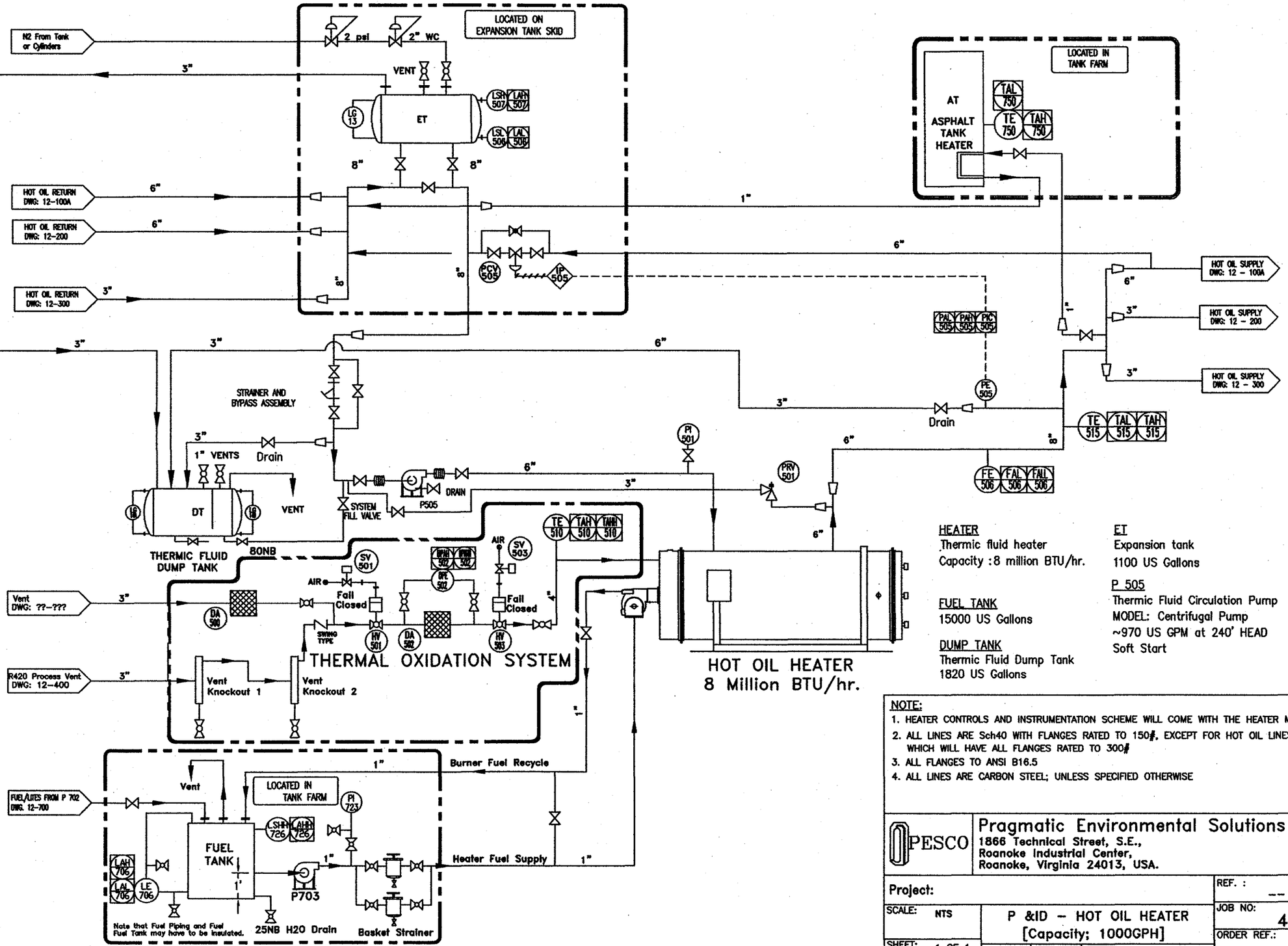

HEATER
Thermic fluid heater
Capacity : 8 million BTU/hr.

FUEL TANK
15000 US Gallons

DUMP TANK
Thermic Fluid Dump Tank
1820 US Gallons

ET
Expansion tank
1100 US Gallons

P 505
Thermic Fluid Circulation Pump
MODEL: Centrifugal Pump
~970 US GPM at 240' HEAD
Soft Start

NOTE:
1. HEATER CONTROLS AND INSTRUMENTATION SCHEME WILL COME WITH THE HEATER MANUAL.
2. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
3. ALL FLANGES TO ANSI B16.5
4. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF. : --
SCALE: NTS	P &ID – HOT OIL HEATER [Capacity; 1000GPH]		JOB NO: 446
SHEET: 1 OF 1			ORDER REF.:
DRN: Sara	CLRD:	DRG NO : 12-500	REV: -0- DATE: 31Oct07

EPAHO04400714

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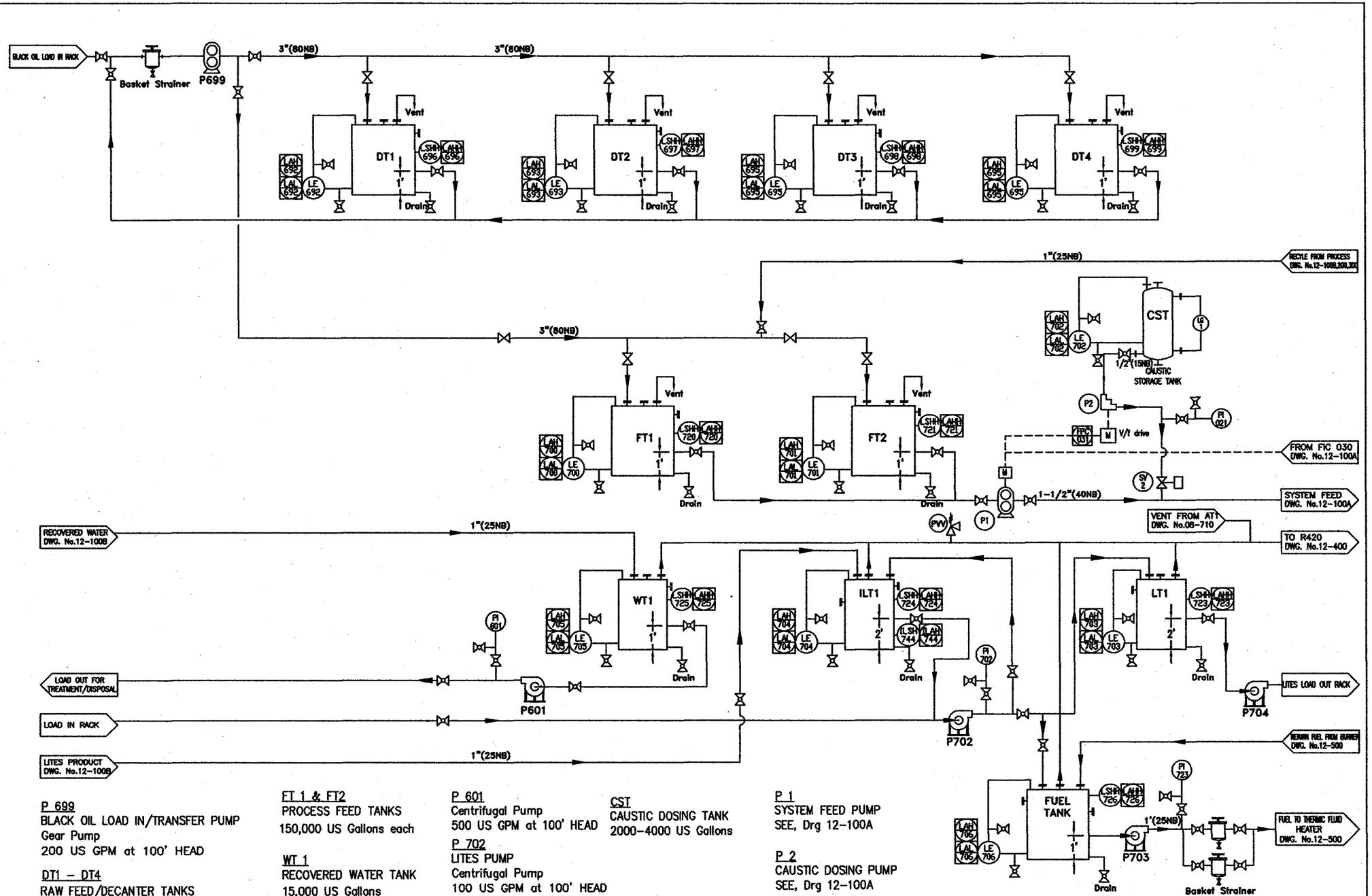

P 699
BLACK OIL LOAD IN/TRANSFER PUMP
Gear Pump
200 US GPM at 100' HEAD

DT1 – DT4
RAW FEED/DECANTER TANKS
15,000 US Gallons each

FT 1 & FT2
PROCESS FEED TANKS
150,000 US Gallons each

WT 1
RECOVERED WATER TANK
15,000 US Gallons

ILT 1
LITES INTERMEDIATE TANK
50,000 US Gallons

LT 1
LITES TANK
75,000 US Gallons

FUEL TANK
15,000 US Gallons

P 601
Centrifugal Pump
500 US GPM at 100' HEAD

P 702
LITES PUMP
Centrifugal Pump
100 US GPM at 100' HEAD

P 703
FUEL OIL PUMP
Centrifugal Pump
15 US GPM at 45' HEAD

P 704
LITES LOAD OUT PUMP
Centrifugal Pump
300 US GPM at 100' HEAD

CST
CAUSTIC DOSING TANK
2000–4000 US Gallons

P 1
SYSTEM FEED PUMP
SEE, Drg 12–100A

P 2
CAUSTIC DOSING PUMP
SEE, Drg 12–100A

NOTES:

1. ALL LINES ARE Sch40 WITH FLANGES RATED TO 150#, EXCEPT FOR HOT OIL LINES WHICH WILL HAVE ALL FLANGES RATED TO 300#
2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE
4. PUMPS P1,P2 WILL BE SUPPLIED BY PESCO
5. CLIENT SCOPE PUMPS ARE SUGGESTED. EQUIVALENTS MAY BE PURCHASED.

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:

SCALE: NTS

SHEET: 1 OF 1

P &ID – TANK FARM [Capacity; 1000GPH]

DRN	CLRD	DRG NO :
GP		12–700

REF. EMail: ---
JOB NO: ---
ORDER REF.: ---
REV: -0- DATE: 31Oct,2007

EPAHO04400071 5

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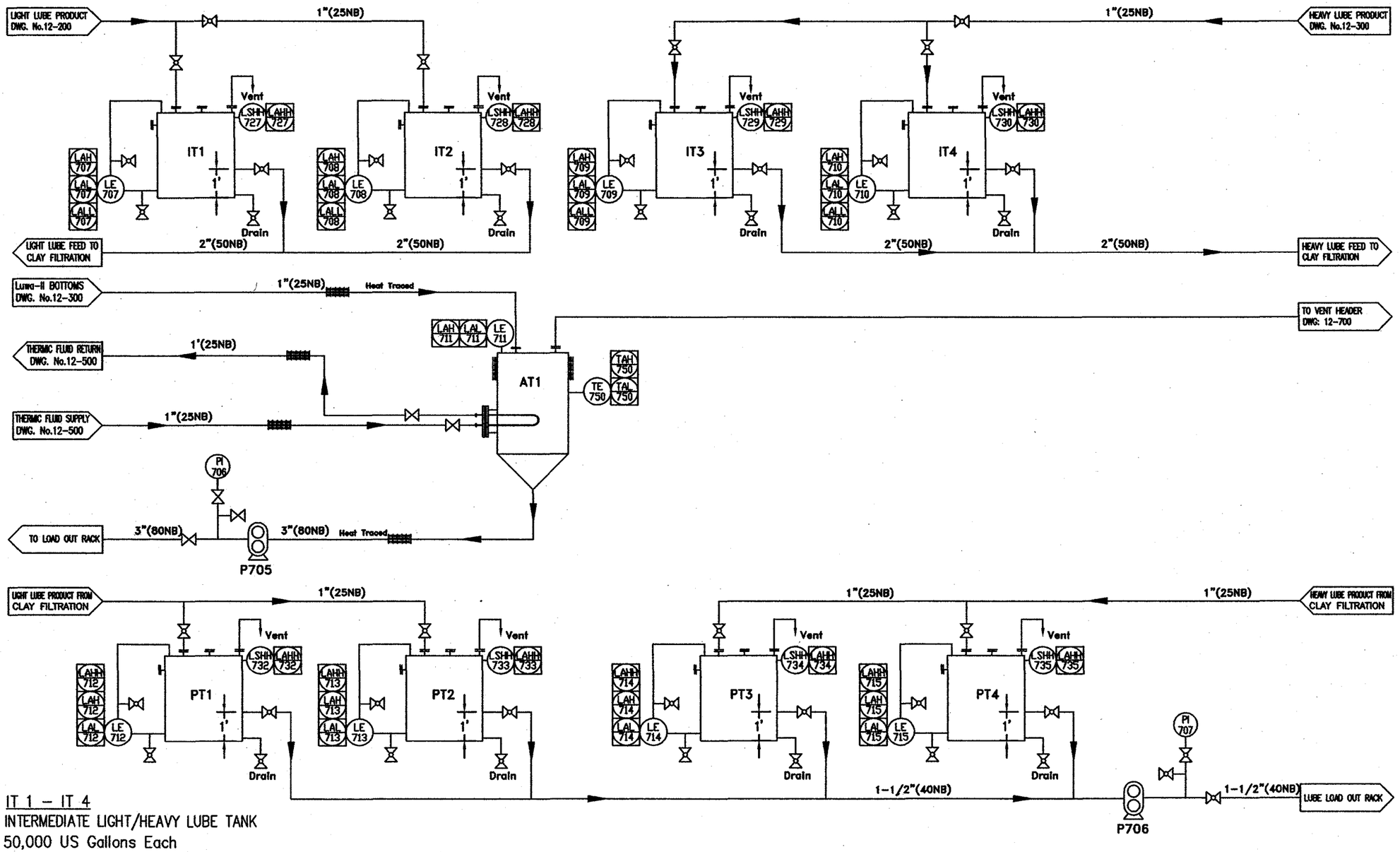

IT 1 – IT 4
INTERMEDIATE LIGHT/HEAVY LUBE TANK
50,000 US Gallons Each

AT1
ASPHALT TANKS
75,000 US Gallons

PT 1 – PT4
LUBE PRODUCT TANKS
50,000 US Gallons Each

P 705
Asphalt Load Out Pump
Gear Pump
100 US GPM at 120' HEAD

P 706
Lube Product Load Out Pump
Gear Pump
200 US GPM at 100' HEAD

NOTES:

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2. ALL FLANGES TO ANSI B16.5
3. ALL LINES ARE CARBON STEEL; UNLESS SPECIFIED OTHERWISE
4. PUMPS P1,P2 WILL BE SUPPLIED BY PESCO
5. CLIENT SCOPE PUMPS ARE SUGGESTED. EQUIVALENTS MAY BE PURCHASED.

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Project:			REF.: ---
SCALE: NTS	P &ID – TANK FARM [Capacity; 1000GPH]		JOB NO: ---
SHEET: 1 OF 1			ORDER REF.:
DRN: GP	CLRD:	DRG NO: 12-710	REV: -0- DATE: 30Sep,07

EPAHO044000716

Construction Meeting

May 19, 2008

Motor Oil Plant

Brian Weathers

Critical targets to focus on in order to adopt and maintain a realistic schedule.

- Assign and dedicate a team to manage this project immediately.
- Install control room and utilize for project management.
- Discuss and decide on dual reboiler situation.
- Begin construction of condensers asap (material list complete. Working on cost on T&M).
- Order tube bundles for condensers.(Doyle & Roth has 1 quote)
- Spec pumps and begin purchasing. (I have informal agreement with 3rd party pump specialist. I have a meeting with him this afternoon to discuss a contract).
- Make decisions on tanks. Certify existing, or fabricate new.
- Spec instrumentation and begin purchasing.
- Make decision on vacuum skid and begin construction.

After a very informative trip to research our project, I feel that this is going to be exciting and challenging for us. In order for this project to be successful CES will need to assign a team and dedicate that group 100% to this. We will need to determine the urgency of the completion and apply ourselves accordingly. This project is very attainable and the outcome and time line can be dictated and managed if we devote ourselves.

OIL PROJECT ACTION PLAN OBJECTIVES
MAY 19, 2008

1. Issue Purchase Order (P.O.) for Vacuum System the week of May 19, 2008, to Pesco for $244,000.
   Delivery projected Sept. 2008 with 30% ($73,000) paid now to Pesco.

2. P.O. for PLC-PC Control Systems to PESCO-Beam for $78,400 need 30 percent deposit ($23,520). For Delivery 12 to 14 weeks.

3. Finalize Flash Tank and Receiver Tanks (3) final nozzle arrangements for modification and recertification for vacuum and temperature. Modify tanks in CES Shop.

4. Review and recertify HE1 for its application and temperature.

5. Order U tube bundles for HE3/HE4 based on LCI recommendations. PO for each $21,257. Estimated cost to start PO order $15,000 to $20,000.

6. Fabricate HE3 and HE4 shells based on LCI design at CES. Cost estimated $30,000.

7. Continue on with 3-D oil structure equipment arrangement drawing which will be the basis for piping drawings.

8. Issue P.O. to LCI for repair of entrainment separators and duct work for the two LUWAs estimated at $30,000.

9. Finish specs for oil project pumps, MCC, instruments, control systems, and piping with input from PESCO.

OilProjectActionPlanObjectives:disk25

1

From: "lukestaengl" (b) (6) >
To: "Clark Hickman" <chickman@cesenvironmental.com>, "'Clarke Hickman'" (b) (6)
Subject: *Proper attachment*
Date: Friday, March 21, 2008 4:11:13 PM

Hopefully this is the right one -

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

(Attachments successfully scanned for viruses.)

Attachment 1: (application/msword)

MEMORANDUM

TO: Luke Staengl

FROM: Clark Hickman

DATE: March 20, 2008

SUBJECT: Package on CES Project for PESCO Work

ITEM	AMOUNT OF BID	(Amount to Pay) PACKAGE PRICE	REDUCED AMOUNT
(1) Multistage Vacuum System - 1/31/08 PESCO PID 12-400	$244,800	$232,560	$12,240
(2) Filter Vac (Clay Unit Purchase from PESCO)	$40,000 (Unpaid Amount)	$20,000	$20,000
(3) PESCO Project Engineering P.O. $40,000	$25,000 Unpaid ($15,000 Advanced)	$15,000.00	$10,000
(4) PLC Computer & Software for Oil Project	$78,400 PESCO Bid	$75,640	$2,760
TOTAL (1 thru 4)	$388,200	$328,200	$45,000

D24:Staengl(CESProjforPESCO)31108

From: "lukestaengl" <lukestaengl@mindspring.com>
To: "'Clarke Hickman'" <chickman7@comcast.net>
CC: "'Pat Therrien'" <pat@swva.net>
Subject: Vacuum System proposal
Date: Thursday, January 31, 2008 2:43:42 PM

One more try - Luke

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com

(Attachments successfully scanned for viruses.)

Attachment 1: (application/msword)

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: www.pescova.com
Email: lukestaengl@mindspring.com

To: Clark Hickman
CES Environmental Services
Houston, Texas

From: Luke Staengl, President

Re: Vacuum System budget proposal

Dear Clark,

PESCO-BEAM hereby proposes to design and build a multistage vacuum system for your company. The system will be designed and built to provide sufficient vacuum for your oil re-refinery to enable you to distill used motor oil in your multistage evaporation system.

The system will include positive displacement vacuum booster blowers, a liquid ring vacuum system, heat exchangers, strainers, receivers, pumps, and control components all assembled on a carbon steel skid. It will come with all the needed control valves, manual valves, fittings, piping as well as the electrical and electronic components necessary to reach the desired vacuums.

System parameters:

VACUUM PULLED

10 mmHg in 1st evaporator with a continuous air bleed up stream of an orifice plate in order to maintain pressure. This also provides a gas ballast for the KT Pump.

1.5 - 2 mmHg in 2nd Evaporator.

Maintenance

1) Operators change out 5 gallons of the pumps 10 gallon capacity with Detergent oil. They say they are using straight 40 Weight Detergent oil.

2)Operators add 2 cups of an additive with the 5 gallons above. The additive is Lubrizol 5347 from the Lubrizol Corporation. This additive is to buffer the acidity that is condensing in the KT Oil.

3)Operators peiodically check Total Acid Number (TAN). This number usually stays below 1.5. This is higher than the 0.3 recommended in the Kinney manual, but much less than the TAN's of 2.5 to 3 recorded at the Portland plant before the above treatment regime was initiated.

4)The first pump used with the above maintenance lasted 1 year.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: www.pescova.com
Email: lukestaengl@mindspring.com

The system will include all the components listed in the accompanying P & I Diagram which accompanies this proposal, assembled and ready to be installed on your system.

The lead-time for the system will be 14 – 16 weeks.

This budget price is good for 30 days from today.

The system will be guaranteed to be perform as specified for one year.

The budget price (+/- 5%) for the system f.o.b. Roanoke will be $244,800.00

Please review this budget proposal (including the diagram attached) and get back to me if you wish to proceed. We will then prepare a formal agreement which will be signed by all parties.

Yours truly,

Luke Staengl
Luke Staengl

2

CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021
FAX: (713) 676-1676

FACSIMILE COVER PAGE

(8 pages including cover page)

TO: Luke Staengl

FROM: Clark Hickman

DATE: 5/9/08

SUBJECT: PLC-PC Control System

See Attached
PO - 37941
For $78,400.00

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021 PHONE: (713) 676-1460 FAX: (713) 6761676

Order Request Form

Purchase Order No.: 374941

Date: 5/5/08

Vendor: PESCO - BEAM Environmental Solutions Company, Inc
Address: 1005 Industry Circle, SE
Roanoke, Virginia 24013
Contact: Luke Staengl
Phone: 504-206-2788
Fax: 504-206-2791

ITEM NO.	DESCRIPTION	QUANTITY	$ COST
1	Pesco-Beam PLC-PC Control System	1	$78,400.00
	Using Allen Bradley Software		
	and Hardware for the CES Oil	System.	
	per Quote Dated 3/21/08		
	which is attached		

Submitted By: Clark Hickman (281-488-0848)
Approved By: _____
Printed Name: _____

OPS ☒ Yes ☐ No
Lab ☐

OFFICE USE ONLY

Internal Expense:

_____CS
_____FS
_____Trans
_____SGA
_____MRI
_____DRM

Job Expense:

What Job?: _____

☐ Give Vendor Re-Sale Certificate
☐ Vendor to Charge Sales Tax

CES:D24:6807

Clark Hickman

From: lukestaengl [lukestaengl@mindspring.com]
Sent: Friday, March 21, 2008 2:05 PM
To: Clark Hickman; 'Clarke Hickman'
Subject: FW: Supply agreement for PLC-PC control system
Attachments: CES Control System Quotation - 01.14.08.doc

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

From: lukestaengl [mailto:lukestaengl@mindspring.com]
Sent: Thursday, March 20, 2008 3:48 PM
To: Clark Hickman (chickman@cesenvironmental.com)
Subject: FW: Supply agreement for PLC-PC control system

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

From: lukestaengl [mailto:lukestaengl@mindspring.com]
Sent: Tuesday, March 18, 2008 4:53 PM
To: 'Clarke Hickman'; Clark Hickman
Subject: Supply agreement for PLC-PC control system

Dear Clark – here is a proposal for PESCO-BEAM to supply a PESCO-BEAM PLC-PC control system.
Please review it and get back to me with any further questions or comments.
Wishing you well,

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588

FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

EPAHO044000729

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

To: Mat Bowman, President
CES Environmental Services Inc.
Houston, TX

Dear Mat,

This is an agreement for PESCO-BEAM to supply a complete PLC-PC control system using Allen Bradley Software and Hardware and PESCO-BEAM technicians and engineers to assemble and program and test the system:

CONTROL SYSTEM DESCRIPTION

All relevant process temperatures, pressures, levels and flows will be monitored by a PLC located in the Main Control Panel. Most of these values will be redundantly reported on the skid with manual gauges. The PLC will report the process values to the HMI, Allen Bradley's RS View, running on the Control Computer located in the control room. All controlled process variables will be controlled by PID blocks in the PLC. The controllers will be monitored and controlled by the operator who will have access to all of the controller setpoints, alarms etc. at the HMI. Pump status will be reported at the control panel and on the computer. Pumps may be shut down at the computer control station.

The PLC itself will be an Allen Bradley Control Logix 5555Processor with 1.5MBYTE memory. The PLC is reading from the following I/O modules:

- 2 Analog Input Cards, 16 channel, 4 – 20 mA (1756-IF16)
- 1 Analog Input Cards, 8 channel, 4 – 20 mA (1756 – IF8)
- 5 Analog Input Cards, 6 Channel, Thermocouple (1756 – ITI)
- 2 Analog Output Cards, 8 Channel, 4 –20 mA (1756 – OF8)
- 2 Discrete Input Cards, 32 channel, 24 VDC (1756-IB32)
- 3 Discrete Out put Cards, 16 channel, Relay (1756 – OW16I)

Communications to the PLC are performed with an Ethernet card, type 1756-ENBT.

All alarming will be done by the PC Based Supervisory Control System, Allen Bradley's RS View. Operators will be informed of an alarm by an audible alarm from the PC as well as an alarm horn. An alarm summary will be located at the bottom of each control screen to inform the operator of any alarm condition in the whole plant. The operator will then have to take the appropriate action. Alarm contacts are supplied in the Process MCC. Plant management is left to buy the preferred alarm horn.

A control computer with an 18" Flat Panel monitor will be supplied as the control computer. This computer will have the HMI software running on it and it will communicate with the PLC using a CAT 5 cable. This computer is the main operator interface to the process. It is strongly advised that Plant Management have another computer on site that can act as a backup computer to be used in case of computer problems with the main control computer.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
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Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

This document contains the Functional Specification of the entire control system including a "Setpoints, Alarms and Interlocks" table that will list all of the proper settings of process controllers and the various alarm and interlock settings

DIGITAL CONTROL

1. All pumps will be operated locally at the skid using the local start/stop buttons. The operator must go to the skid in order to start the pump to ensure that the pump is working properly and not leaking at start up.
2. Start/Stops will be of the three-wire variety with the exception of the pumps and blowers, which are of 2 wire design:
    - P_2 (Caustic Feed Pump)
    - P_401 (Vacuum Blower)
    - P_402 (Oil Seal Vacuum Pump)
    - P_403 (R300 Decant Pump)
    - P_404 (Oxidizer Blower)
    - P_501 (Cooling Water Recirculation Pump)
    - P_502 (Cooling Tower Fan)
    - P_503 (Hot Oil Circulation Pump)
    - P_504 (Hot Oil Heater Fuel Pump)
3. Power to each pumps start circuit will come through a dry contact in the PLC. This enables operators to stop a pump from the Control Room. This feature also enables interlocking any pump through PLC programming.
4. The state of each motor contactor will be monitored on the PC based SCS.
5. Emergency shutoff buttons are also provided for each pump at each MCC panel.

PID Control Loops

All PID Controllers used to control the process will be programmed into the PLC hardware and will be accessible from the HMI. Operators will be able to view and/or change the following on each controller:

- Process Value
- Setpoint
- Controller Output
- Auto/Manual status.
- High and Low alarm settings.

The bid price for PESCO-BEAM to supply the described system is: **$78,400.00**

The cost of the system based sensors for flow, level, temperature, & pressure, is: **$32,700.00**

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Email: **lukestaengl@mindspring.com**

The cost of PESCO-BEAM technicians and engineers to set the system up at site: **$18,500.00**

Terms of Payment:

30% deposit with a signed contract or purchase order: [at this point PESCO-BEAM will proceed with the detail engineering. At this point PESCO-BEAM will also proceed with the ordering and down-payment of major components with long lead-times.

25% when all the engineering is completed and client has approved the P & I Diagrams, Process layout and elevation drawings, and mass balance.

25% when the system is 50% complete, subject to the customer's inspection.

10% when the system is ready to ship, subject to customer's inspection.

10% when system has been operating for 72 hours consecutively at the design rate or greater.
Note: Any delays in this payment schedule will result in delays for the delivery of the system.

Warrantees:

The system is guaranteed to perform as specified in this offer. Our performance guarantee trials that will be conducted over a 24 hr run during commissioning will demonstrate

- Capacity of the plant
- Consumption of utilities

All performance guarantee figures on utilities and capacity will be subject to a tolerance of ±10% of rated figures.
The following provisions will have to be made while checking the guarantees:

- All the connections to the Utilities and Storage tanks will be inspected by our Engineer and cleared before commissioning;
- All ancillary equipment in clients scope of supply shall be commissioned by the respective suppliers and should perform to recommended specifications as given in this offer; if they are in clients scope.
- A PESCO / BEAM representative is present during start-up for 2 weeks
- The customer's employees will work as per instructions given by our commissioning engineer, follow good engineering practices and follow the operation and instruction manual in running and maintaining the plant.

The plant supplied is Guaranteed to perform as specified above. Components will be guaranteed by PESCO-BEAM for a period of One year from the date of receipt at Port of destination plus 30 days to allow for erection and start-up, or from the date of commissioning – whichever is sooner - normal wear and tear excepted. If commissioning is delayed due to fault of PESCO-BEAM then the date of commissioning will be the start date of the warranty period, no matter when that is.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

Our liability is also limited to replacement or repair of any defective components and we are not liable for any damage to personnel, property or loss in production.

Validity of offer: This final offer is valid for 30 days for your consideration and acceptance.

Force Majeure The performance of this Agreement, except for the payment of money for services already rendered, may be suspended by either party in the event the performance of obligations are prevented by a cause or causes beyond the reasonable control of such party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood, or sabotage; lack of adequate fuel, power, raw materials, labor or transportation facilities; governmental laws, regulations, requirements, orders or actions; breakage or failure of machinery or apparatus; national defense requirements; injunctions or restraining orders; labor trouble, strike, lockout or injunction (provided that neither party shall be required to settle a labor dispute against its own best judgment).

The party asserting a right to suspend performance under this Section must, within a reasonable time after he has knowledge of the effective cause, notify the other party of the cause for suspension, the performance suspended, and the anticipated duration of suspension. Upon receipt of such notice advising of a material or indefinite suspension of performance, and if such suspension substantially impairs the value of this Agreement to him, a party may, within a reasonable time (not to exceed thirty days), terminate this Agreement. If such notice of termination is not provided, this Agreement will lapse with respect to any performance suspended hereunder.

The party asserting a right to suspend performance hereunder shall advise the other party when the suspending event has ended, and when performance will be resumed.

Jurisdiction: The final contract shall be governed under the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, we have executed this contract on the date indicated below:

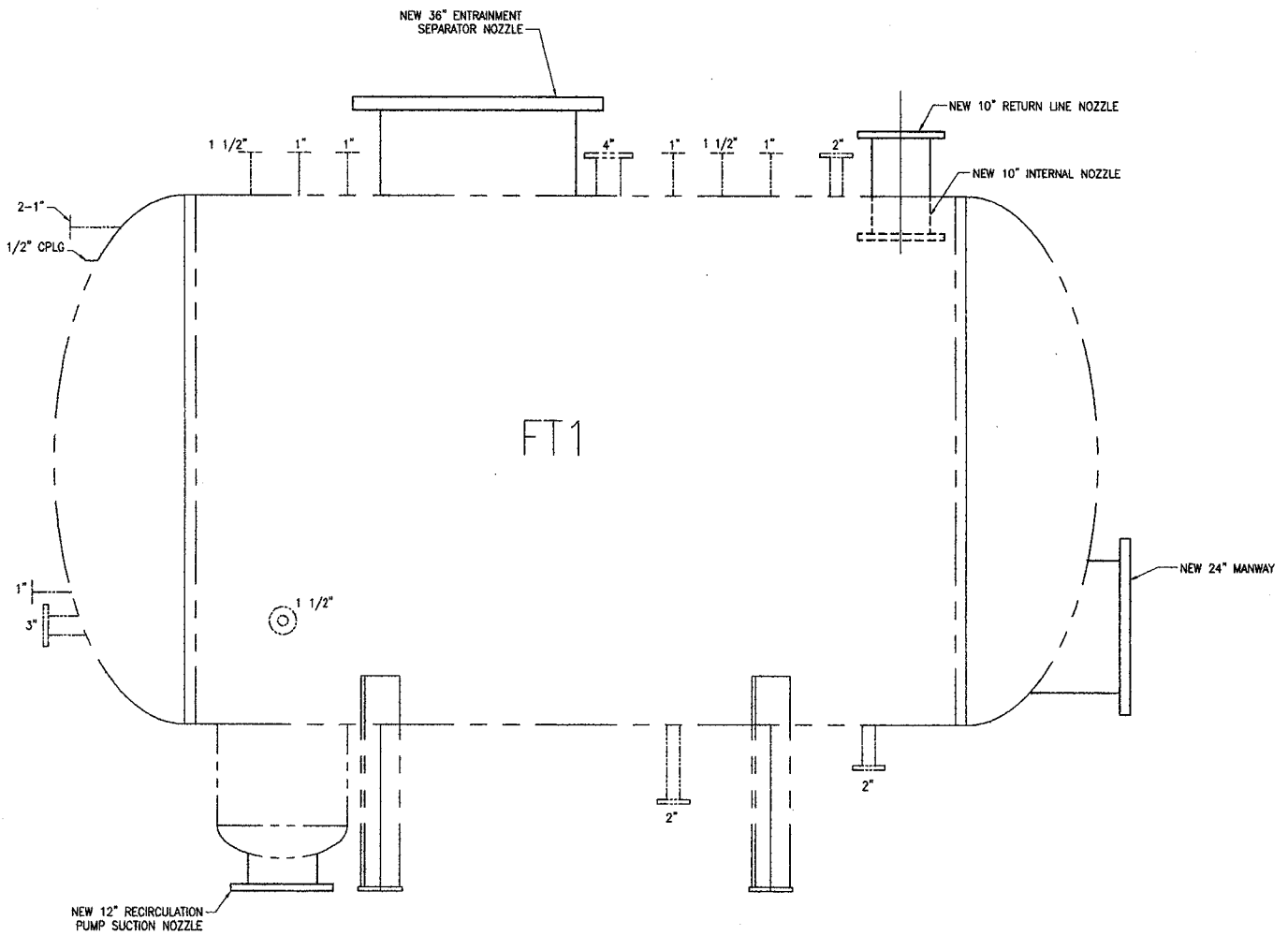
For PESCO-BEAM Inc. by:

_____ _____
Luke Staengl, President Date

For Your Company:

_____ _____
Signature, Title Date

3



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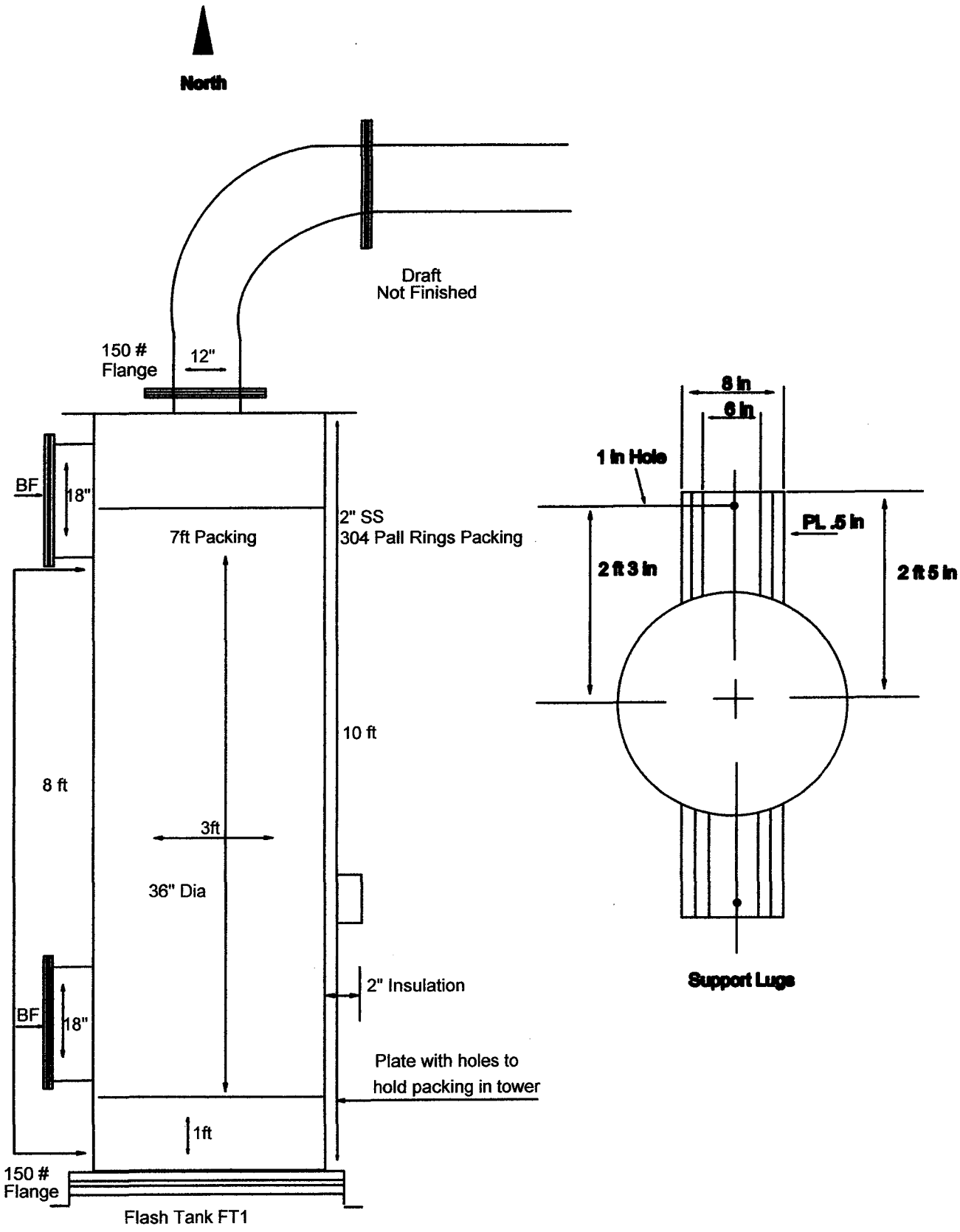
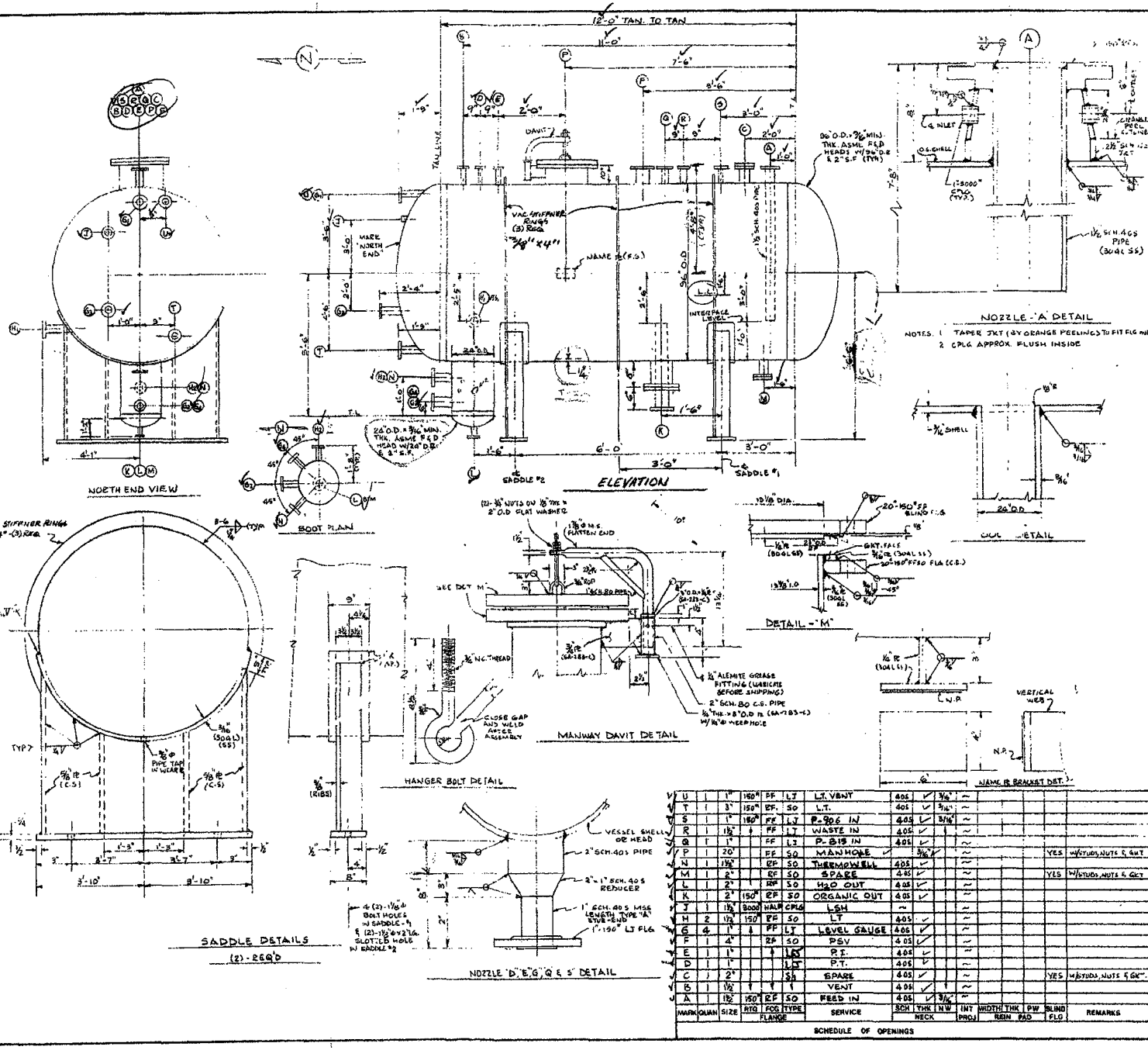


CES Environmental Services, Inc.
Entrainment Separator
Flash Tanks (FT1) (Oil Processing)
April 8, 2008 (rev)



DESIGN CONDITIONS		SHELL	HEADS	JACKET
DESIGN PRESSURE	INTERNAL (PSIG)	15		
	EXTERNAL PSIG AT 300 (°F)	5		
DESIGN TEMPERATURE	(°F)	300		
MAX ALLOW WORKING PRESS (PSIG) AT 300°F		29		
HYDROSTATIC TEST PRESS NEW AND COLD (PSIG)		45		
CORROSION ALLOWANCE		NONE		
RADIOGRAPHY		SPOT		
DESIGN JOINT EFFICIENCY		.85		
HEAT TREATMENT		NO		
CAPACITY TOTAL 5000 (GALLONS)				

MATERIAL SPECIFICATIONS (ASME)			
	VESSEL	INTERNALS	JACKET
SHELL	SA 240 T 304L		
HEADS	SA-240-T 304L		
SUPPORTS	SA-283 GR.C		
CLIPS AND LUGS	—		
FLANGES	SA-181-II 304LSS		
PIPE	SA-312-TP 304L		
BOLTS / NUTS	SA-193-B8 / SA-194-8M		
GASKETS	304SS W/TEFLON	FLEXITALLIC	
COUPLINGS	SA-182 F 304 L		

GENERAL NOTES

1. ALL FLANGE BOLT HOLES SHALL STRADDLE NORMAL VESS. ℄'S UNLESS NOTED.
2. ALL WELDS SHALL BE NEAT IN APPEARANCE, FREE OF SLAG, DILLS, UNDERCUTS, AND OTHER DEFECTS.
3. VESSEL SHALL BE LEFT CLEAN AND DRY INSIDE AND FREE OF ALL FABRICATION DEBRIS.
4. ALL NOZZLE GASKET SURFACES SHALL BE COATED WITH PROTECTIVE LUBRICANT BEFORE BLANKING FOR SHIPMENT.
5. K AND L TO FURNISH BOLTING AND GASKETS FOR ALL MATING FLANGES INCLUDING BLINDS SEE SCHEDULE OF OPENINGS UNLESS NOTED.
6. REFER TO DWG. NO. KLW-101 FOR STANDARD SHOP PROCEDURES ON NECK AND FLG. ATTACH., RF PAD LAYOUT, MAIN CYL. SEAMS, ETC.

MARK	QUAN	SIZE	RTG	FCG	TYPE FLANGE	SERVICE	SCH	THK	NW	INT PROJ	WIDTH	THK	PW	BLIND FLG	REMARKS
U	1	1"	150#	RF	LT	LT. VENT	40S	✓	3/16"	~					
T	1	3"	150#	RF	SO	L.T.	40S	✓	3/16"	~					
S	1	1"	150#	FF	LJ	P-906 IN	40S	✓	3/16"	~					
R	1	1½"	″	FF	LJ	WASTE IN	40S	✓	″	~					
Q	1	1"		FF	LJ	P-815 IN	40S	✓		~					
P	1	20"		FF	SO	MANHOLE	✓		3/16"	~				YES	W/STUDS, NUTS & GKT
N	1	1½"		RF	SO	THERMOWELL	40S	✓		~					
M	1	2"		RF	SO	SPARE	40S	✓		~				YES	W/STUDS, NUTS & GKT
L	1	2"		RF	SO	H2O OUT	40S	✓		~					
K	1	2"	150#	RF	SO	ORGANIC OUT	40S	✓		~					
J	1	1½"	3000	HALF CPLG		LSH	~			~					
H	2	1½"	150#	RF	SO	LT	40S	✓		~					
G	4	1"	″	FF	LT	LEVEL GAUGE	40S	✓		~					
F	1	4"		RF	SO	PSV	40S	✓		~					
E	1	1"		″	LJ	P.I.	40S	✓		~					
D	1	1"		″	LJ	P.T.	40S	✓		~					
C	1	2"		″	SO	SPARE	40S	✓		~				YES	W/STUDS, NUTS & GKT.
B	1	1½"	″	″	″	VENT	40S	✓		~					
A	1	1½"	150#	RF	SO	FEED IN	40S	✓	3/16"	~					

SCHEDULE OF OPENINGS

19 YEAR BUILT	K AND L WELDING COMPANY
U W 1219	1150 MFR'S SER. NO. / NAT'L. BD. NO.
	25 PSIG MAWP AT / FULL VAC. 300° °F
	8400 WEIGHT LBS EMPTY / D-833 ITEM NO.
	ITEM NO D-833
	P.O. NO 16123
45 PSIG TEST PRESS.	BADISCHE CORP.
	SERVICE: LIQUID WASTE DRUM

K AND L CODE NAME R (T-310 STNLS.)

PAINTING REQUIREMENTS: ONE COAT OF CARBOLINK-11 TO ALL C.S. PARTS ONLY (3 MILS D.F.T.) AFTER SURFACE PREPARATION PER SSPC-SP10-63T.

DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH: ASME SEC. VIII DIV 1 LATEST

STAMP AND REGISTRATION: YES — INSPECTION BY: ASME INSP.

WEIGHTS, LBS: EMPTY 8400 LBS: OPERATING — TEST: 50,000 LBS

CUSTOMER: BADISCHE CORPORATION — P.O. NO: 16123

CUSTOMER DWG. NO: A5-6876-32 — ITEM NO: D-833

PROJECT: NEOPENTYL GLYCOL — SITE:

SERVICE: LIQUID WASTE DRUM

VESSEL ARRANGEMENT AND DETAILS

REVISIONS

K&L WELDING ANGLETON, TEXAS

QUAN'S SPEC'D ARE FOR ONE UNIT ONLY ( ) UNITS REQ'D.

DRAWN SDM 7/16/80

CHECKED RP 7/16/80

APP'VED

SCALE N.T.S — DWG NO KLW-D-833-1 — REV NO 0

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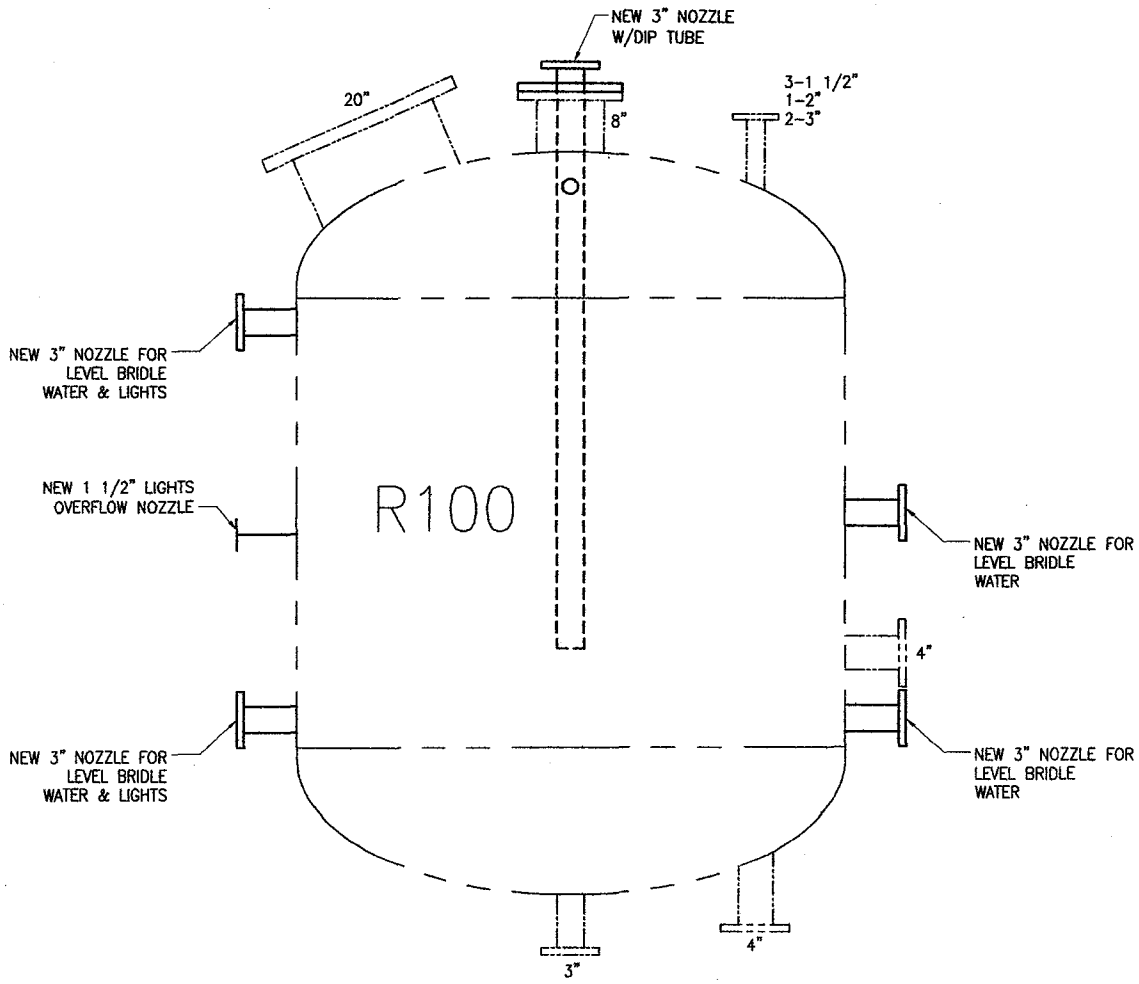
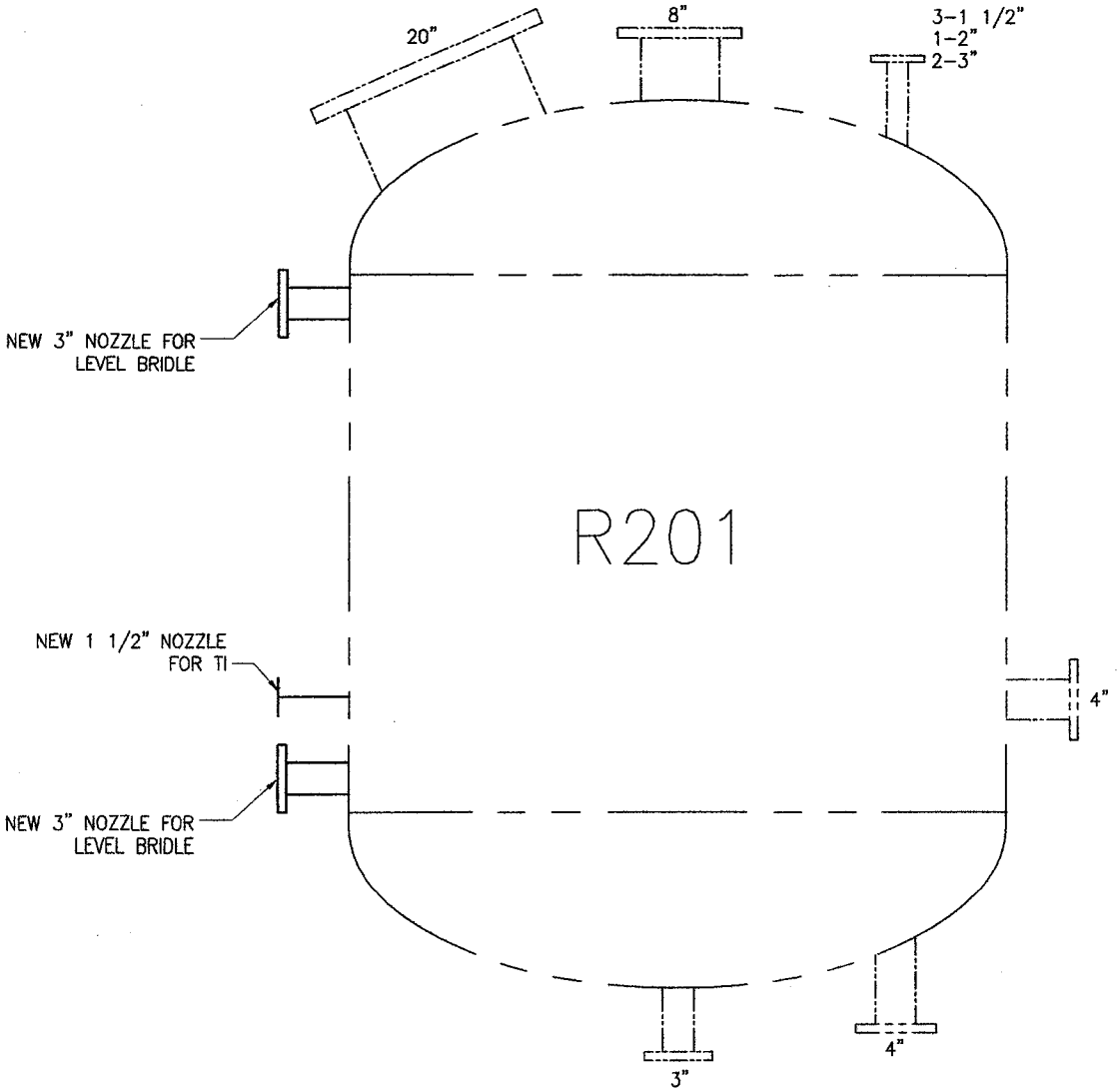
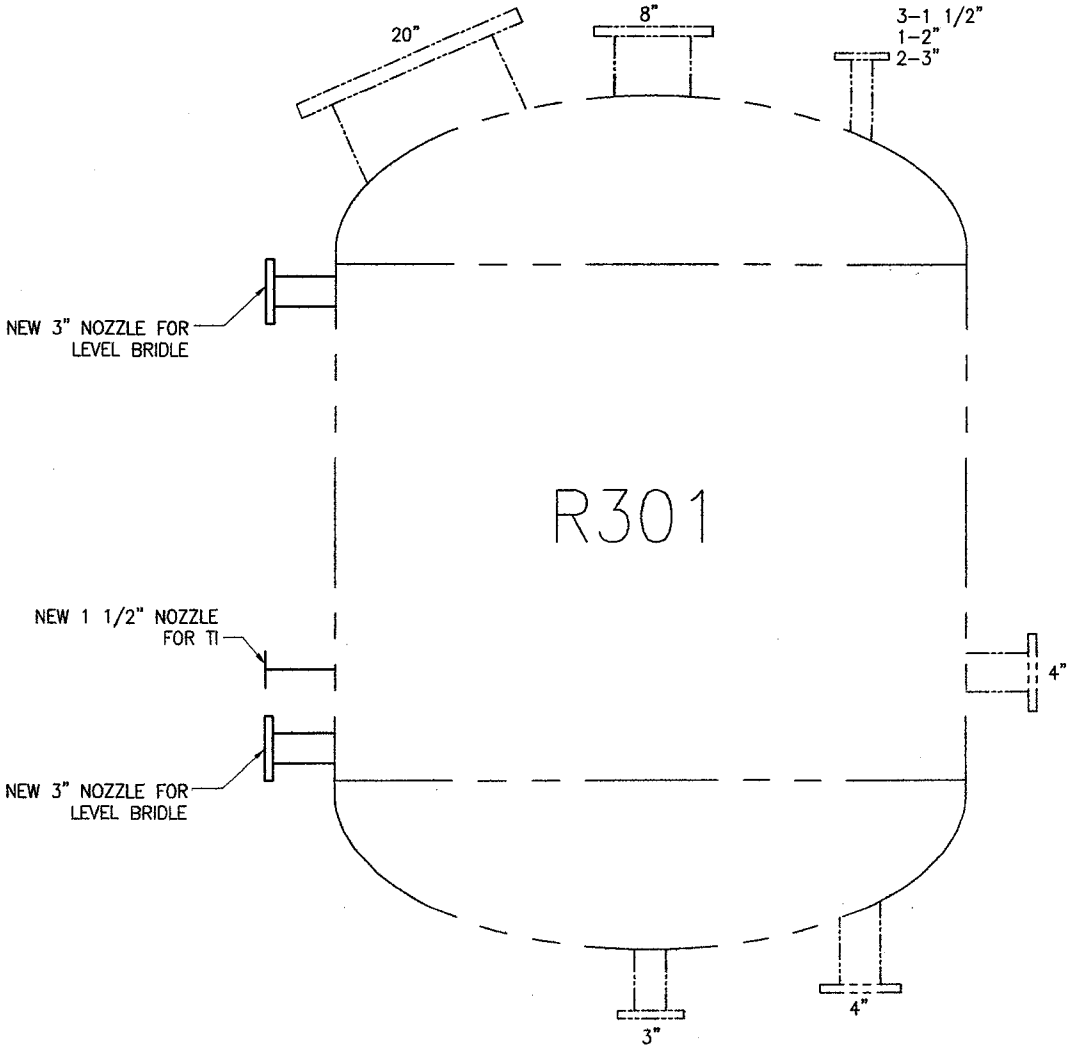
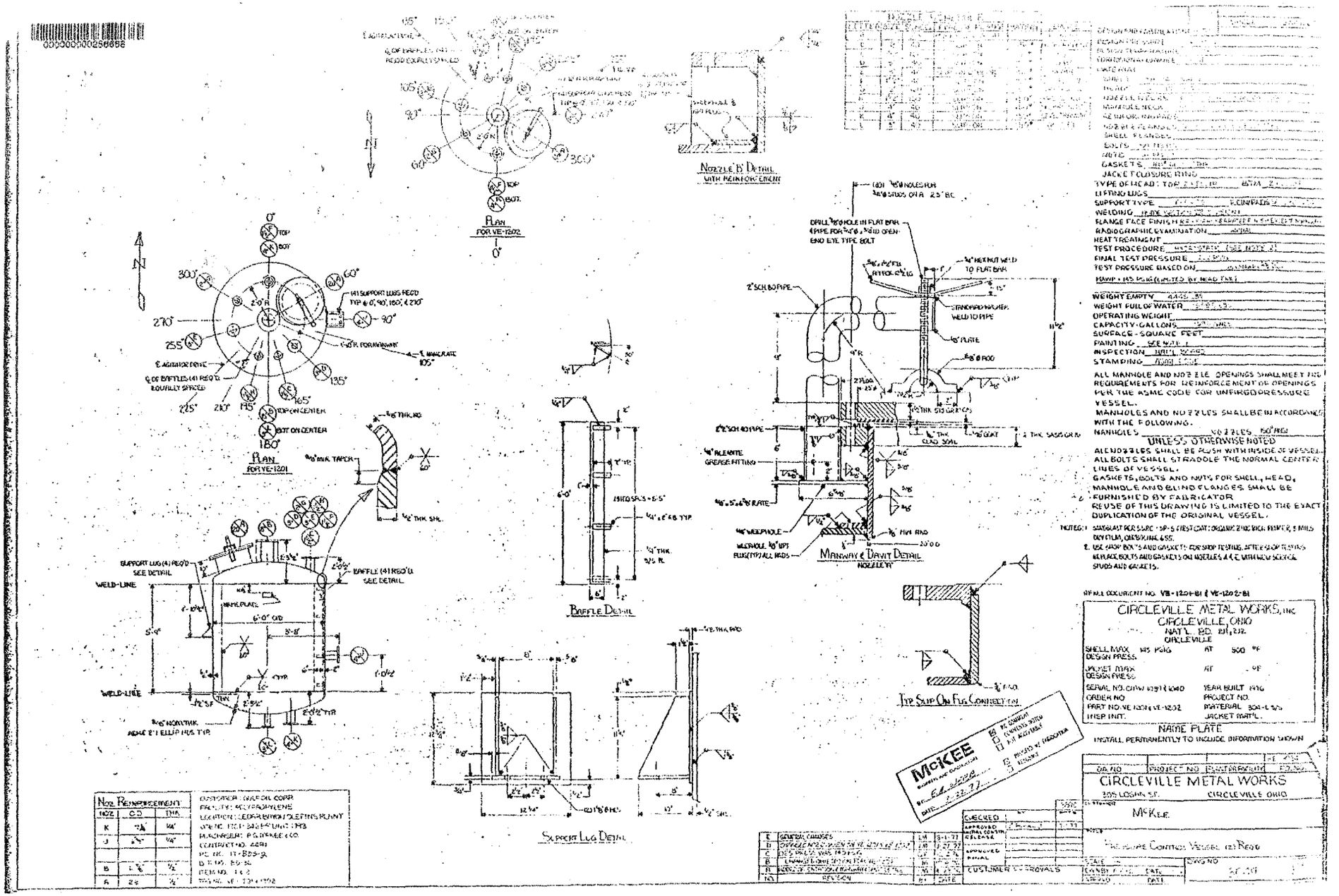

NEW 3" NOZZLE
W/DIP TUBE
20"
8"
3-1 1/2"
1-2"
2-3"
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER & LIGHTS
NEW 1 1/2" LIGHTS
OVERFLOW NOZZLE
R100
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER
4"
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER & LIGHTS
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER
3"
4"


20"
8"
3-1 1/2"
1-2"
2-3"
NEW 3" NOZZLE FOR LEVEL BRIDLE
R201
NEW 1 1/2" NOZZLE FOR TI
4"
NEW 3" NOZZLE FOR LEVEL BRIDLE
4"
3"


20"
8"
3-1 1/2"
1-2"
2-3"
NEW 3" NOZZLE FOR LEVEL BRIDLE
R301
NEW 1 1/2" NOZZLE FOR TI
4"
NEW 3" NOZZLE FOR LEVEL BRIDLE
4"
3"



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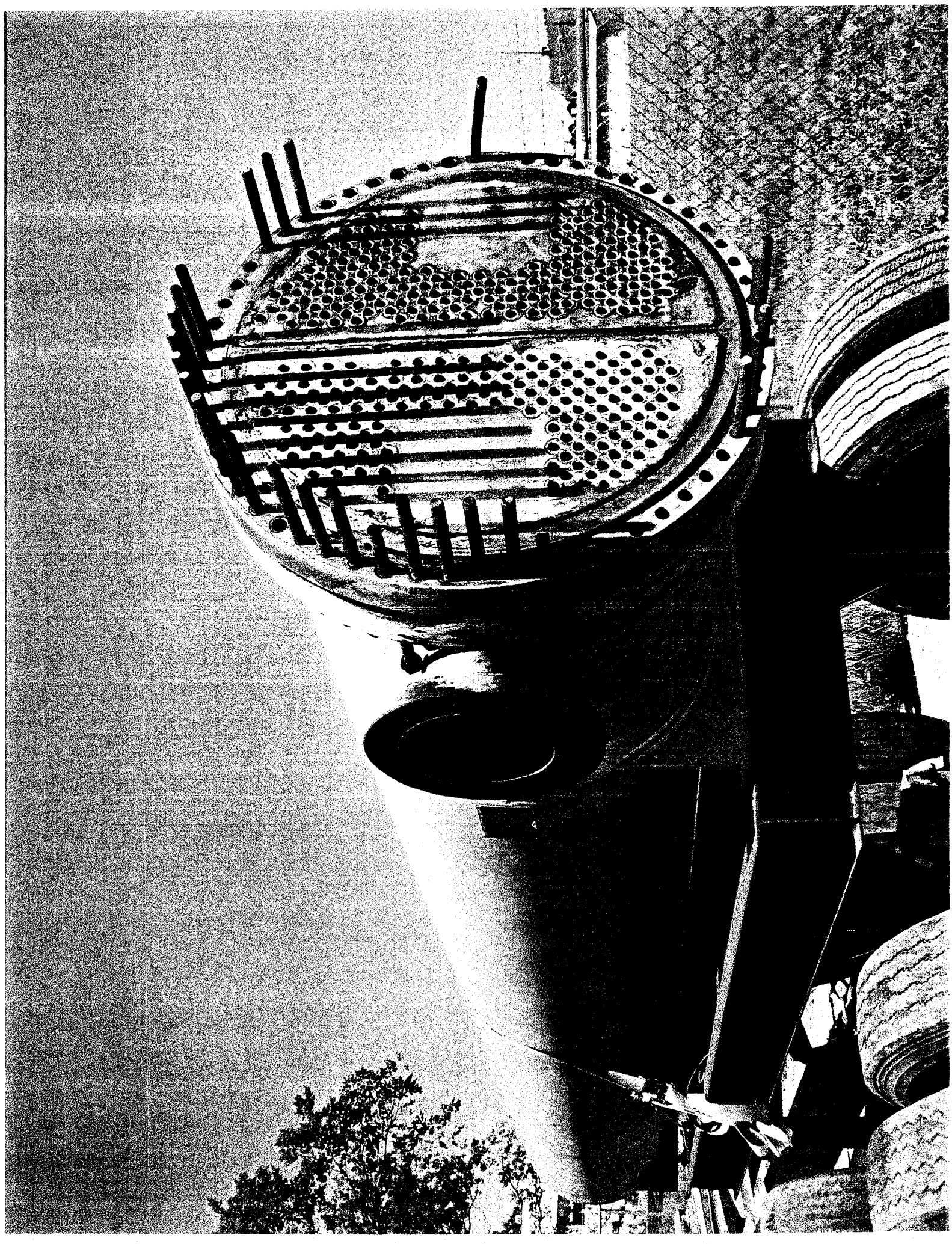

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5

DOYLE & ROTH MANUFACTURING CO. INC.
90 Broad Street 14th Floor
New York, NY 10004

PHONE: (212) 269 7840 FAX: (212) 248 4780
E-MAIL ADDRESS: DOYLEROTH@AOL.COM
WWW.DOYLEROTH.COM

Attn: James Pauley Jr.
LCI Corporation
Tel: (704) 398-7882
Email: JPauley@lcicorp.com

Quotation No: ME-4568
April 23, 2008
Page 1 of 1
Ref: Email

We are pleased to offer the following for your approval:

Description

Equipment No: "Bayonet Heater"

One (1) D&R LL206U2-6H horizontal U-tube bundle with bonnet single pass shell Two (2) pass tubeside 304LSS tubeside construction with 304LSS baffle assembly suitable for a 20" O.D. X 3/8" thick shell containing 120-3/4" O.D. X #16 BWG SA-249 304LSS welded U-tubes 6'-0" straight length 253 sq. ft. surface 1" square pitch, design shell FV & 30 PSI @ 600°F, design tubes FV & 100 PSI @ 350°F tubeside connections Two (2) 3"-150# ANSI flanges complete with ASME stamp and partial U2 TEMA "C" configuration B-U.

Price $21,257.00 NET FOB our plant, Simpson PA

Approximate shipping weight: 1,400 lbs

Drawing: 1-2 weeks after receipt of purchase order
Delivery: 10-12 weeks after receipt of approved drawings

Notes:

1. Outline drawing will be emailed shortly.
2. Bundle is designed suitable for 20"-150 ANSI bolting.
3. Due to extreme volatility of current metal markets, prices must be confirmed at time of order and delivery.
4. Unless otherwise requested hard copies will not be mailed.

Rohit V.Patel/jp
Vice President

This quotation is subject to the terms and conditions
Terms: ½%-10 Days, Net 30

PRICES QUOTED ARE FIRM FOR 30 DAYS and do not include any Municipal, County, State or Federal Sales, Excise or Use Taxes

DOYLE & ROTH MANUFACTURING CO. INC.
90 Broad Street 14th Floor
New York, NY 10004

PHONE: (212) 269 7840 FAX: (212) 248 4780
E-MAIL ADDRESS: DOYLEROTH@AOL.COM
WWW.DOYLEROTH.COM

5. Visit with us on the Internet @ www.DoyleRoth.com

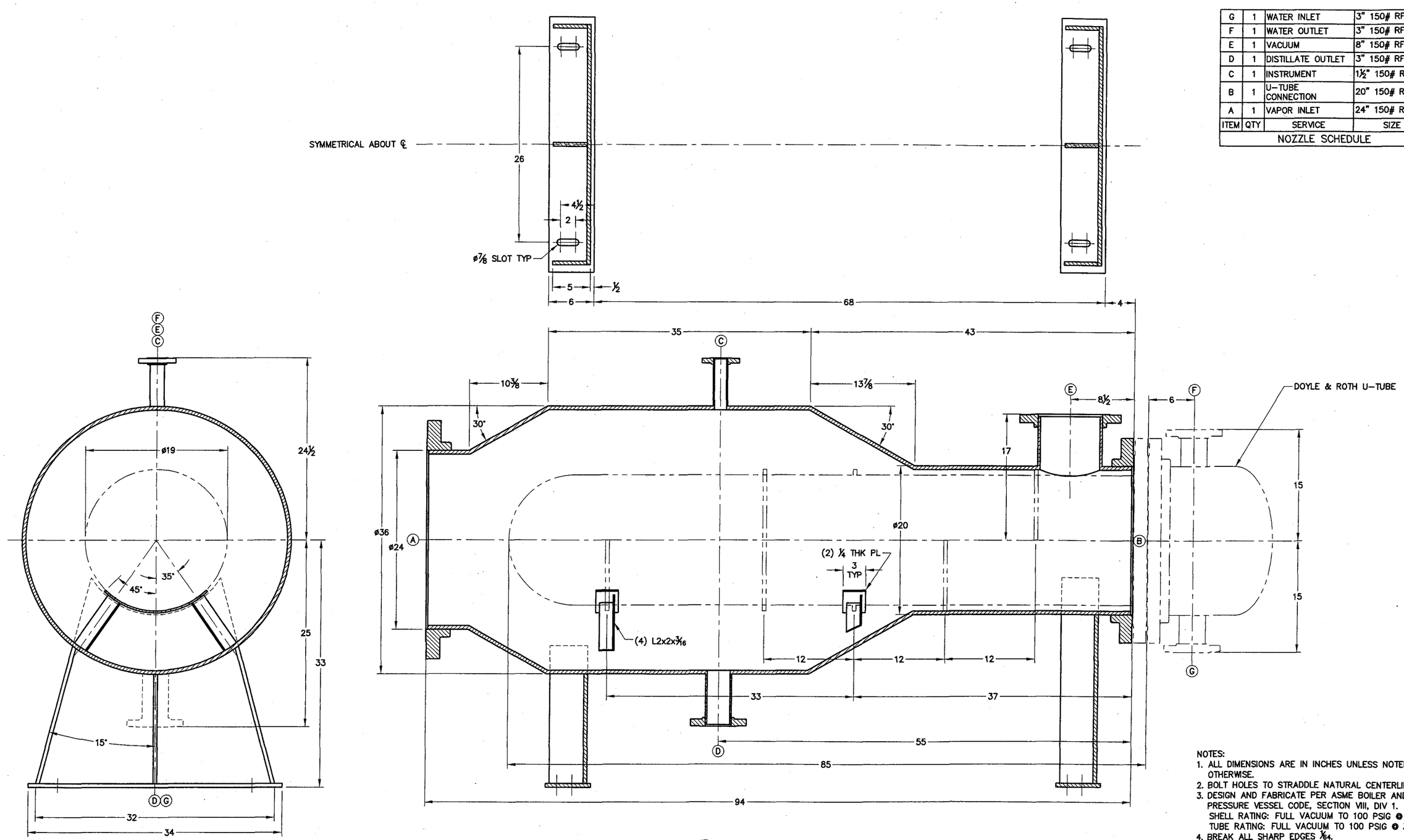
CC: Fred Diestmann

Rohit V.Patel/jp
Vice President

This quotation is subject to the terms and conditions
Terms: ½%-10 Days, Net 30

PRICES QUOTED ARE FIRM FOR 30 DAYS and do not include any Municipal, County, State or Federal Sales, Excise or Use Taxes

6



ITEM	QTY	SERVICE	SIZE
G	1	WATER INLET	3" 150# RFSO
F	1	WATER OUTLET	3" 150# RFSO
E	1	VACUUM	8" 150# RFSO
D	1	DISTILLATE OUTLET	3" 150# RFSO
C	1	INSTRUMENT	1½" 150# RFSO
B	1	U-TUBE CONNECTION	20" 150# RFSO
A	1	VAPOR INLET	24" 150# RFSO

NOZZLE SCHEDULE

NOTES:
1. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
2. BOLT HOLES TO STRADDLE NATURAL CENTERLINES.
3. DESIGN AND FABRICATE PER ASME BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIV 1.
   SHELL RATING: FULL VACUUM TO 100 PSIG @ 600°F
   TUBE RATING: FULL VACUUM TO 100 PSIG @ 350°F
4. BREAK ALL SHARP EDGES 1/64.
5. MATERIAL: CARBON STEEL, ALL PLATE TO BE ½ THICK UNLESS NOTED OTHERWISE, ALL PIPE TO BE SCH 40.

PRELIMINARY
NOT FOR CONSTRUCTION

REV	BY / DATE	CHK / DATE	APPR / DATE	APPR / DATE	DESCRIPTION
0	NFG 6/8/08				PRELIMINARY

TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL .XX ±.02 .XXX ±.005 SURFACE FINISH 125
FRACTION ±1/16 ANGLE ±1/2°
SCALE: 1=6

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TITLE: CONDENSER OIL RECOVERY OUTLINE

DWG NO: S020036-1D REV 0

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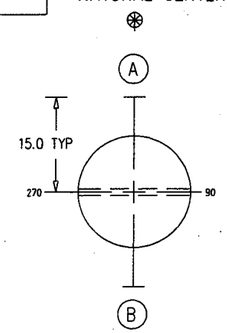
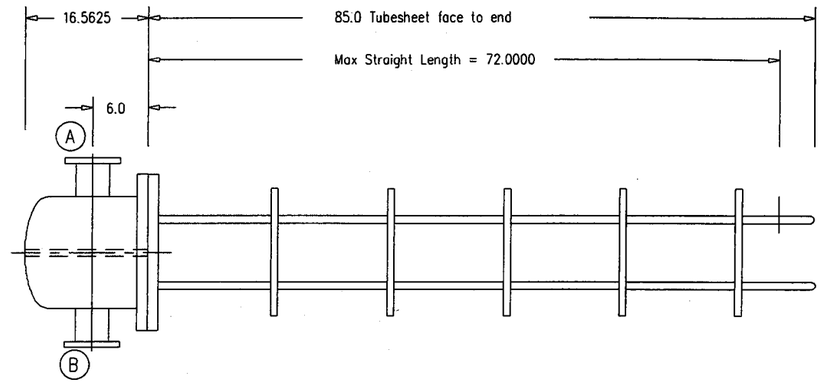
D & R MODEL: LL206U2-6H
304LSS TUBESIDE CONSTRUCTION
WITH 304LSS BAFFLE ASSEMBLY
BUNDLE & BONNET ONLY

DIMENSIONS IN INCHES
NOT DRAWN TO SCALE
BOLT HOLES STRADDLE
NATURAL CENTERLINES



HEAD(S)
FRONT VIEW



FRONT REAR

ALL DIMENSIONS SUBJECT TO CAHNGE UPON FINAL ENGINEERING

	NPS / OD	SCH/THK	
Nozzle A	3		150 # ANSI L.J. Flg SA-105 With SA-312 Tp304L Wld Hi Alloy Steel Pipe W/Stub End
Nozzle B	3		150 # ANSI L.J. Flg SA-105 With SA-312 Tp304L Wld Hi Alloy Steel Pipe W/Stub End
Front Head Cylinder	20.0		SA-240 Gr 304L Hi Ally Steel Plate
Front Head Cover	20.0		SA-240 Gr 304L Hi Ally Steel Plate Ellipsoidal Cover
Front Tubesheet	27.5		20" - 150# ANSI Std SA-240 Gr 304L Hi Ally Steel Plate
Front Head Flange at Ts	27.5		20" - 150# ANSI SA-105 Carbon Steel Forg RING Flange Faced With 304LSS
Front Head Gasket at Ts	23.0		20" - 150# ANSI Std Blue Gard Periph width 1.5 in.
Front Hd Bolting at Ts	1.0		20" - 150# ANSI Std SA-193 B7 Steel Blt 20 Bolts on 25.0 in B.C. W/ SA-194 Cl 2H Nuts
Tubes	0.75	0.065	SA-249 Tp304L Wld Hi Alloy Steel Tube Bare tubes
Baffles	19.0625		SA-36 Steel Plt
Tie Rods	0.375		SA-36 Steel Rod
Spacers	0.625		SA-214 Wld C Steel Tube Bare tubes

DESIGN CONDITIONS	SHELL SIDE	TUBE SIDE
DESIGN PRESSURE (psig)	FULL VAC/30	FULL VAC/100
TEST PRESSURE (psig)	None	130
DESIGN TEMPERATURE / MIN (F)	600 / -20	350 / -20
NUMBER OF PASSES	1	2
CORROS ALLOW, Except Tubes (in)	0.0625	0.0
RADIOGRAPHY	None	None

TEMA TYPE B-U SIZE 19-72 SURFACE AREA 253 ft2
TUBE TYPE Bare NO.OF HOLES 240 NOM BDL LG 72 in
LAYOUT 1.0 in Sq TUBE-TUBESHT JT Expanded W/ 2 Grooves
BAFFLE TYPE Single Segmental CUT 25 % H
BAFFLE SPACING (in) 12.0
IMPINGEMENT PLATE None
CODE: ASME SECT VIII,DIV 1, 2007 TEMA CLASS C
WEIGHT: EMPTY 1843 FLOODED 2557 BUNDLE 613 lb
DATE: 05-07-08 DRAWN: HS CHKD: APPD:

DOYLE & ROTH MFG CO., INC
90 BROAD STREET 14 FLOOR, NEW YORK, NY 10004

NOTES: ASME STAMP,NATIONAL BOARD INSPECTION & REGISTRATION ARE REQUIRED.
PAINT CARBON STEEL ONLY, ONE SHOP COAT RED PRIMER
IMPACT TEST NOT REQD PER SECT VIII, DIV I, PARA UG 20(F) & UHA 51

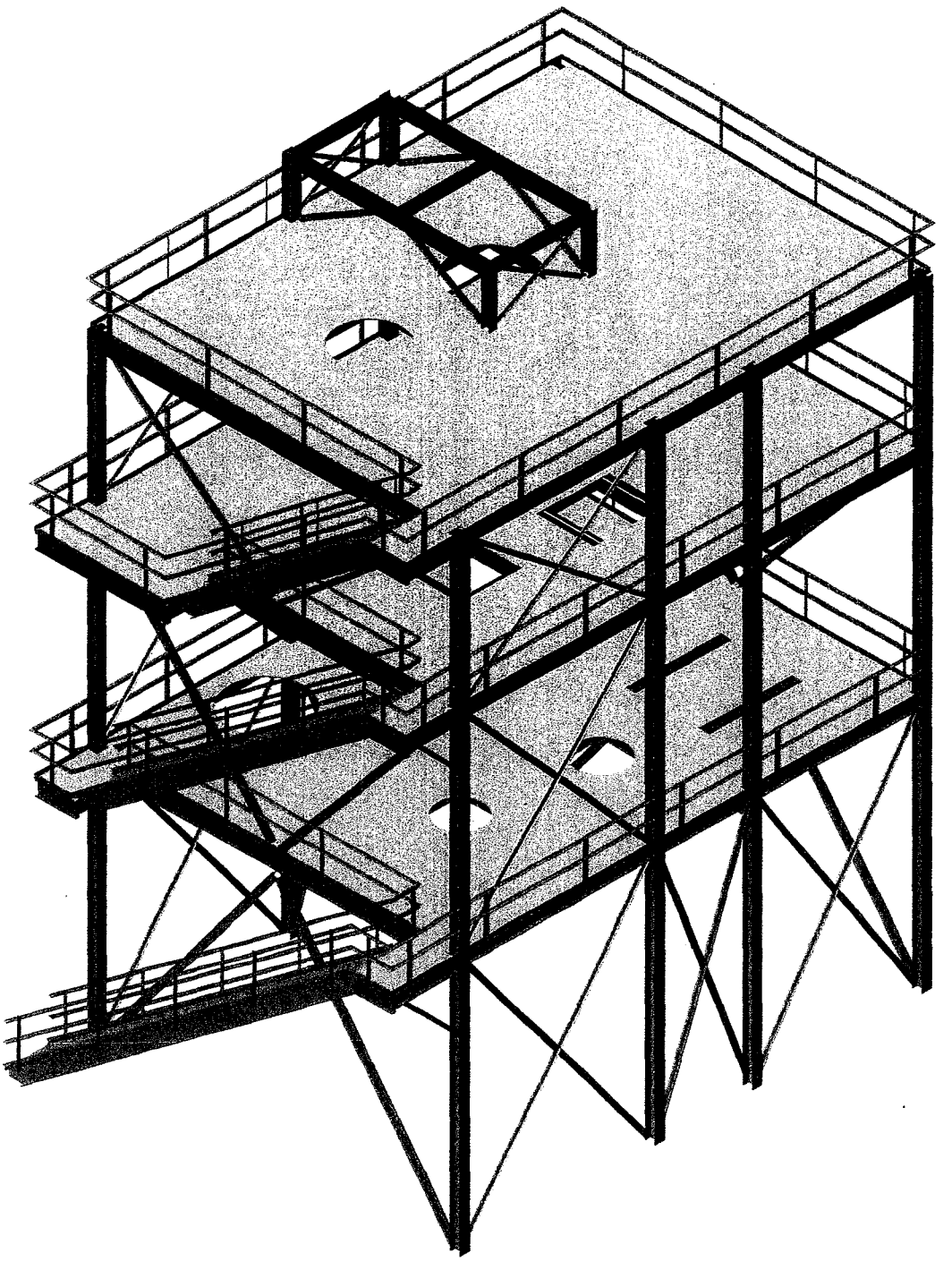
NO	DATE	BY	REVISIONS

CUSTOMER : LCI CORPORATION
P.O. NO. : LATER QTY : ONE (1)
EQUIP NO.: BAYONET HEATER

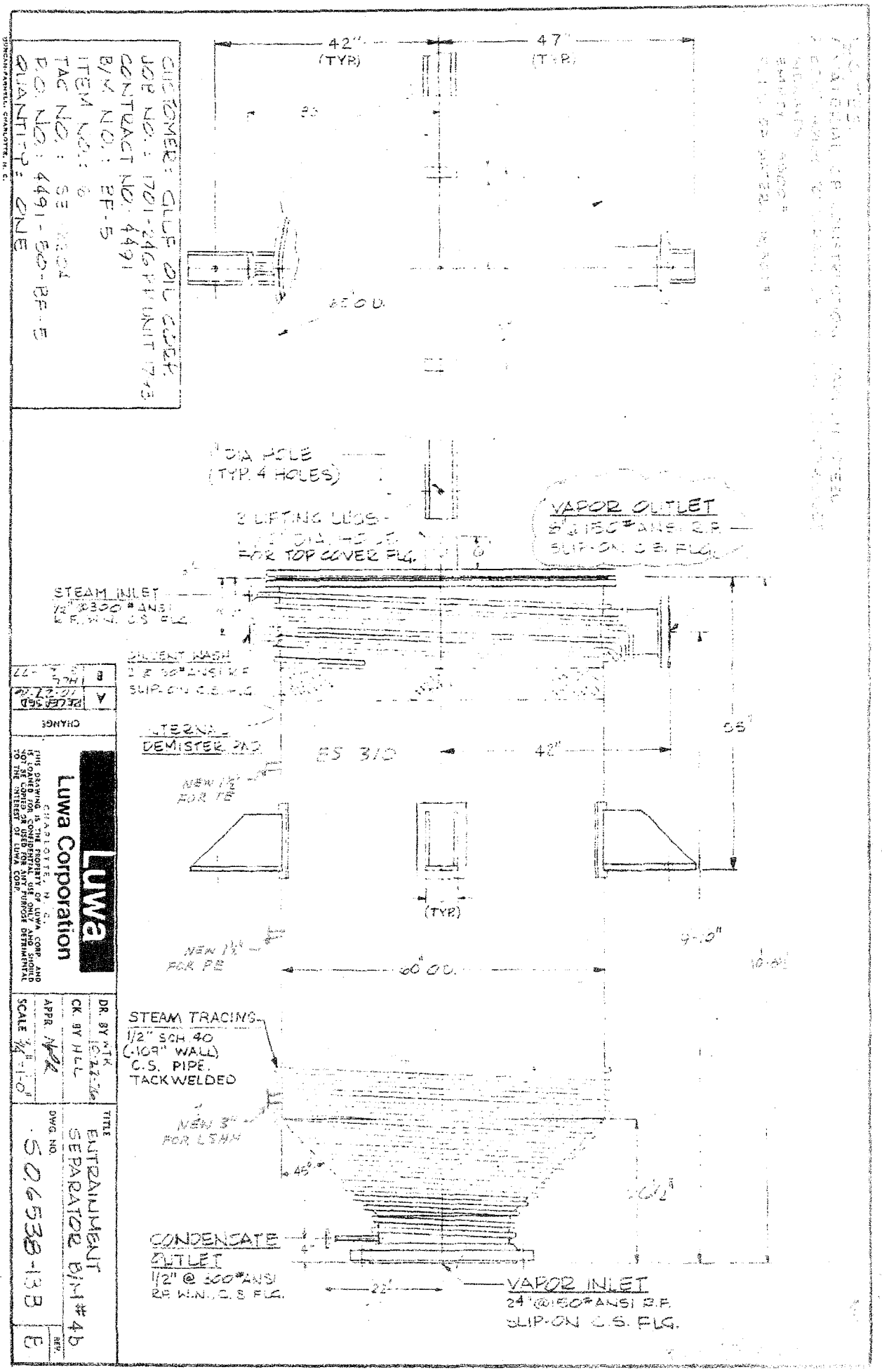
JOB NO ME4568 DWG NO B LATER REV

EPAHO04400749

7



8



CUSTOMER: GULF OIL CORP.
JOB NO.: 1701-246 PP UNIT 743
CONTRACT NO.: 4491
B/M NO.: PF-5
ITEM NO.: 6
TAG NO.: SE 1604
P.O. NO.: 4491-50-PF-5
QUANTITY: ONE

REV.	CHANGE	DATE	BY
B			
A	RELEASED	10-27-76	HCH

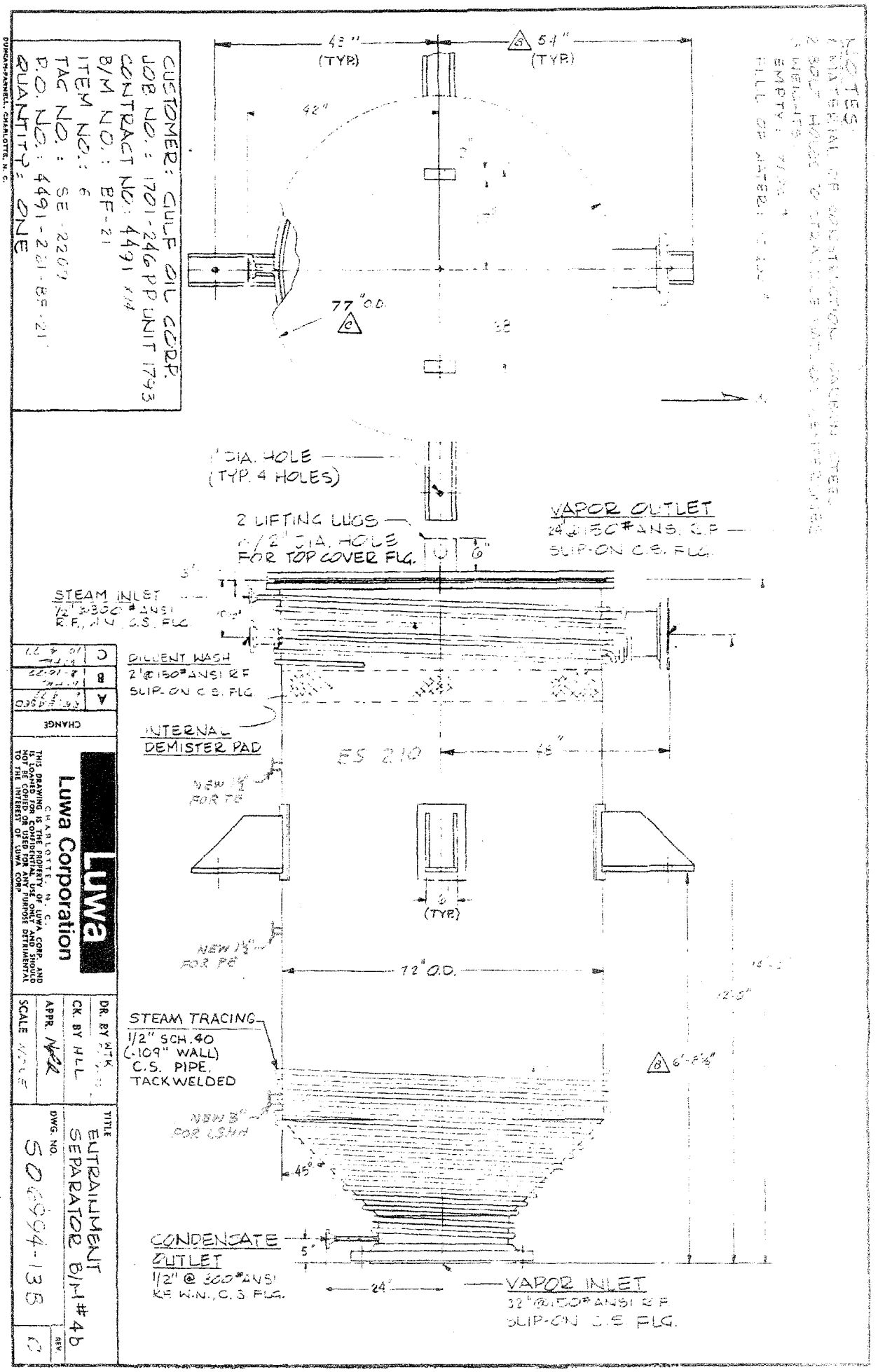
Luwa Corporation
CHARLOTTE, N. C.
THIS DRAWING IS THE PROPERTY OF LUWA CORP. AND IS LOANED FOR CONFIDENTIAL USE ONLY AND SHOULD NOT BE USED FOR ANY PURPOSE DETRIMENTAL TO THE INTEREST OF LUWA CORP.

DR. BY WTK 10-22-76
CK. BY HLL
APPR.
SCALE 3/4"-1'-0"

TITLE: ENTRAINMENT SEPARATOR B/M #4b
DWG. NO.: SO 6538-13 B
REV. B

DUNCAN-PARNELL CHARLOTTE, N. C.

EPAHO044000753



EPAHO044000754

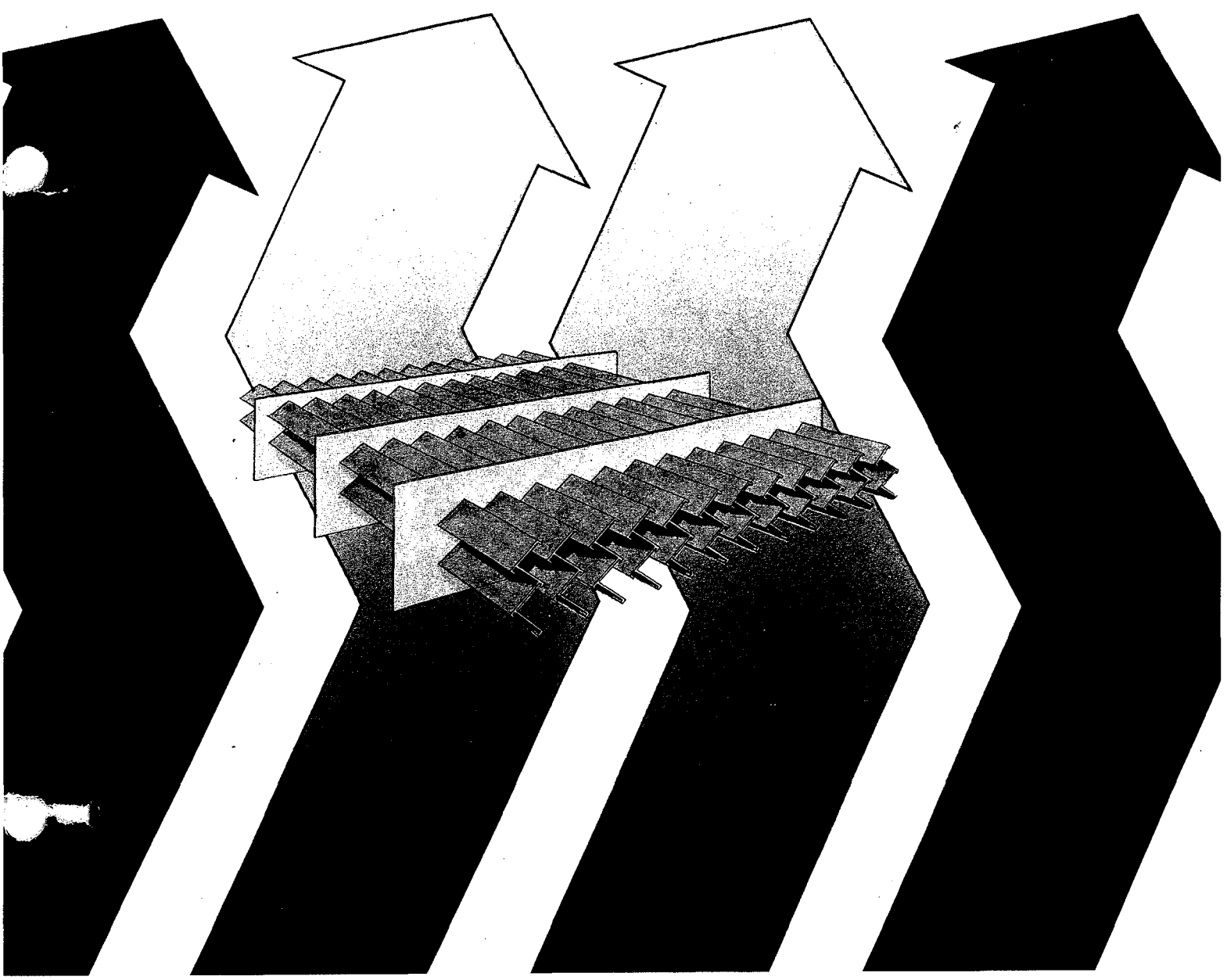
KOCH
ENGINEERING COMPANY INC

FLEXICHEVRON MIST ELIMINATOR

BULLETIN KFV-2

"The Mist Eliminator for Fouling Service"

Proven Effective Where Others Have Failed



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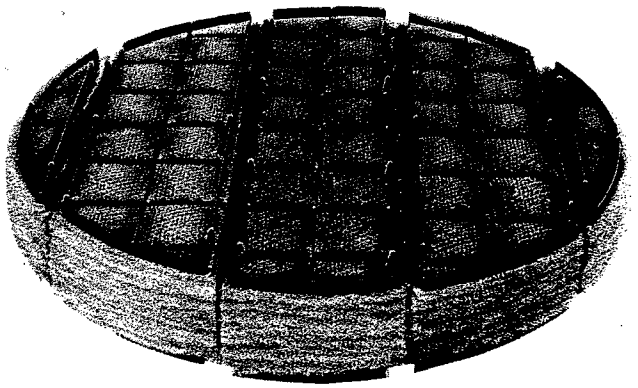
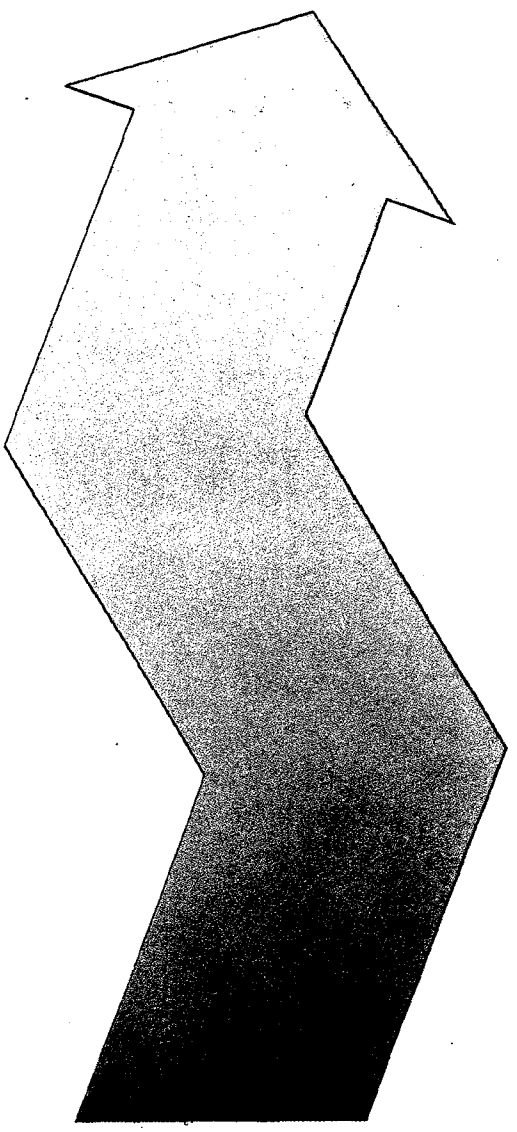


SECTIONAL
FLEXIMESH ASSEMBLY WITH GRIDS

FOR APPLICATIONS WHERE FOULING IS NOT A FACTOR KOCH CAN SUPPLY A COMPLETE LINE OF KNITTED MESH TYPE MIST ELIMINATORS IN METALS AND PLASTICS. SEE BULLETIN FM-3



The FlexiChevron Mist Eliminator

Koch Engineering's FlexiChevron Mist Eliminators employ unique design which provide low cost droplet removal from gasses with little or no maintenance requirement. **The FlexiChevron Unit is ideally suited to replacement of mesh type mist eliminators where fouling has proven to be a problem.**

What is a FlexiChevron Mist Eliminator?

A FlexiChevron Mist Eliminator is a set of zig-zag baffles which are used to separate liquid droplets from flowing gases. The gases processed in this manner are suitable for atmospheric discharge or further processing.

Where are FlexiChevron Mist Eliminators Used?

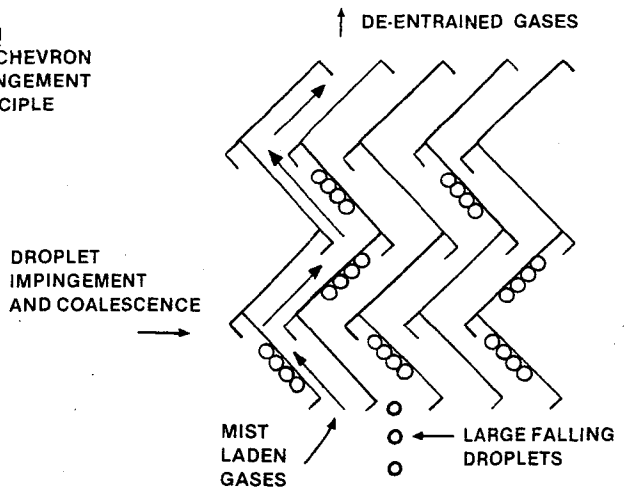
This type of mist eliminator should be used any time high droplet/gas separation is required where plugging of traditional mist eliminators is a risk. These applications include:

- All types of air pollution control scrubbing services.
- Services where droplets will be sticky or viscous and will blind classic wire mesh mist eliminators. This would especially be true in many petro/petrochemical applications.
- Situations where wide flow rate ranges are possible and cyclonic type mist eliminators will not be suitable.

How does a FlexiChevron Mist Eliminator Work?

Gases with entrained liquid droplets flow between the zig-zag baffles. The gas can easily make the turns while the droplets impinge upon the walls of the baffles and coalesce to a size such that they drop downward, being too heavy to be carried in the gas.

FIG. 1
THE CHEVRON IMPINGEMENT PRINCIPLE



Koch designs spacing between baffles, turning angle, and passes to satisfy specific removal requirements. FlexiChevron designs are available for vertically or horizontally flowing gases.

Copyright 1980

How do you rate a FlexiChevron?

Sizing a chevron type mist eliminator involves a complicated relationship between gas velocity, gas density, liquid loading rate, droplet partical size, and liquid density.

Extensive pilot plant studies on all the various chevron styles, over a wide variety of conditions, permit Koch Engineers to select the correct style and size for your application.

Why use FlexiChevrons?

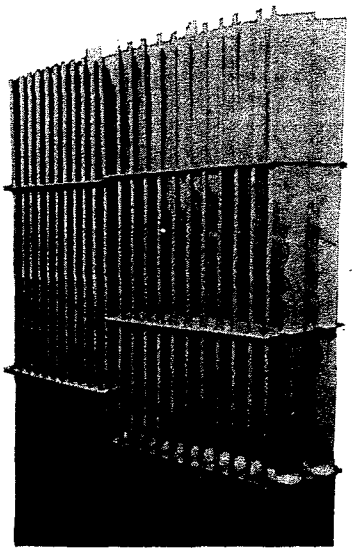
1. Non Plugging Design:

Koch has used the FlexiChevron design in applications where droplets collected are sticky or contain suspended solids. Intermittent underspraying to remove clinging particles is usually all that is required to keep the design clean. Traditional wire mesh style mist eliminators collect solids at their lower boundries. Spraying this mesh design from below only forces the solids further into the mesh.

2. Various Geometrics and Modular Design Are Available to Meet Special Customer Needs.

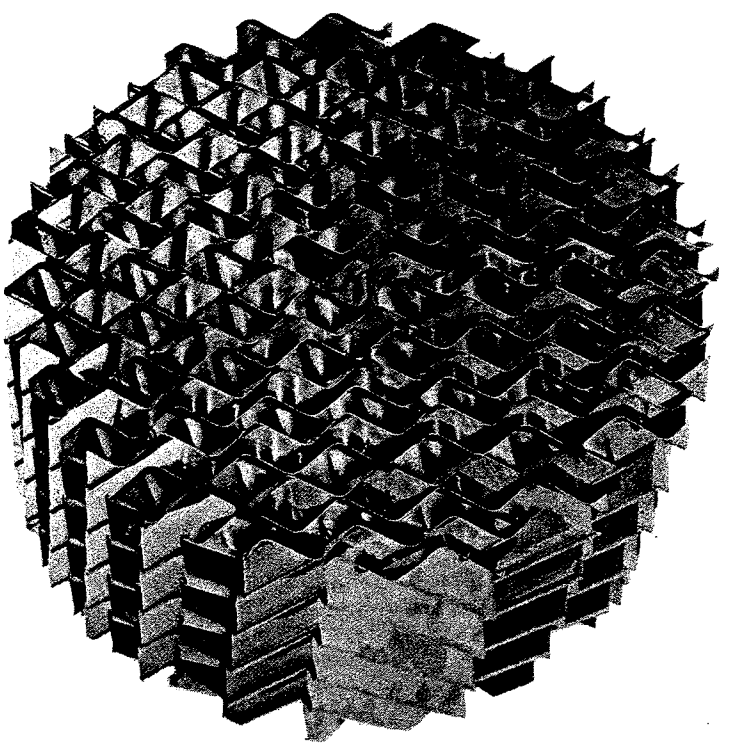
3. Units Can Be Built in Many Material Options.

A wide range of metal and plastic units are available to meet specific applications where temperature or corrosion might be a problem.

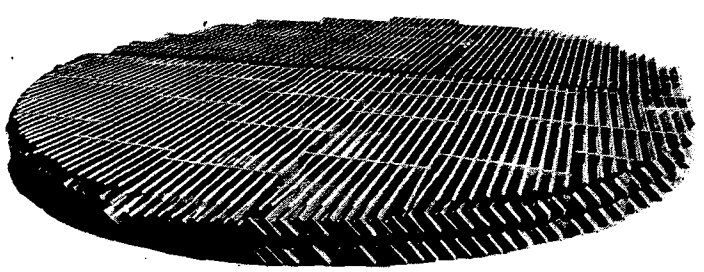


STYLE 1 FLEXICHEVRON IN A HORIZONTAL FLOW APPLICATION.

FLEXICHEVRON STYLE 2



FLEXICHEVRON STYLE 1



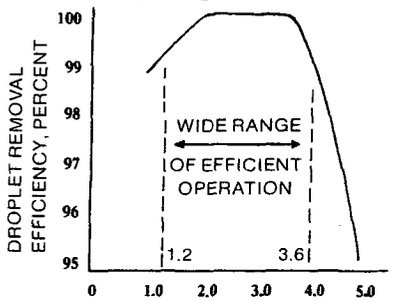
FLEXICHEVRONS ARE AVAILABLE IN A WIDE VARIETY OF MATERIALS BOTH METAL AND PLASTIC

EPAHO044000757

4. Efficiency is Maintained at Wide Gas Flow Variations:

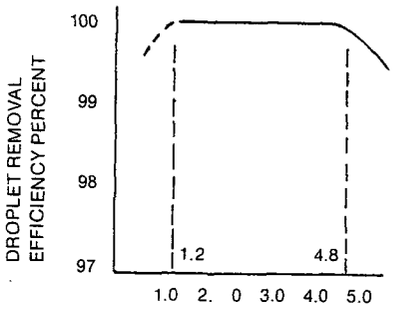
Because it employs the impingement principle, the FlexiChevron can be used efficiently over wide gas velocity regions—without significant loss of droplet removal efficiency. Cyclonic style mist eliminators (classically used as dust scrubbers) cannot operate efficiently over as wide a range of gas flows. Please refer to Figure 3 for suitable operating range criteria.

FIGURE 3A
FLEXICHEVRON MIST ELIMINATOR TYPICAL DROPLET REMOVAL EFFICIENCIES VERTICAL FLOW



'F' FACTOR = SUPERFICIAL VELOCITY X (GAS DENSITY)$^{0.5}$
(FT./SEC.) (LB./FT.^{3})$^{0.5}$

FIGURE 3B
FLEXICHEVRON MIST ELIMINATOR TYPICAL DROPLET REMOVAL EFFICIENCIES HORIZONTAL FLOW

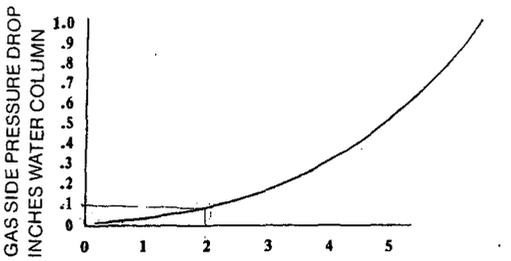


F = SUPERFICIAL VELOCITY X (GAS DENSITY)$^{0.5}$

5. Low Pressure Drop:

Pressure drop through the Koch FlexiChevron is rarely an important consideration. Test data developed on pressure drops are presented in Figure 4.

FIGURE 4
TYPICAL PRESSURE DROP THROUGH FLEXICHEVRON



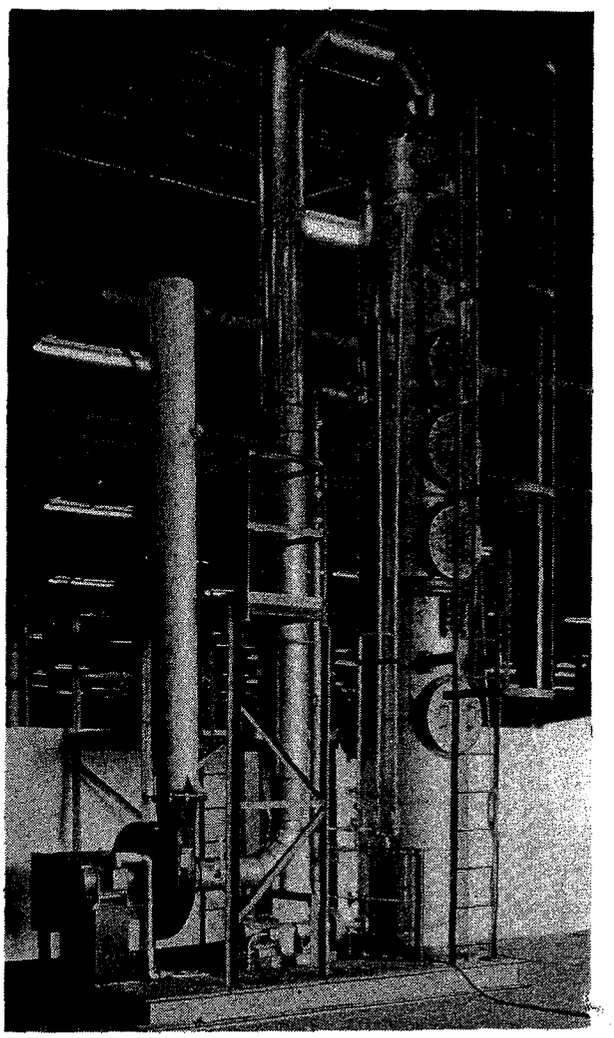
'F' FACTOR = SUPERFICIAL VELOCITY X (GAS DENSITY)$^{0.5}$
(FT./SEC.) (LB./FT.^{3})$^{0.5}$

6. Compatability with other Mist Eliminators:

Because its best operating velocity is similar to mesh type designs, the chevron can replace mesh mist eliminators in equal size towers with little or no retrofitting required. Also, when extremely high droplet loading exists, the FlexiChevron can be used as a first step mist eliminator, followed by a mesh or other mist eliminator. The mesh can even be supported on top of the chevron blades.

Pilot Plant Available

Due to the difficulty of many mist removal services, Koch has a fully equipped skid mounted pilot plant available to be used either directly on the vent gases at the plant site or in a laboratory test.



F165 KOCH'S SKID MOUNTED PILOT TEST UNIT

EPAHO044000758

Sample Ratings:

1. Existing Crude Distillation Column, Mesh Mist Eliminator is Plugging and Blinding:
   Gas Overhead Flow-58,700 Lbs./Hr.
   Pressure - 125 PSIG
   Temperature 275°F
   Molecular Weight of Gas - 44
   Existing Tower Diameter - 3 Feet (Area = 7.065 Ft.^{2})
   Calculation:
   Actual Gas Flow, Cubic feet per hour =

$$\left(\frac{58700}{44}\right)(379)\left(\frac{735}{520}\right)\left(\frac{14.7}{139.7}\right) = 75202 \text{ Ft.}^3/\text{Hr.}$$

   Gas Density = 58700/75202 = 0.781 Lbs./Ft.^{3}
   Gas Superficial Velocity = 75202/(3600)(7.065) = 2.96 Ft./Sec.
   'F' Factor = $2.96\sqrt{.781} = 2.61$

   - Therefore the Tower Diameter is acceptable (From Figure 3).
   - Efficient Turndown = 1.2/2.61 = 46 percent
   - Pressure Drop (Figure 4) = .18 IN. W.G.

2. Steam Exiting an Evaporator must be De-Entrained. Mesh Style Eliminators have Plugged previously in this service.
   Unit must operate at Half Design Rate.
   Design Steam Flow - 2,875 Lbs./Hr.
   Pressure - 1 PSIA
   From Steam Tables:
   Steam Density = 1/333.6 = .03 Lbs./Ft.^{3}
   'F' Factor =

$$\frac{2875}{3600 \times \text{Area} \times .003}\sqrt{.003} = \frac{14.58}{\text{Area}}$$

   Any 'F' factor at 2.4 or higher will permit a 2 to 1 turndown. For economy, Make 'F' 3.0.

$$\text{Area} = \frac{14.58}{3} = 4.86 \text{ Ft.}^2$$

   Diameter = 2'6"
   Pressure Drop = .2 IN. W.G.

3. An existing High Energy (60 In. W.C.) Venturi is followed by Cyclone Mist Eliminator. Unfortunately, Cyclonic motion breaks down at 50 percent of Design Flow.
   Solution:
   a. Install Anti-Spin Vane in Tower to Break Cyclonic Motion
   b. Install Koch Closed Space FlexiChevron Design for Droplet Mist Elimination Over 3:1 Turndown.

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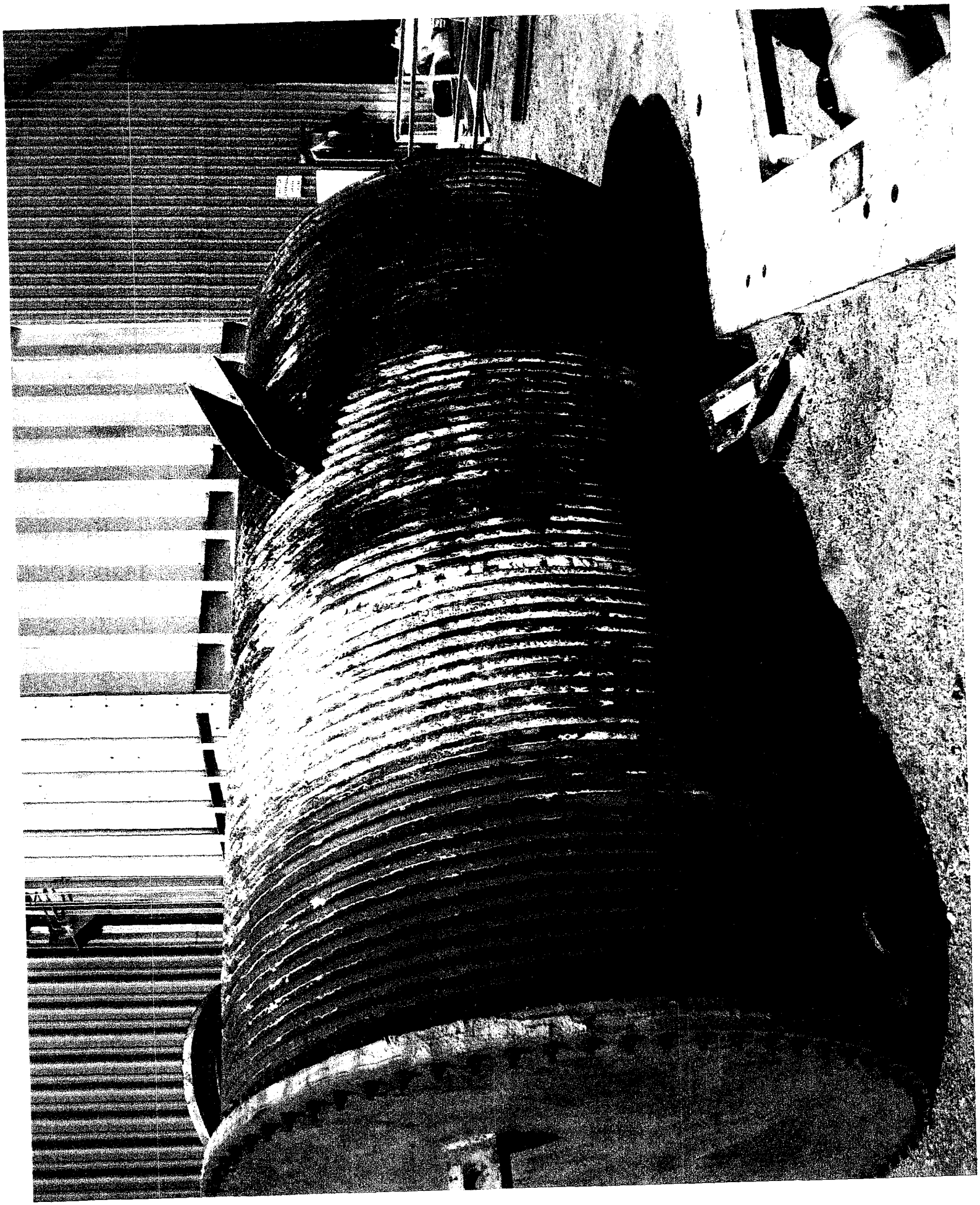

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EPAHO044000761

EPAHO044000762

9

~~Scrubber Piping for Front~~

~~Caustic Treatment Unit 40,000~~

~~Boiler Install 13,000~~

- Air Compressors Installs $50,000
- SIB upgrades (piping) 5,000
- Motor Oil Control Room $30,000
- Tank wash Tank $3,000

~~Bulk Chemical storage tanks 13,000~~

- Thermal oxidizers $5,000
- Port Arthur SIB / Caustic Treatment
- Scrubber Piping for main Processing facility $25,000

$210,000

Finish in ≈ 6 weeks

Vacuum 73
PLC 24
Doyle Roth 50
HF 3+4 - 20
Entrainment - 25

- Loans for 2 thermal oxidizers

OR CESSITE
Brine 15/25
Rich 7+/5
Steam 50
Cleat

Brine Steam Line Setup Water for Propane
Mixing with Water

NEW CESSITE
NEW CESSITE
50% CESSITE Houston

EPAHO044000764

date

project

page

CES Project Workforce Arrangements

CES Workforce	CESSite Houston	CESOil Project	CESSub PA
Clark		100%	
Brian	25%	75%	
Steve		30%	70%
Rick	25%	75%	
Chris	50%	50%	0%

Beginning Early July when motor oil plant gets Hot

task list:

OIL PROJECT ACTION PLAN OBJECTIVES
MAY 19, 2008

1. Issue Purchase Order (P.O.) for Vacuum System the week of May 19, 2008, to Pesco for $244,000. → 232,560
Delivery projected Sept. 2008 with 30% ($73,000) paid now to Pesco.

2. P.O. for PLC-PC Control Systems to PESCO-Beam for $78,400 need 30 percent deposit ($23,520). For Delivery 12 to 14 weeks.

3. Finalize Flash Tank and Receiver Tanks (3) final nozzle arrangements for modification and recertification for vacuum and temperature. Modify tanks in CES Shop. →

4. Review and recertify HE1 for its application and temperature.

5. Order U tube bundles for HE3/HE4 based on LCI recommendations. PO for each $21,257. Estimated cost to start PO order $15,000 to $20,000. Doyle & Roth
*2

6. Fabricate HE3 and HE4 shells based on LCI design at CES. Cost estimated $30,000.

7. Continue on with 3-D oil structure equipment arrangement drawing which will be the basis for piping drawings.

8. Issue P.O. to LCI for repair of entrainment separators and duct work for the two LUWAs estimated at $60,000.

9. Finish specs for oil project pumps, MCC, instruments, control systems, and piping with input from PESCO.

10. LuWA Repair $200,000

3

* Order A.S.A.P

Pay Immediately $200,000
$ 73,000
$ 23,520
21,257
$317,777

OilProjectActionPlanObjectives:disk25

1

From: "lukestaengl" <lukestaengl@mindspring.com>
To: "Clark Hickman" <chickman@cesenvironmental.com>, "'Clarke Hickman'" <chickman7@comcast.net>
Subject: *Proper attachment*
Date: Friday, March 21, 2008 4:11:13 PM

Hopefully this is the right one -

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

(Attachments successfully scanned for viruses.)

Attachment 1: (application/msword)

MEMORANDUM

TO: Luke Staengl

FROM: Clark Hickman

DATE: March 20, 2008

SUBJECT: Package on CES Project for PESCO Work

ITEM	AMOUNT OF BID	(Amount to Pay) PACKAGE PRICE	REDUCED AMOUNT
(1) Multistage Vacuum System - 1/31/08 PESCO PID 12-400	$244,800	$232,560	$12,240
(2) Filter Vac (Clay Unit Purchase from PESCO)	$40,000 (Unpaid Amount)	$20,000	$20,000
(3) PESCO Project Engineering P.O. $40,000	$25,000 Unpaid ($15,000 Advanced)	$15,000.00	$10,000
(4) PLC Computer & Software for Oil Project	$78,400 PESCO Bid	$75,640	$2,760
TOTAL (1 thru 4)	$388,200	$328,200	$45,000

D24:Staengl(CESProjforPESCO)31108

From: "lukestaengl" <lukestaengl@mindspring.com>
To: "'Clarke Hickman'" <chickman7@comcast.net>
CC: "'Pat Therrien'" <pat@swva.net>
Subject: Vacuum System proposal
Date: Thursday, January 31, 2008 2:43:42 PM

One more try - Luke

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com

(Attachments successfully scanned for viruses.)

Attachment 1: (application/msword)

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: www.pescova.com
Email: lukestaengl@mindspring.com

To: Clark Hickman
CES Environmental Services
Houston, Texas

From: Luke Staengl, President

Re: Vacuum System budget proposal

Dear Clark,

PESCO-BEAM hereby proposes to design and build a multistage vacuum system for your company. The system will be designed and built to provide sufficient vacuum for your oil re-refinery to enable you to distill used motor oil in your multistage evaporation system.

The system will include positive displacement vacuum booster blowers, a liquid ring vacuum system, heat exchangers, strainers, receivers, pumps, and control components all assembled on a carbon steel skid. It will come with all the needed control valves, manual valves, fittings, piping as well as the electrical and electronic components necessary to reach the desired vacuums.

System parameters:

VACUUM PULLED

10 mmHg in 1st evaporator with a continuous air bleed up stream of an orifice plate in order to maintain pressure. This also provides a gas ballast for the KT Pump.
1.5 - 2 mmHg in 2nd Evaporator.

Maintenance

1) Operators change out 5 gallons of the pumps 10 gallon capacity with Detergent oil. They say they are using straight 40 Weight Detergent oil.
2)Operators add 2 cups of an additive with the 5 gallons above. The additive is Lubrizol 5347 from the Lubrizol Corporation. This additive is to buffer the acidity that is condensing in the KT Oil.
3)Operators peiodically check Total Acid Number (TAN). This number usually stays below 1.5. This is higher than the 0.3 recommended in the Kinney manual, but much less than the TAN's of 2.5 to 3 recorded at the Portland plant before the above treatment regime was initiated.
4)The first pump used with the above maintenance lasted 1 year.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

The system will include all the components listed in the accompanying P & I Diagram which accompanies this proposal, assembled and ready to be installed on your system.

The lead-time for the system will be 14 – 16 weeks.

This budget price is good for 30 days from today.

The system will be guaranteed to be perform as specified for one year.

The budget price (+/- 5%) for the system f.o.b. Roanoke will be $244,800.00

Please review this budget proposal (including the diagram attached) and get back to me if you wish to proceed. We will then prepare a formal agreement which will be signed by all parties.

Yours truly,

Luke Staengl
Luke Staengl

2

CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021
FAX: (713) 676-1676

FACSIMILE COVER PAGE

(8 pages including cover page)

TO: Luke Staengl

FROM: Clark Hickman

DATE: 5/9/08

SUBJECT: DLC-PC Control System

See Attached
PO - 374941
For $78,400.00

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
PHONE: (713) 676-1460 FAX: (713) 6761676

Order Request Form

Purchase Order No.: 374941

Date: 5/5/08

Vendor: PESCO-BEAM Environmental Solutions Company, Inc
Address: 1005 Industry Circle, SE
Roanoke, Virginia 24013
Contact: Luke Staengl
Phone: 504-206-2788
Fax: 504-206-2791

ITEM NO.	DESCRIPTION	QUANTITY	$ COST
1	Pesco-Beam PLC-PC Control System	1	$78,400.00
	Using Allen Bradley Software		
	and Hardware for the CES Oil	System	
	per Quote Dated 3/21/08		
	which is attached		

Submitted By: Clark Hickman (281-488-0848)
Approved By: _____
Printed Name: _____

OPS ☒ Yes ☐ No
Lab ☐

OFFICE USE ONLY

Internal Expense:

_____CS
_____FS
_____Trans
_____SGA
_____MRI
_____DRM

Job Expense:

What Job?: _____

☐ Give Vendor Re-Sale Certificate
☐ Vendor to Charge Sales Tax

CES:D24:6807

Clark Hickman

From: lukestaengl [lukestaengl@mindspring.com]
Sent: Friday, March 21, 2008 2:05 PM
To: Clark Hickman; 'Clarke Hickman'
Subject: FW: Supply agreement for PLC-PC control system
Attachments: CES Control System Quotation - 01.14.08.doc

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

From: lukestaengl [mailto:lukestaengl@mindspring.com]
Sent: Thursday, March 20, 2008 3:48 PM
To: Clark Hickman (chickman@cesenvironmental.com)
Subject: FW: Supply agreement for PLC-PC control system

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

From: lukestaengl [mailto:lukestaengl@mindspring.com]
Sent: Tuesday, March 18, 2008 4:53 PM
To: 'Clarke Hickman'; Clark Hickman
Subject: Supply agreement for PLC-PC control system

Dear Clark – here is a proposal for PESCO-BEAM to supply a PESCO-BEAM PLC-PC control system.
Please review it and get back to me with any further questions or comments.
Wishing you well,

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588

FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com
www.pescova.com

EPAHO044000777

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

To: Mat Bowman, President
CES Environmental Services Inc.
Houston, TX

Dear Mat,

This is an agreement for PESCO-BEAM to supply a complete PLC-PC control system using Allen Bradley Software and Hardware and PESCO-BEAM technicians and engineers to assemble and program and test the system:

CONTROL SYSTEM DESCRIPTION

All relevant process temperatures, pressures, levels and flows will be monitored by a PLC located in the Main Control Panel. Most of these values will be redundantly reported on the skid with manual gauges. The PLC will report the process values to the HMI, Allen Bradley's RS View, running on the Control Computer located in the control room. All controlled process variables will be controlled by PID blocks in the PLC. The controllers will be monitored and controlled by the operator who will have access to all of the controller setpoints, alarms etc. at the HMI. Pump status will be reported at the control panel and on the computer. Pumps may be shut down at the computer control station.

The PLC itself will be an Allen Bradley Control Logix 5555Processor with 1.5MBYTE memory. The PLC is reading from the following I/O modules:

- 2 Analog Input Cards, 16 channel, 4 – 20 mA (1756-IF16)
- 1 Analog Input Cards, 8 channel, 4 – 20 mA (1756 – IF8)
- 5 Analog Input Cards, 6 Channel, Thermocouple (1756 – ITI)
- 2 Analog Output Cards, 8 Channel, 4 –20 mA (1756 – OF8)
- 2 Discrete Input Cards, 32 channel, 24 VDC (1756-IB32)
- 3 Discrete Out put Cards, 16 channel, Relay (1756 – OW16I)

Communications to the PLC are performed with an Ethernet card, type 1756-ENBT.

All alarming will be done by the PC Based Supervisory Control System, Allen Bradley's RS View. Operators will be informed of an alarm by an audible alarm from the PC as well as an alarm horn. An alarm summary will be located at the bottom of each control screen to inform the operator of any alarm condition in the whole plant. The operator will then have to take the appropriate action. Alarm contacts are supplied in the Process MCC. Plant management is left to buy the preferred alarm horn.

A control computer with an 18" Flat Panel monitor will be supplied as the control computer. This computer will have the HMI software running on it and it will communicate with the PLC using a CAT 5 cable. This computer is the main operator interface to the process. It is strongly advised that Plant Management have another computer on site that can act as a backup computer to be used in case of computer problems with the main control computer.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

This document contains the Functional Specification of the entire control system including a "Setpoints, Alarms and Interlocks" table that will list all of the proper settings of process controllers and the various alarm and interlock settings

DIGITAL CONTROL

1. All pumps will be operated locally at the skid using the local start/stop buttons. The operator must go to the skid in order to start the pump to ensure that the pump is working properly and not leaking at start up.
2. Start/Stops will be of the three-wire variety with the exception of the pumps and blowers, which are of 2 wire design:
    - P_2 (Caustic Feed Pump)
    - P_401 (Vacuum Blower)
    - P_402 (Oil Seal Vacuum Pump)
    - P_403 (R300 Decant Pump)
    - P_404 (Oxidizer Blower)
    - P_501 (Cooling Water Recirculation Pump)
    - P_502 (Cooling Tower Fan)
    - P_503 (Hot Oil Circulation Pump)
    - P_504 (Hot Oil Heater Fuel Pump)
3. Power to each pumps start circuit will come through a dry contact in the PLC. This enables operators to stop a pump from the Control Room. This feature also enables interlocking any pump through PLC programming.
4. The state of each motor contactor will be monitored on the PC based SCS.
5. Emergency shutoff buttons are also provided for each pump at each MCC panel.

PID Control Loops

All PID Controllers used to control the process will be programmed into the PLC hardware and will be accessible from the HMI. Operators will be able to view and/or change the following on each controller:

- Process Value
- Setpoint
- Controller Output
- Auto/Manual status.
- High and Low alarm settings.

The bid price for PESCO-BEAM to supply the described system is: **$78,400.00**

The cost of the system based sensors for flow, level, temperature, & pressure, is: **$32,700.00**

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1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
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Email: **lukestaengl@mindspring.com**

The cost of PESCO-BEAM technicians and engineers to set the system up at site: **$18,500.00**

Terms of Payment:

30% deposit with a signed contract or purchase order: [at this point PESCO-BEAM will proceed with the detail engineering. At this point PESCO-BEAM will also proceed with the ordering and down-payment of major components with long lead-times.

25% when all the engineering is completed and client has approved the P & I Diagrams, Process layout and elevation drawings, and mass balance.

25% when the system is 50% complete, subject to the customer's inspection.

10% when the system is ready to ship, subject to customer's inspection.

10% when system has been operating for 72 hours consecutively at the design rate or greater.
Note: Any delays in this payment schedule will result in delays for the delivery of the system.

Warrantees:

The system is guaranteed to perform as specified in this offer. Our performance guarantee trials that will be conducted over a 24 hr run during commissioning will demonstrate

- Capacity of the plant
- Consumption of utilities

All performance guarantee figures on utilities and capacity will be subject to a tolerance of ±10% of rated figures.
The following provisions will have to be made while checking the guarantees:

- All the connections to the Utilities and Storage tanks will be inspected by our Engineer and cleared before commissioning;
- All ancillary equipment in clients scope of supply shall be commissioned by the respective suppliers and should perform to recommended specifications as given in this offer; if they are in clients scope.
- A PESCO / BEAM representative is present during start-up for 2 weeks
- The customer's employees will work as per instructions given by our commissioning engineer, follow good engineering practices and follow the operation and instruction manual in running and maintaining the plant.

The plant supplied is Guaranteed to perform as specified above. Components will be guaranteed by PESCO-BEAM for a period of One year from the date of receipt at Port of destination plus 30 days to allow for erection and start-up, or from the date of commissioning – whichever is sooner - normal wear and tear excepted. If commissioning is delayed due to fault of PESCO-BEAM then the date of commissioning will be the start date of the warranty period, no matter when that is.

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

Our liability is also limited to replacement or repair of any defective components and we are not liable for any damage to personnel, property or loss in production.

Validity of offer: This final offer is valid for 30 days for your consideration and acceptance.

Force Majeure The performance of this Agreement, except for the payment of money for services already rendered, may be suspended by either party in the event the performance of obligations are prevented by a cause or causes beyond the reasonable control of such party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood, or sabotage; lack of adequate fuel, power, raw materials, labor or transportation facilities; governmental laws, regulations, requirements, orders or actions; breakage or failure of machinery or apparatus; national defense requirements; injunctions or restraining orders; labor trouble, strike, lockout or injunction (provided that neither party shall be required to settle a labor dispute against its own best judgment).

The party asserting a right to suspend performance under this Section must, within a reasonable time after he has knowledge of the effective cause, notify the other party of the cause for suspension, the performance suspended, and the anticipated duration of suspension. Upon receipt of such notice advising of a material or indefinite suspension of performance, and if such suspension substantially impairs the value of this Agreement to him, a party may, within a reasonable time (not to exceed thirty days), terminate this Agreement. If such notice of termination is not provided, this Agreement will lapse with respect to any performance suspended hereunder.

The party asserting a right to suspend performance hereunder shall advise the other party when the suspending event has ended, and when performance will be resumed.

Jurisdiction: The final contract shall be governed under the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, we have executed this contract on the date indicated below:

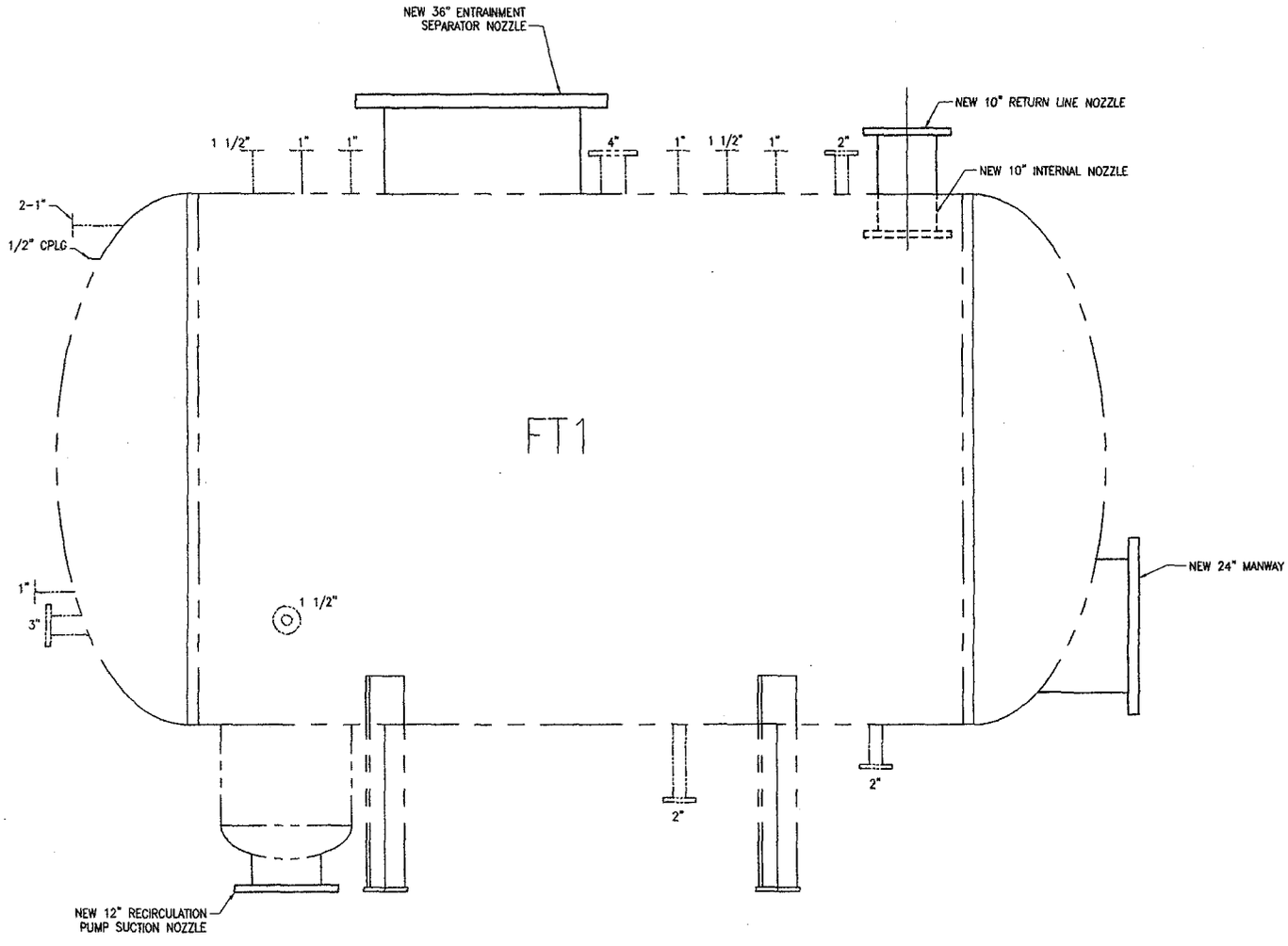
For PESCO-BEAM Inc. by:

_____ _____
Luke Staengl, President Date

For Your Company:

_____ _____
Signature, Title Date

3



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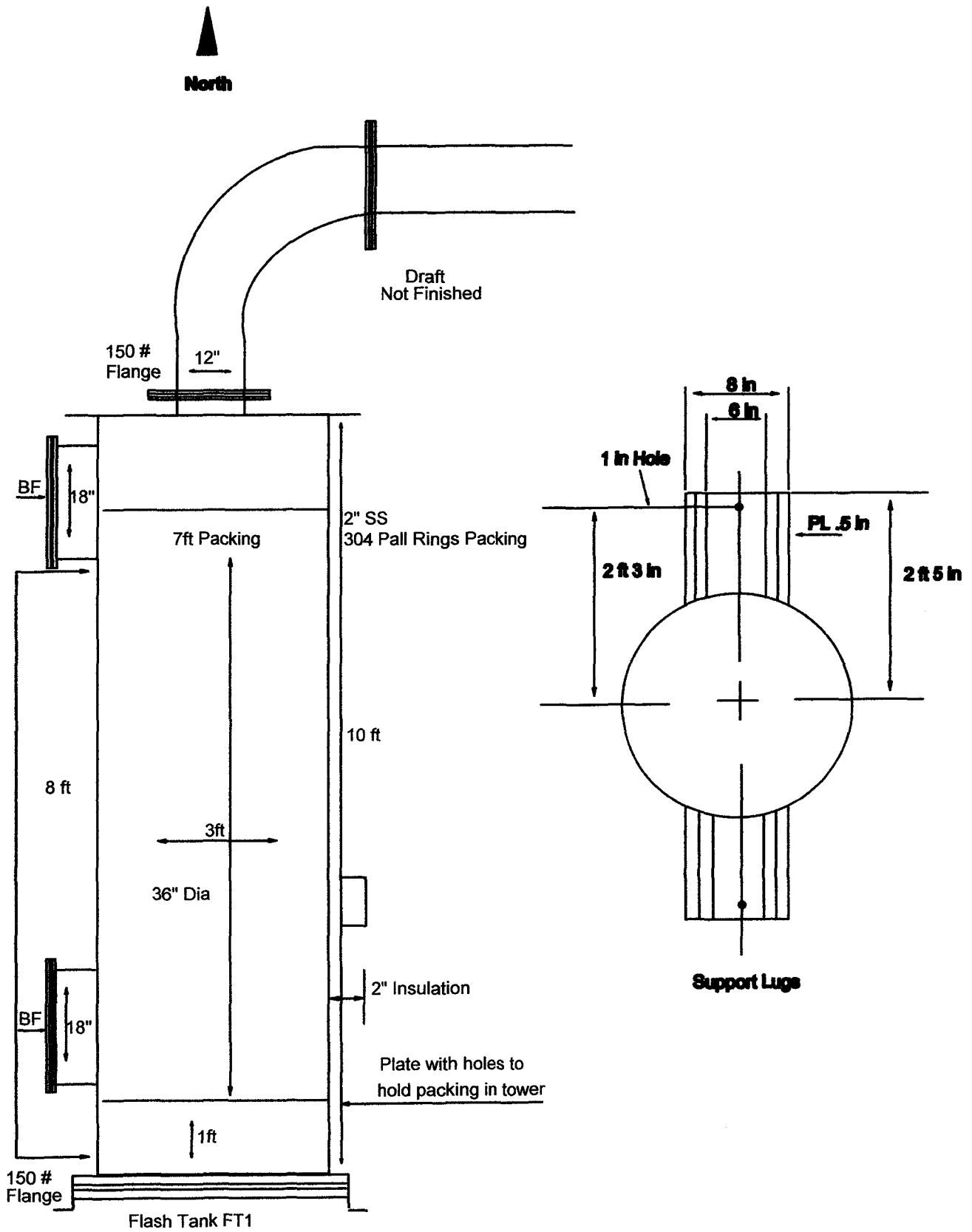
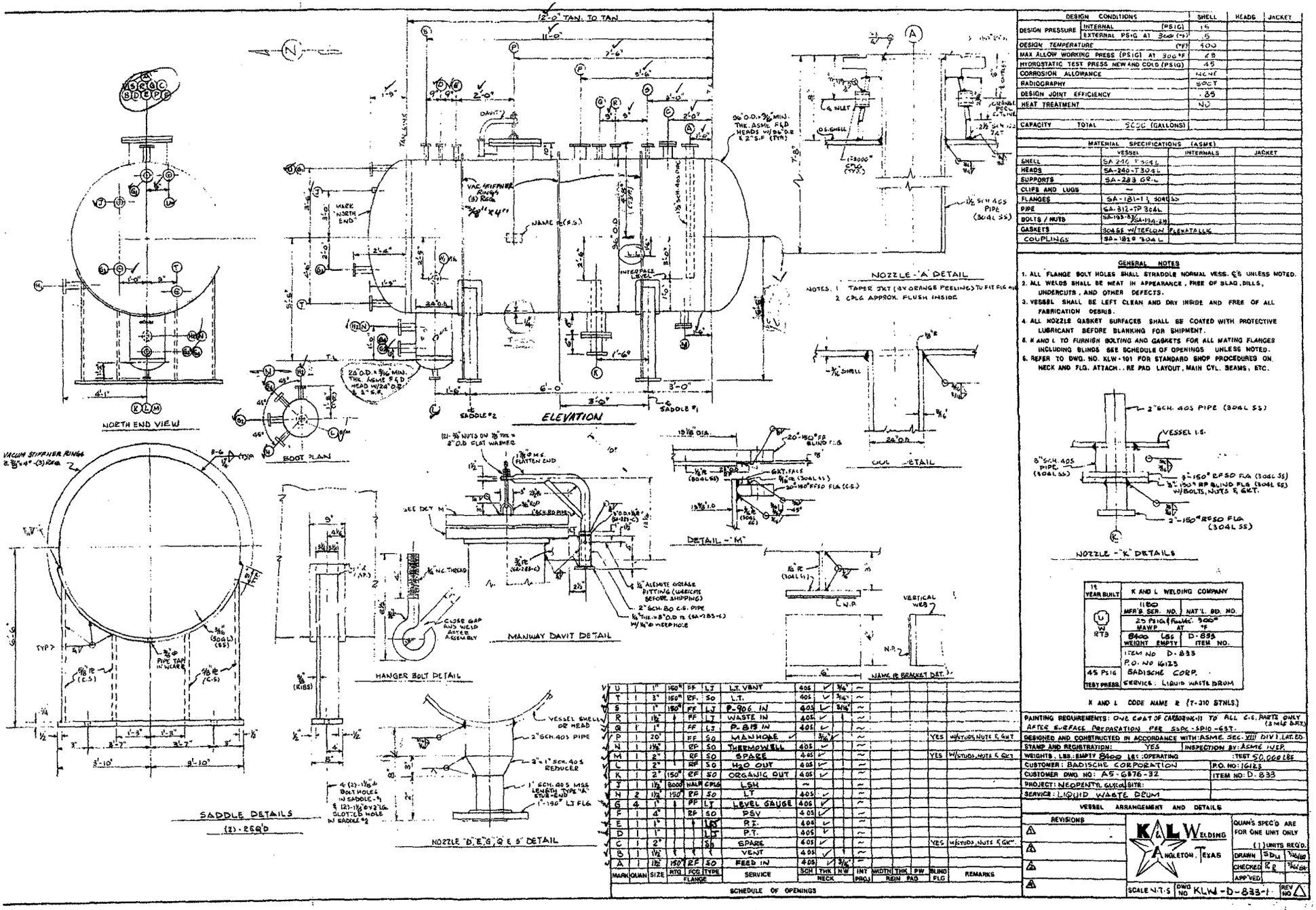


CES Environmental Services, Inc.
Entrainment Separator
Flash Tanks (FT1) (Oil Processing)
April 8, 2008 (rev)



DESIGN CONDITIONS		SHELL	HEADS	JACKET
DESIGN PRESSURE	INTERNAL (PSIG)	15		
	EXTERNAL PSIG AT 300° (+)	15		
DESIGN TEMPERATURE	(°F)	400		
MAX ALLOW WORKING PRESS (PSIG) AT 300 °F		28		
HYDROSTATIC TEST PRESS NEW AND COLD (PSIG)		45		
CORROSION ALLOWANCE		NONE		
RADIOGRAPHY		SPOT		
DESIGN JOINT EFFICIENCY		.85		
HEAT TREATMENT		NO		
CAPACITY TOTAL 5000 (GALLONS)				

MATERIAL SPECIFICATIONS (ASME)			
	VESSEL	INTERNALS	JACKET
SHELL	SA 240 T304L		
HEADS	SA-240-T304L		
SUPPORTS	SA-283 GR. C		
CLIPS AND LUGS	—		
FLANGES	SA-181-II 304L SS		
PIPE	SA-312-TP 304L		
BOLTS / NUTS	SA-193-B8 / SA-194-8A		
GASKETS	304SS W/TEFLON FLEXITALLIC		
COUPLINGS	SA-182 F 304L		

GENERAL NOTES

1. ALL FLANGE BOLT HOLES SHALL STRADDLE NORMAL VESS. C'S UNLESS NOTED.
2. ALL WELDS SHALL BE NEAT IN APPEARANCE, FREE OF SLAG, DILLS, UNDERCUTS, AND OTHER DEFECTS.
3. VESSEL SHALL BE LEFT CLEAN AND DRY INSIDE AND FREE OF ALL FABRICATION DEBRIS.
4. ALL NOZZLE GASKET SURFACES SHALL BE COATED WITH PROTECTIVE LUBRICANT BEFORE BLANKING FOR SHIPMENT.
5. K AND L TO FURNISH BOLTING AND GASKETS FOR ALL MATING FLANGES INCLUDING BLINDS SEE SCHEDULE OF OPENINGS UNLESS NOTED.
6. REFER TO DWG. NO. KLW-101 FOR STANDARD SHOP PROCEDURES ON NECK AND FLG. ATTACH., RE PAD LAYOUT, MAIN CYL. SEAMS, ETC.

U	1	1"	150#	RF	LJ	L.T. VENT	40S	✓	3/16"	~				
T	1	3"	150#	RF	SO	L.T.	40S	✓	3/16"	~				
S	1	1"	150#	FF	LJ	P-906 IN	40S	✓	3/16"	~				
R	1	1½"	1	FF	LJ	WASTE IN	40S	✓	1	~				
Q	1	1"		FF	LJ	P-813 IN	40S	✓		~				
P	1	20"		FF	SO	MANHOLE ✓		3/16"	✓	~			YES	W/STUDS, NUTS & GKT
O	1	1½"		FF	SO	THERMOWELL	40S	✓		~				
M	1	2"		RF	SO	SPARE	40S	✓		~			YES	W/STUDS, NUTS & GKT
L	1	2"		RF	SO	H2O OUT	40S	✓		~				
K	1	2"	150#	RF	SO	ORGANIC OUT	40S	✓		~				
J	1	1½"	3000	HALF	CPLG	LSH	—			~				
H	2	1½"	150	RF	SO	LT	40S	✓		~				
G	4	1"	1	RF	LJ	LEVEL GAUGE	40S	✓		~				
F	1	4"		RF	SO	PSV	40S	✓		~				
E	1	1"		1	LJ	P.I.	40S	✓		~				
D	1	1"		1	LJ	P.T.	40S	✓		~				
C	1	2"		1	SO	SPARE	40S	✓		~			YES	W/STUDS, NUTS & GKT
B	1	1½"		1	1	VENT	40S	✓	1	~				
A	1	12"	150#	RF	SO	FEED IN	40S	✓	3/16"	~				

MARK	QUAN	SIZE	FLANGE RTG	FLANGE FCG	FLANGE TYPE	SERVICE	NECK SCH	NECK THK	NECK I.W	INT PROJ	REIN PAD WIDTH	REIN PAD THK	REIN PAD P.W	BLIND FLG	REMARKS

SCHEDULE OF OPENINGS

15 YEAR BUILT	K AND L WELDING COMPANY
U W RTB	1150 MFR'S SER. NO. / NAT'L. BD. NO.
	25 PSIG (FULL VAC. 900° MAWP AT °F
	8400 LBS WEIGHT EMPTY / D-833 ITEM NO.
	ITEM NO D-833
	P.O. NO 16123
45 PSIG TEST PRESS.	SADISCHE CORP. SERVICE: LIQUID WASTE DRUM

K AND L CODE NAME R (T-310 STNLS.)

PAINTING REQUIREMENTS: ONE COAT OF CARBOLINE-11 TO ALL C.S. PARTS ONLY AFTER SURFACE PREPARATION PER SSPC-SP10-63T.

DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ASME SEC. VIII DIV 1, LATEST ED.

STAMP AND REGISTRATION: YES — INSPECTION BY: ASME INSP.

WEIGHTS, LBS. EMPTY 8400 LBS: OPERATING: TEST 50,000 LBS

CUSTOMER: BADISCHE CORPORATION — P.O. NO: 16123

CUSTOMER DWG. NO: AS-6876-32 — ITEM NO: D-833

PROJECT: NEOPENTYL GLYCOL — SITE:

SERVICE: LIQUID WASTE DRUM

VESSEL ARRANGEMENT AND DETAILS

REVISIONS		
1		
2		
3		
4		

K&L WELDING, ANGLETON, TEXAS

QUAN'S SPEC'D ARE FOR ONE UNIT ONLY

( ) UNITS REQ'D.

DRAWN	S.D.H.	7/16/68
CHECKED	R.R.	7/16/68
APP'VED		

SCALE N.T.S | DWG NO KLW-D-833-1 | REV NO 0

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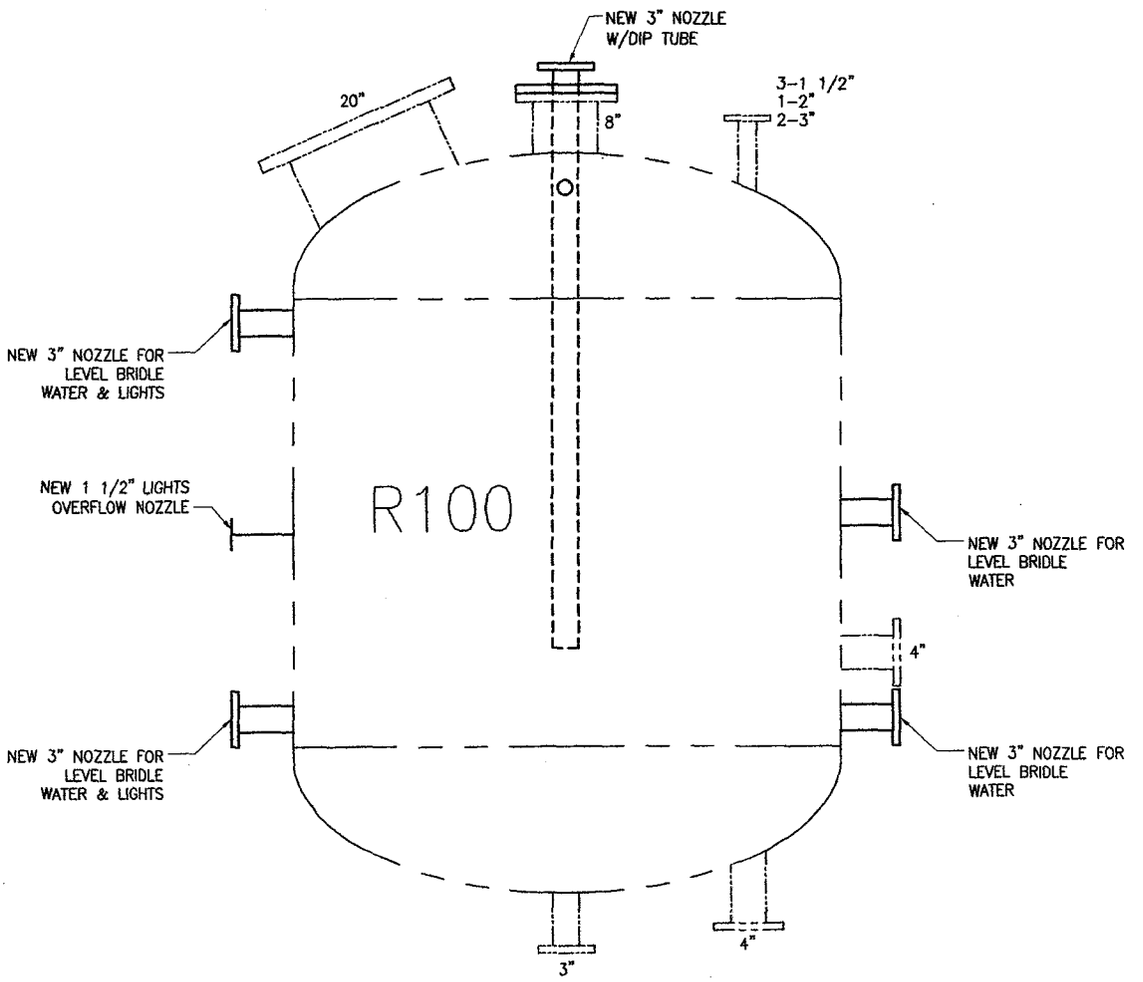
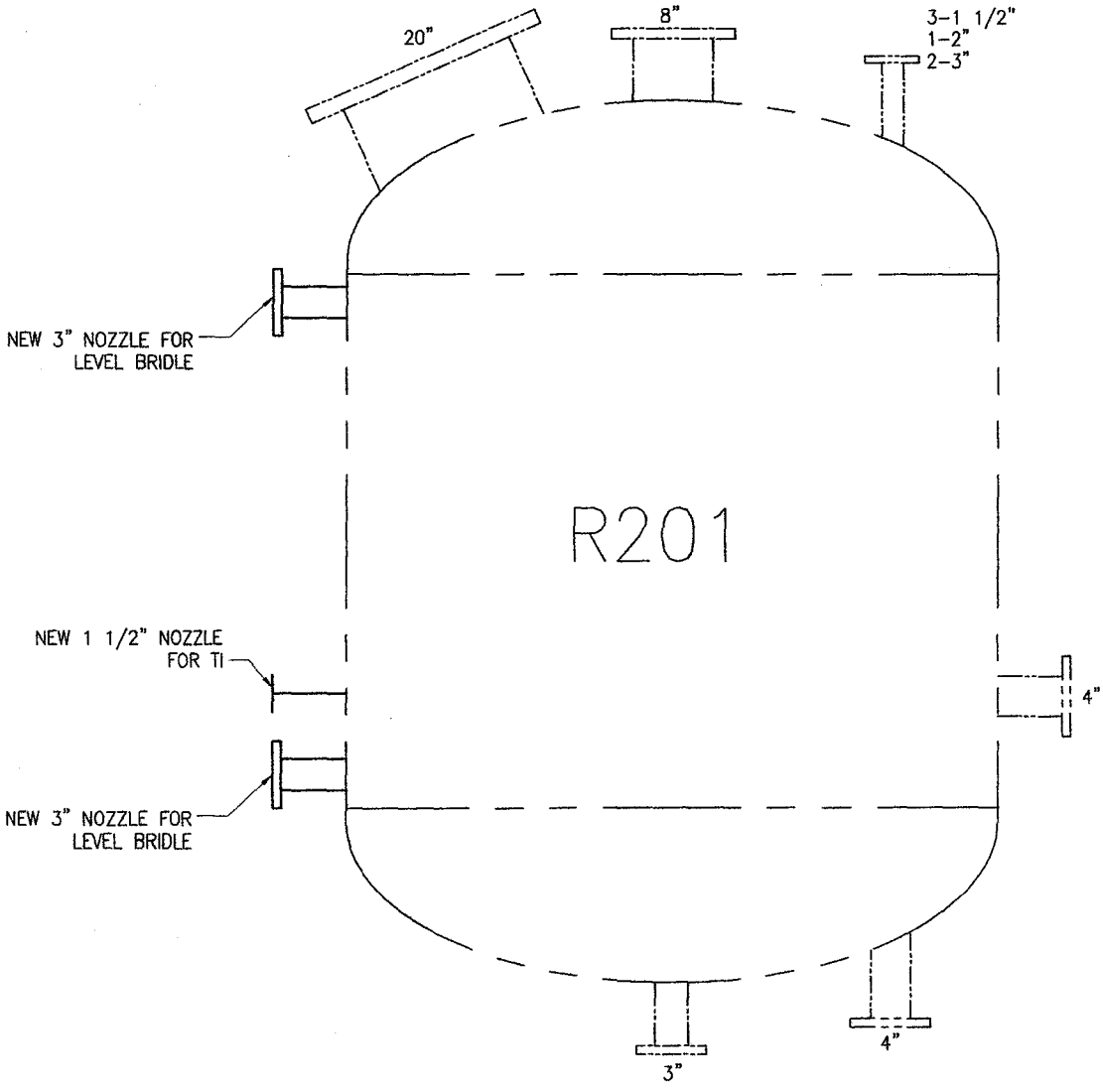
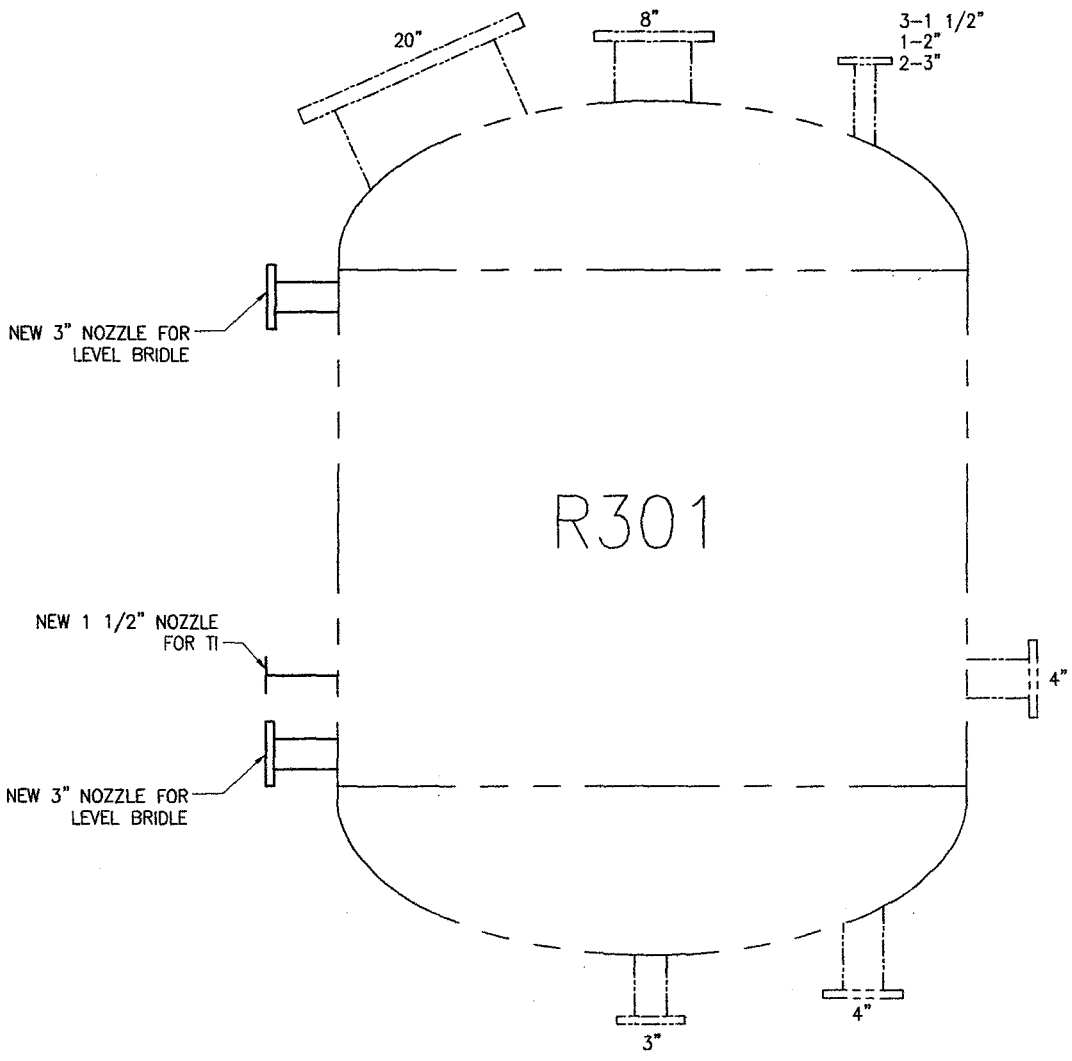
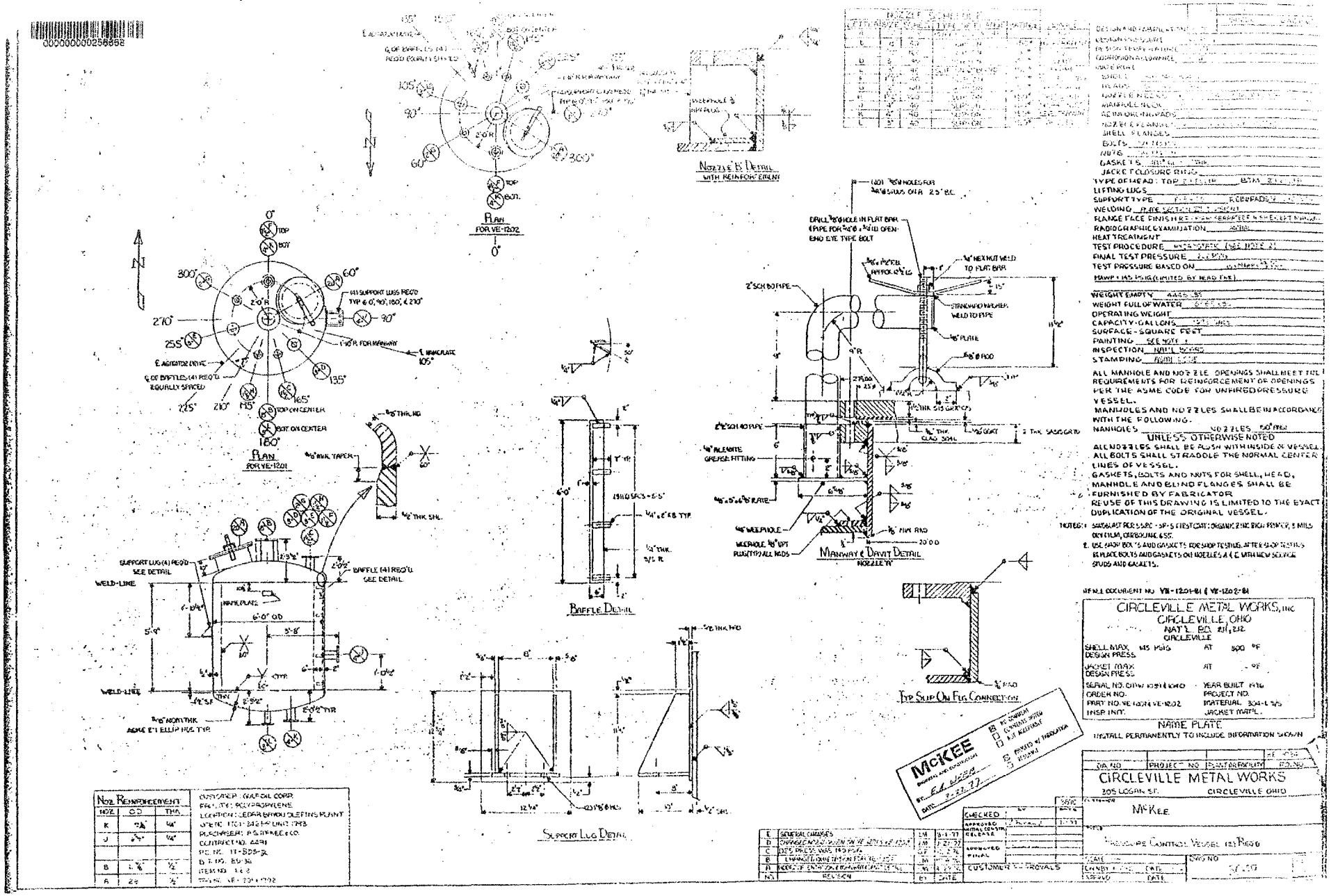

NEW 3" NOZZLE
W/DIP TUBE
20"
8"
3-1 1/2"
1-2"
2-3"
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER & LIGHTS
NEW 1 1/2" LIGHTS
OVERFLOW NOZZLE
R100
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER
4"
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER & LIGHTS
NEW 3" NOZZLE FOR
LEVEL BRIDLE
WATER
4"
3"


20"
8"
3-1 1/2"
1-2"
2-3"
NEW 3" NOZZLE FOR LEVEL BRIDLE
R201
NEW 1 1/2" NOZZLE FOR TI
4"
NEW 3" NOZZLE FOR LEVEL BRIDLE
4"
3"


20"
8"
3–1 1/2"
1–2"
2–3"
NEW 3" NOZZLE FOR LEVEL BRIDLE
R301
NEW 1 1/2" NOZZLE FOR TI
4"
NEW 3" NOZZLE FOR LEVEL BRIDLE
4"
3"



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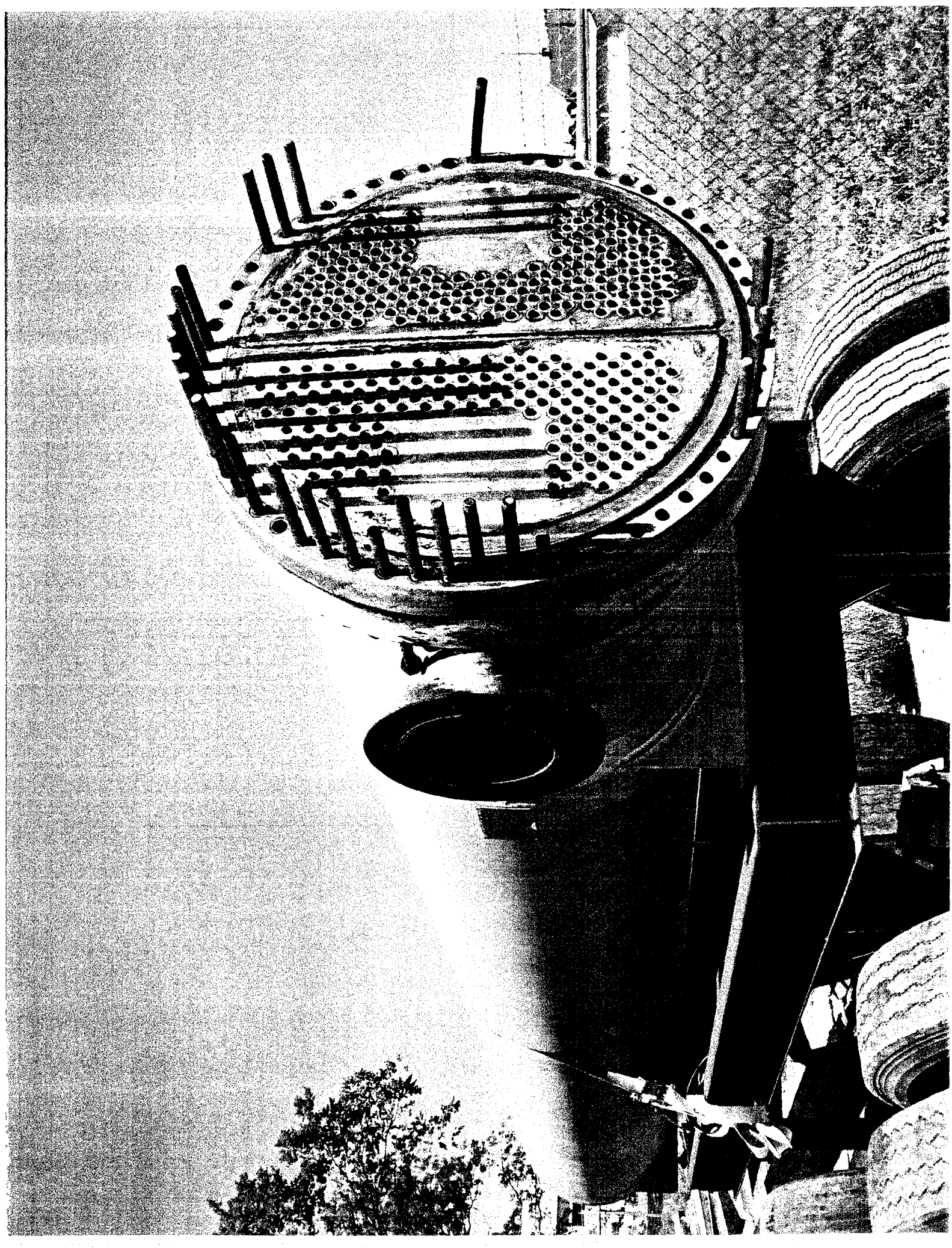

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5

DOYLE & ROTH MANUFACTURING CO. INC.
90 Broad Street 14th Floor
New York, NY 10004

PHONE: (212) 269 7840 FAX: (212) 248 4780
E-MAIL ADDRESS: DOYLEROTH@AOL.COM
WWW.DOYLEROTH.COM

Attn: James Pauley Jr.
LCI Corporation
Tel: (704) 398-7882
Email: JPauley@lcicorp.com

Quotation No: ME-4568
April 23, 2008
Page 1 of 1
Ref: Email

We are pleased to offer the following for your approval:

Description

Equipment No: "Bayonet Heater"

One (1) D&R LL206U2-6H horizontal U-tube bundle with bonnet single pass shell Two (2) pass tubeside 304LSS tubeside construction with 304LSS baffle assembly suitable for a 20" O.D. X 3/8" thick shell containing 120-3/4" O.D. X #16 BWG SA-249 304LSS welded U-tubes 6'-0" straight length 253 sq. ft. surface 1" square pitch, design shell FV & 30 PSI @ 600°F, design tubes FV & 100 PSI @ 350°F tubeside connections Two (2) 3"-150# ANSI flanges complete with ASME stamp and partial U2 TEMA "C" configuration B-U.

Price $21,257.00 NET FOB our plant, Simpson PA

Approximate shipping weight: 1,400 lbs

Drawing: 1-2 weeks after receipt of purchase order
Delivery: 10-12 weeks after receipt of approved drawings

Notes:

1. Outline drawing will be emailed shortly.
2. Bundle is designed suitable for 20"-150 ANSI bolting.
3. Due to extreme volatility of current metal markets, prices must be confirmed at time of order and delivery.
4. Unless otherwise requested hard copies will not be mailed.

Rohit V.Patel/jp
Vice President

This quotation is subject to the terms and conditions
Terms: ½%-10 Days, Net 30

PRICES QUOTED ARE FIRM FOR 30 DAYS and do not include any Municipal, County, State or Federal Sales, Excise or Use Taxes

DOYLE & ROTH MANUFACTURING CO. INC.
90 Broad Street 14th Floor
New York, NY 10004

PHONE: (212) 269 7840 FAX: (212) 248 4780
E-MAIL ADDRESS: DOYLEROTH@AOL.COM
WWW.DOYLEROTH.COM

5. Visit with us on the Internet @ www.DoyleRoth.com

CC: Fred Diestmann

Rohit V.Patel/jp
Vice President

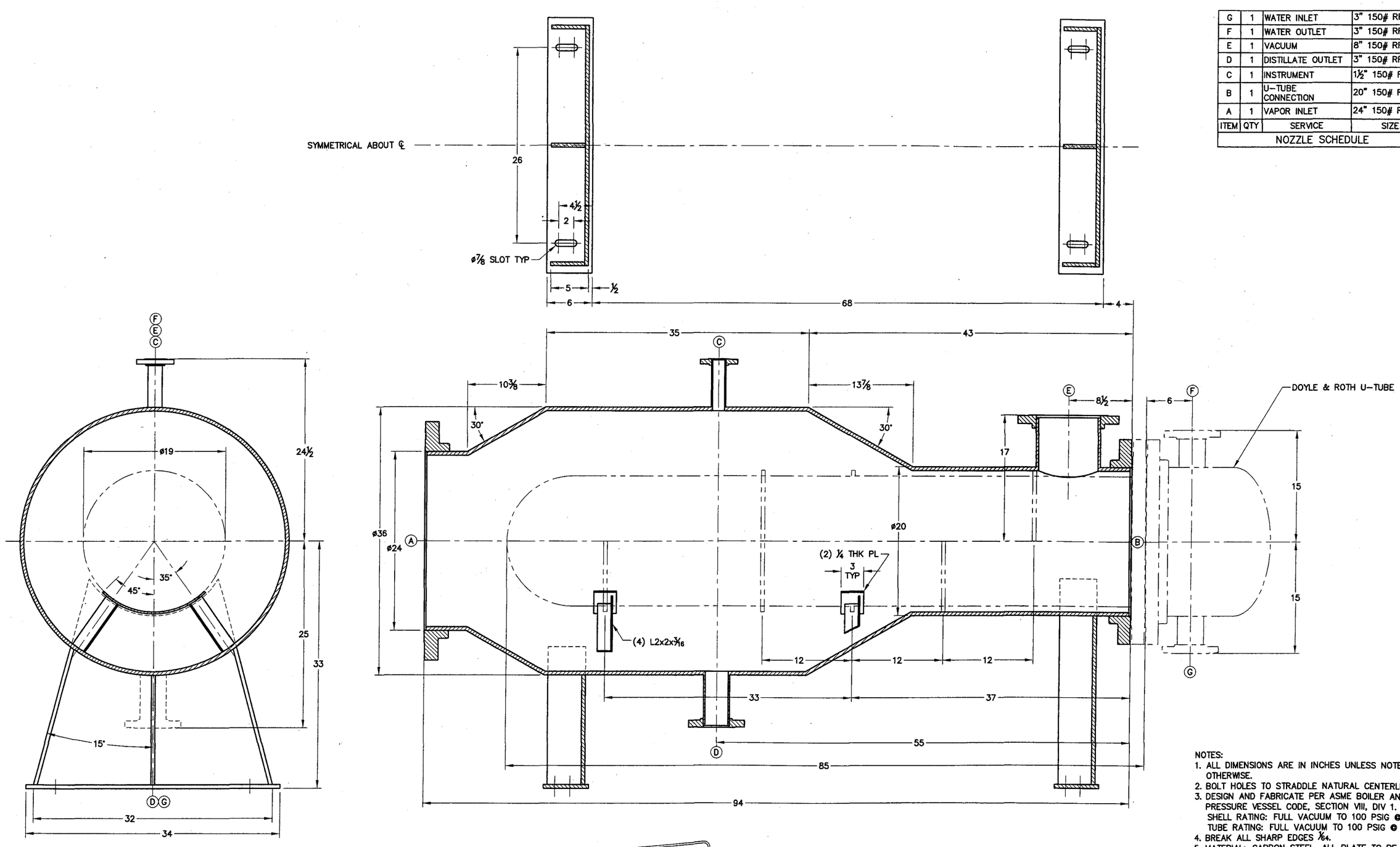
This quotation is subject to the terms and conditions
Terms: ½%-10 Days, Net 30

PRICES QUOTED ARE FIRM FOR 30 DAYS and do not include any Municipal, County, State or Federal Sales, Excise or Use Taxes

6

ITEM	QTY	SERVICE	SIZE
G	1	WATER INLET	3" 150# RFSO
F	1	WATER OUTLET	3" 150# RFSO
E	1	VACUUM	8" 150# RFSO
D	1	DISTILLATE OUTLET	3" 150# RFSO
C	1	INSTRUMENT	1½" 150# RFSO
B	1	U-TUBE CONNECTION	20" 150# RFSO
A	1	VAPOR INLET	24" 150# RFSO

NOZZLE SCHEDULE



NOTES:
1. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
2. BOLT HOLES TO STRADDLE NATURAL CENTERLINES.
3. DESIGN AND FABRICATE PER ASME BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIV 1.
   SHELL RATING: FULL VACUUM TO 100 PSIG @ 600°F
   TUBE RATING: FULL VACUUM TO 100 PSIG @ 350°F
4. BREAK ALL SHARP EDGES 1/64.
5. MATERIAL: CARBON STEEL, ALL PLATE TO BE ½ THICK UNLESS NOTED OTHERWISE, ALL PIPE TO BE SCH 40.

PRELIMINARY
NOT FOR CONSTRUCTION

REV	BY / DATE	CHK / DATE	APPR / DATE	APPR / DATE	DESCRIPTION
0	NFG 6/6/96				PRELIMINARY

TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL .XX ±.02 .XXX ±.005 SURFACE FINISH 125
FRACTION ±1/16 ANGLE ±1/2°
SCALE: 1=6

THIS DRAWING IS THE PROPERTY OF LCI CORP CHARLOTTE NC USA AND IS LOANED FOR CONFIDENTIAL USE ONLY AND SHOULD NOT BE COPIED OR USED FOR ANY PURPOSE DETRIMENTAL TO THE INTEREST OF LCI CORP

TITLE: CONDENSER OIL RECOVERY OUTLINE

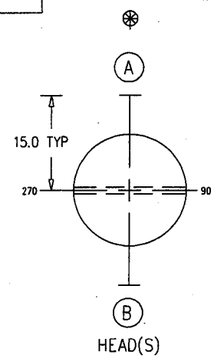
DWG NO: S020036-1D REV 0

EPAHO044000796

THIS DRAWING SHALL NOT BE COPIED, DISPOSED OF, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS FURNISHED, WITHOUT THE WRITTEN PERMISSION OF DOYLE & ROTH MFG CO., INC

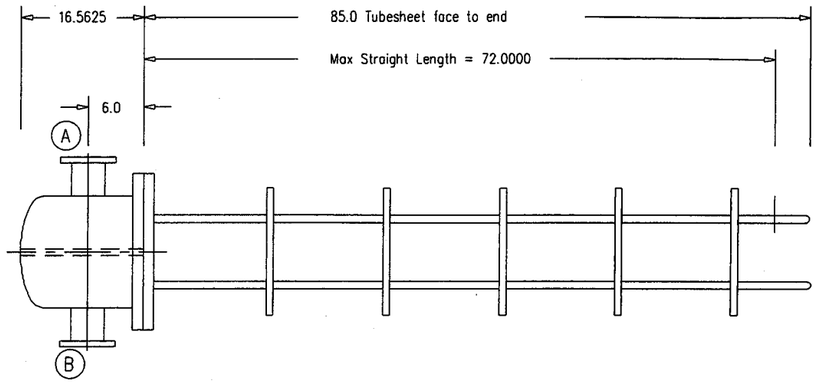
D & R MODEL: LL206U2-6H
304LSS TUBESIDE CONSTRUCTION
WITH 304LSS BAFFLE ASSEMBLY
BUNDLE & BONNET ONLY

DIMENSIONS IN INCHES
NOT DRAWN TO SCALE
BOLT HOLES STRADDLE
NATURAL CENTERLINES



HEAD(S)

FRONT VIEW



FRONT REAR

ALL DIMENSIONS SUBJECT TO CAHNGE UPON FINAL ENGINEERING

	NPS / OD	SCH/THK	
Nozzle A	3		150 # ANSI L.J. Flg SA-105 With SA-312 Tp304L Wld Hi Alloy Steel Pipe W/Stub End
Nozzle B	3		150 # ANSI L.J. Flg SA-105 With SA-312 Tp304L Wld Hi Alloy Steel Pipe W/Stub End
Front Head Cylinder	20.0		SA-240 Gr 304L Hi Ally Steel Plate
Front Head Cover	20.0		SA-240 Gr 304L Hi Ally Steel Plate Ellipsoidal Cover
Front Tubesheet	27.5		20" - 150# ANSI Std SA-240 Gr 304L Hi Ally Steel Plate
Front Head Flange at Ts	27.5		20" - 150# ANSI SA-105 Carbon Steel Forg RING Flange Faced With 304LSS
Front Head Gasket at Ts	23.0		20" - 150# ANSI Std Blue Gard Periph width 1.5 in.
Front Hd Bolting at Ts	1.0		20" - 150# ANSI Std SA-193 B7 Steel Blt 20 Bolts on 25.0 in B.C. W/ SA-194 Cl 2H Nuts
Tubes	0.75	0.065	SA-249 Tp304L Wld Hi Alloy Steel Tube Bare tubes
Baffles	19.0625		SA-36 Steel Plt
Tie Rods	0.375		SA-36 Steel Rod
Spacers	0.625		SA-214 Wld C Steel Tube Bare tubes

DESIGN CONDITIONS	SHELL SIDE	TUBE SIDE
DESIGN PRESSURE (psig)	FULL VAC/30	FULL VAC/100
TEST PRESSURE (psig)	None	130
DESIGN TEMPERATURE / MIN (F)	600 / -20	350 / -20
NUMBER OF PASSES	1	2
CORROS ALLOW, Except Tubes (in)	0.0625	0.0
RADIOGRAPHY	None	None

TEMA TYPE	B-U	SIZE	19-72	SURFACE AREA	253 ft2
TUBE TYPE	Bare	NO.OF HOLES	240	NOM BDL LG	72 in
LAYOUT	1.0 in Sq	TUBE-TUBESHT JT	Expanded W/ 2 Grooves		
BAFFLE TYPE	Single Segmental	CUT	25 % H		
BAFFLE SPACING (in)	12.0				
IMPINGEMENT PLATE	None				
CODE: ASME SECT VIII,DIV 1,	2007	TEMA CLASS	C		
WEIGHT: EMPTY	1843	FLOODED	2557	BUNDLE	613 lb
DATE: 05-07-08	DRAWN: HS	CHKD:		APPD:	

DOYLE & ROTH MFG CO., INC
90 BROAD STREET 14 FLOOR, NEW YORK, NY 10004

NOTES: ASME STAMP,NATIONAL BOARD INSPECTION & REGISTRATION ARE REQUIRED.
PAINT CARBON STEEL ONLY, ONE SHOP COAT RED PRIMER
IMPACT TEST NOT REQD PER SECT VIII, DIV I, PARA UG 20(F) & UHA 51

NO	DATE	BY	REVISIONS

CUSTOMER : LCI CORPORATION
P.O. NO. : LATER QTY : ONE (1)
EQUIP NO.: BAYONET HEATER

JOB NO ME456R DWG NO R LATER REV

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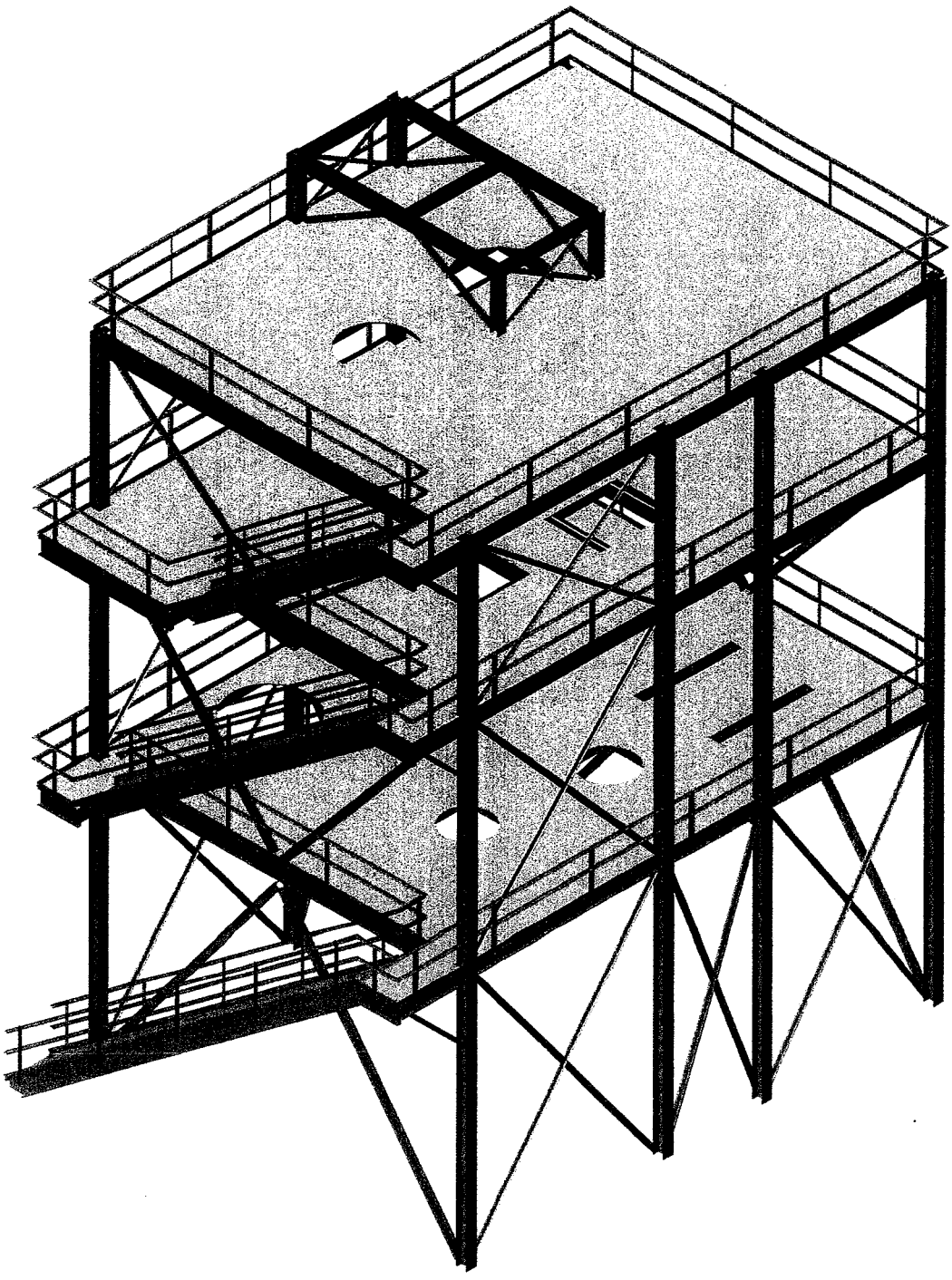

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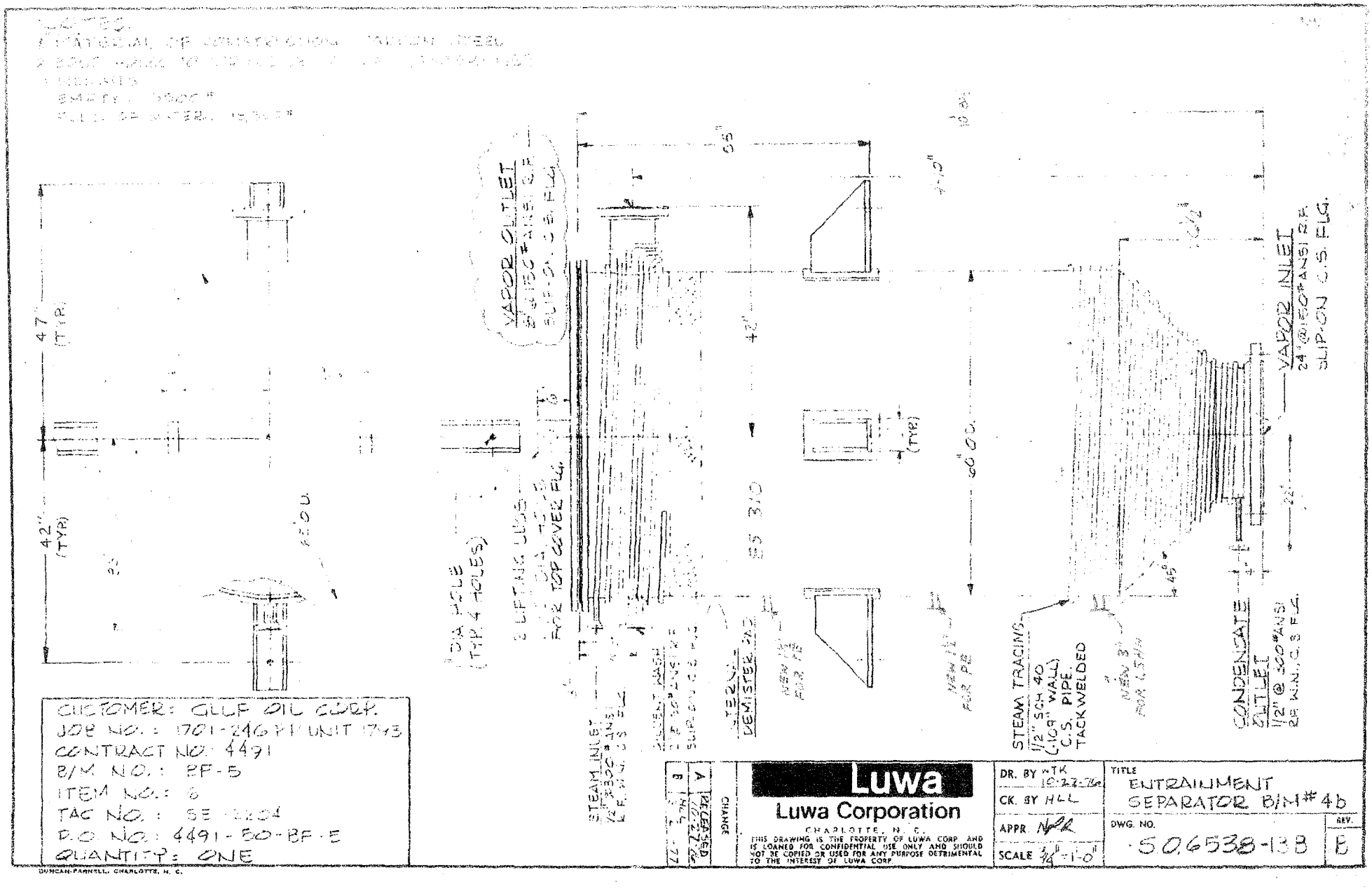

CUSTOMER: GULF OIL CORP.
JOB NO.: 1701-246 PP UNIT 1743
CONTRACT NO.: 4491
B/M NO.: BF-5
ITEM NO.: 6
TAC NO.: SE-2204
P.O. NO.: 4491-50-BF-5
QUANTITY: ONE

CHANGE	
A	RECEIVED 10-27-76
B	HLL 3-2-77

Luwa
Luwa Corporation
CHARLOTTE, N. C.

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DR. BY WTK 10-27-76
CK. BY HLL
APPR. NPR
SCALE 3/4" = 1'-0"

TITLE ENTRAINMENT SEPARATOR B/M # 4b
DWG. NO. S06538-13B
REV. B

DUNCAN-PARNELL, CHARLOTTE, N. C.

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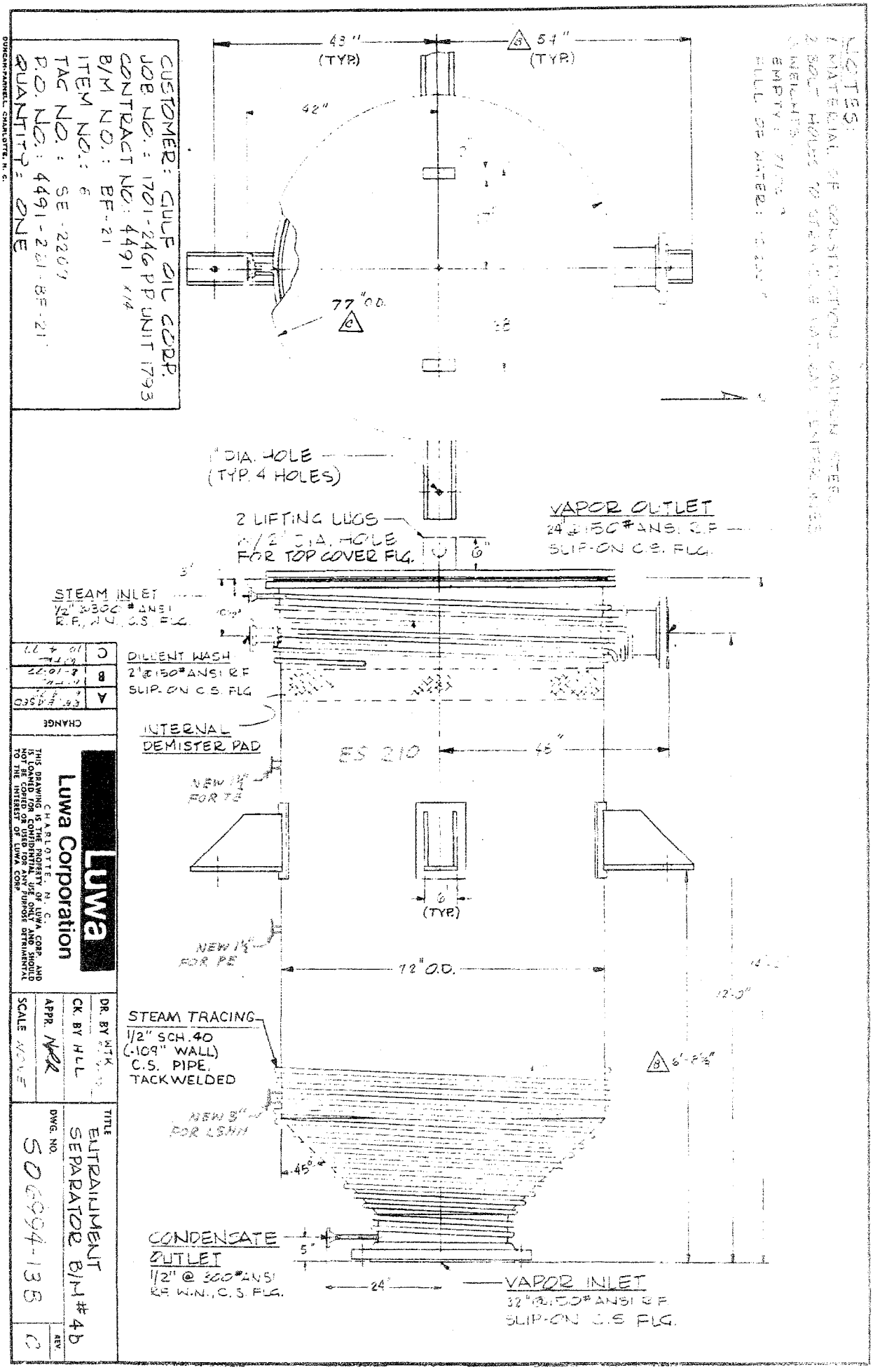

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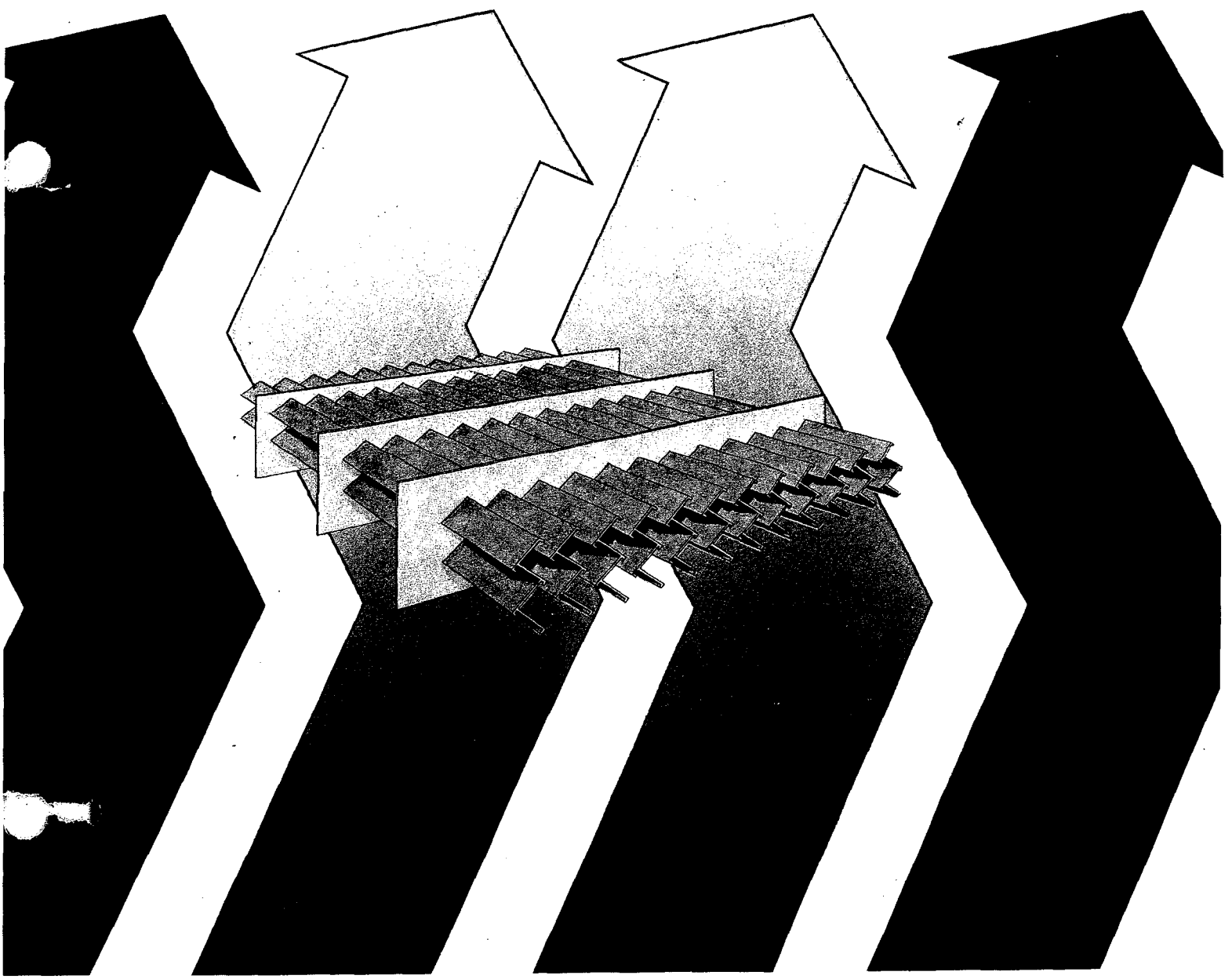
KOCH
ENGINEERING COMPANY INC

FLEXICHEVRON MIST ELIMINATOR

BULLETIN KFV-2

"The Mist Eliminator for Fouling Service"

Proven Effective Where Others Have Failed



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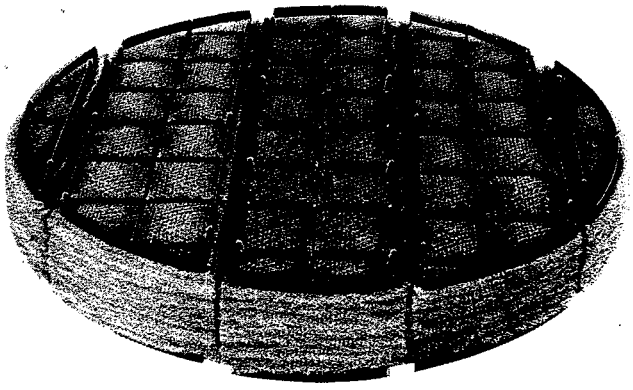
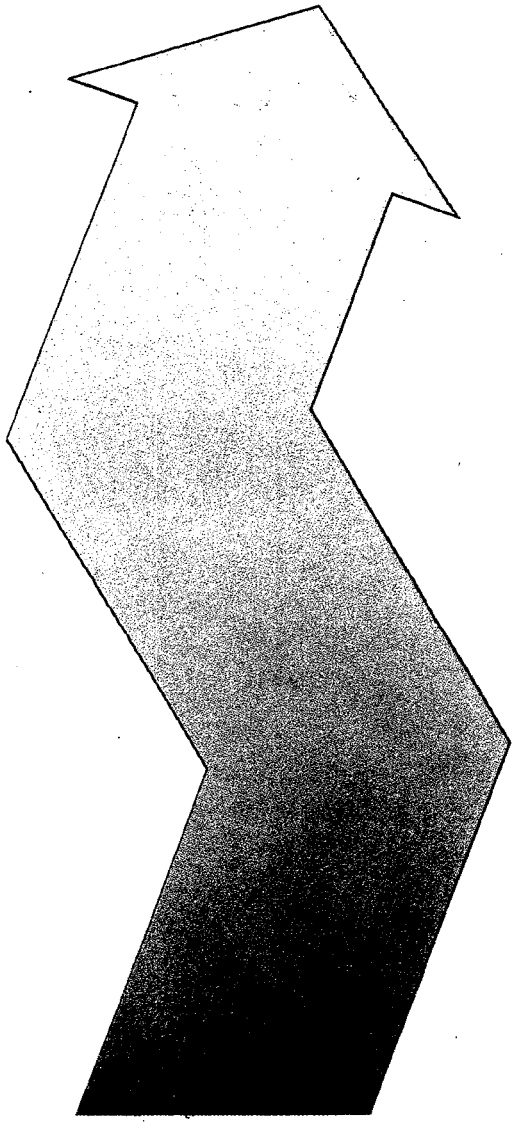


SECTIONAL
FLEXIMESH ASSEMBLY WITH GRIDS

FOR APPLICATIONS WHERE FOULING IS NOT A FACTOR KOCH CAN SUPPLY A COMPLETE LINE OF KNITTED MESH TYPE MIST ELIMINATORS IN METALS AND PLASTICS. SEE BULLETIN FM-3



The FlexiChevron Mist Eliminator

Koch Engineering's FlexiChevron Mist Eliminators employ unique design which provide low cost droplet removal from gasses with little or no maintenance requirement. **The FlexiChevron Unit is ideally suited to replacement of mesh type mist eliminators where fouling has proven to be a problem.**

What is a FlexiChevron Mist Eliminator?

A FlexiChevron Mist Eliminator is a set of zig-zag baffles which are used to separate liquid droplets from flowing gases. The gases processed in this manner are suitable for atmospheric discharge or further processing.

Where are FlexiChevron Mist Eliminators Used?

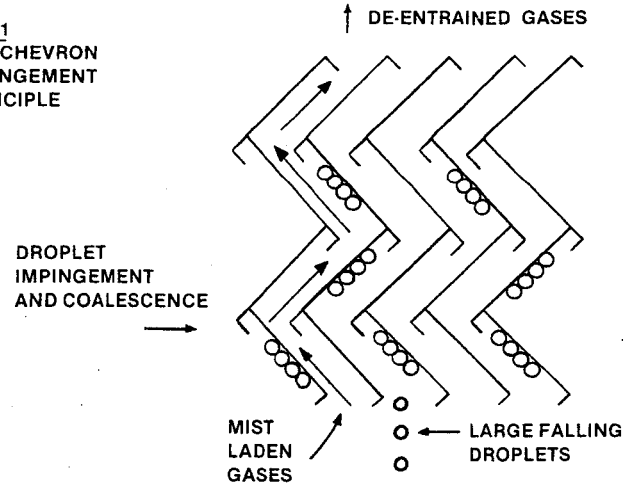
This type of mist eliminator should be used any time high droplet/gas separation is required where plugging of traditional mist eliminators is a risk. These applications include:

- All types of air pollution control scrubbing services.
- Services where droplets will be sticky or viscous and will blind classic wire mesh mist eliminators. This would especially be true in many petro/petrochemical applications.
- Situations where wide flow rate ranges are possible and cyclonic type mist eliminators will not be suitable.

How does a FlexiChevron Mist Eliminator Work?

Gases with entrained liquid droplets flow between the zig-zag baffles. The gas can easily make the turns while the droplets impinge upon the walls of the baffles and coalesce to a size such that they drop downward, being too heavy to be carried in the gas.

FIG. 1
THE CHEVRON IMPINGEMENT PRINCIPLE



Koch designs spacing between baffles, turning angle, and passes to satisfy specific removal requirements. FlexiChevron designs are available for vertically or horizontally flowing gases.

Copyright 1980

How do you rate a FlexiChevron?

Sizing a chevron type mist eliminator involves a complicated relationship between gas velocity, gas density, liquid loading rate, droplet partical size, and liquid density.

Extensive pilot plant studies on all the various chevron styles, over a wide variety of conditions, permit Koch Engineers to select the correct style and size for your application.

Why use FlexiChevrons?

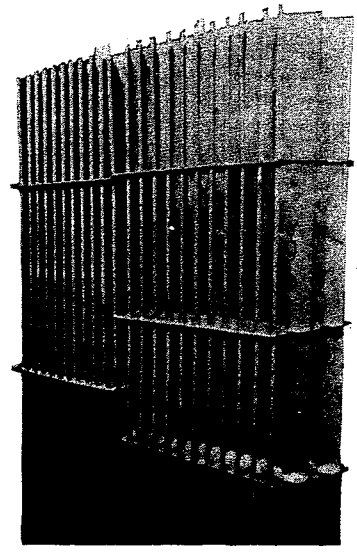
1. Non Plugging Design:

Koch has used the FlexiChevron design in applications where droplets collected are sticky or contain suspended solids. Intermittent underspraying to remove clinging particles is usually all that is required to keep the design clean. Traditional wire mesh style mist eliminators collect solids at their lower boundries. Spraying this mesh design from below only forces the solids further into the mesh.

2. Various Geometrics and Modular Design Are Available to Meet Special Customer Needs.

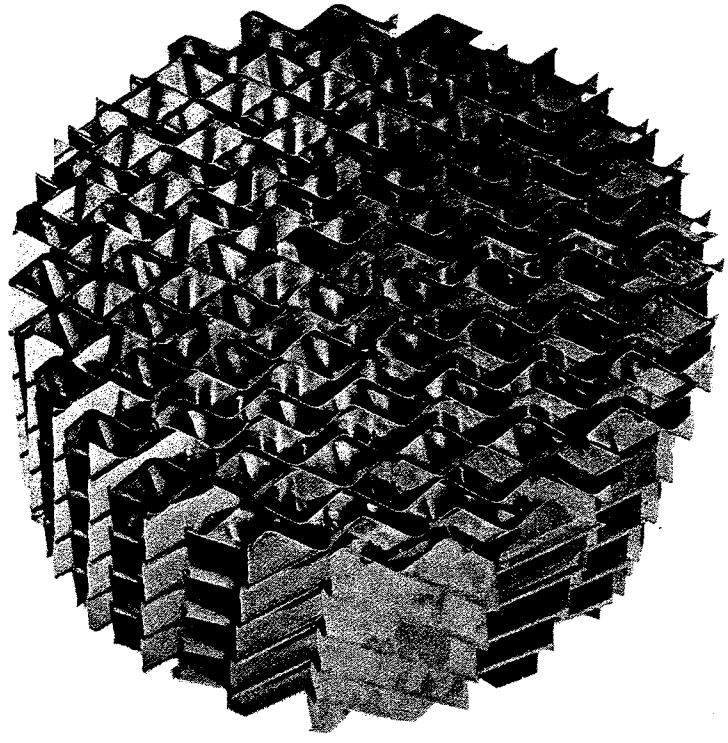
3. Units Can Be Built in Many Material Options.

A wide range of metal and plastic units are available to meet specific applications where temperature or corrosion might be a problem.

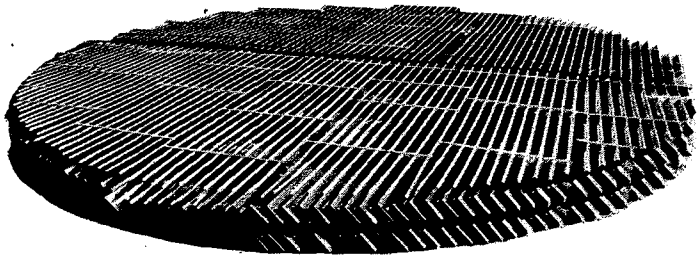


STYLE 1 FLEXICHEVRON IN A HORIZONTAL FLOW APPLICATION.

FLEXICHEVRON STYLE 2



FLEXICHEVRON STYLE 1



FLEXICHEVRONS ARE AVAILABLE IN A WIDE VARIETY OF MATERIALS BOTH METAL AND PLASTIC

EPAHO044000805

4. Efficiency is Maintained at Wide Gas Flow Variations:

Because it employs the impingement principle, the FlexiChevron can be used efficiently over wide gas velocity regions—without significant loss of droplet removal efficiency. Cyclonic style mist eliminators (classically used as dust scrubbers) cannot operate efficiently over as wide a range of gas flows. Please refer to Figure 3 for suitable operating range criteria.

FIGURE 3A
FLEXICHEVRON MIST ELIMINATOR TYPICAL DROPLET REMOVAL EFFICIENCIES VERTICAL FLOW

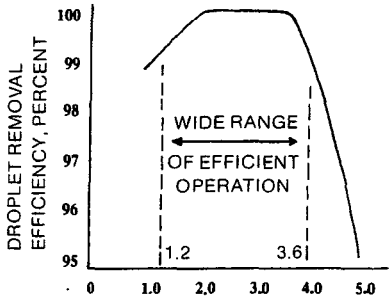
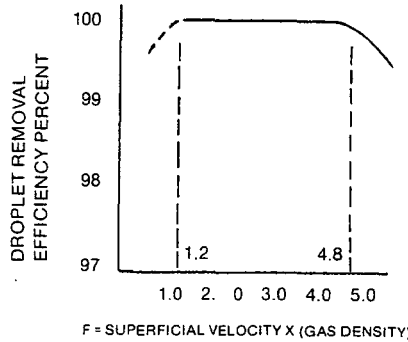


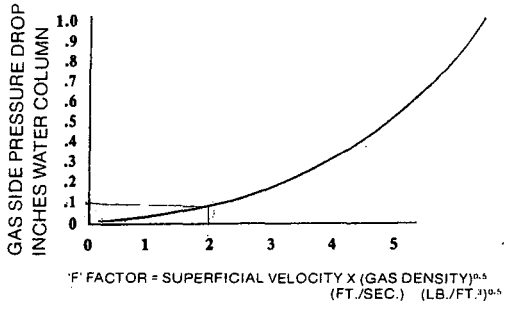
FIGURE 3B
FLEXICHEVRON MIST ELIMINATOR TYPICAL DROPLET REMOVAL EFFICIENCIES HORIZONTAL FLOW



5. Low Pressure Drop:

Pressure drop through the Koch FlexiChevron is rarely an important consideration. Test data developed on pressure drops are presented in Figure 4.

FIGURE 4
TYPICAL PRESSURE DROP THROUGH FLEXICHEVRON

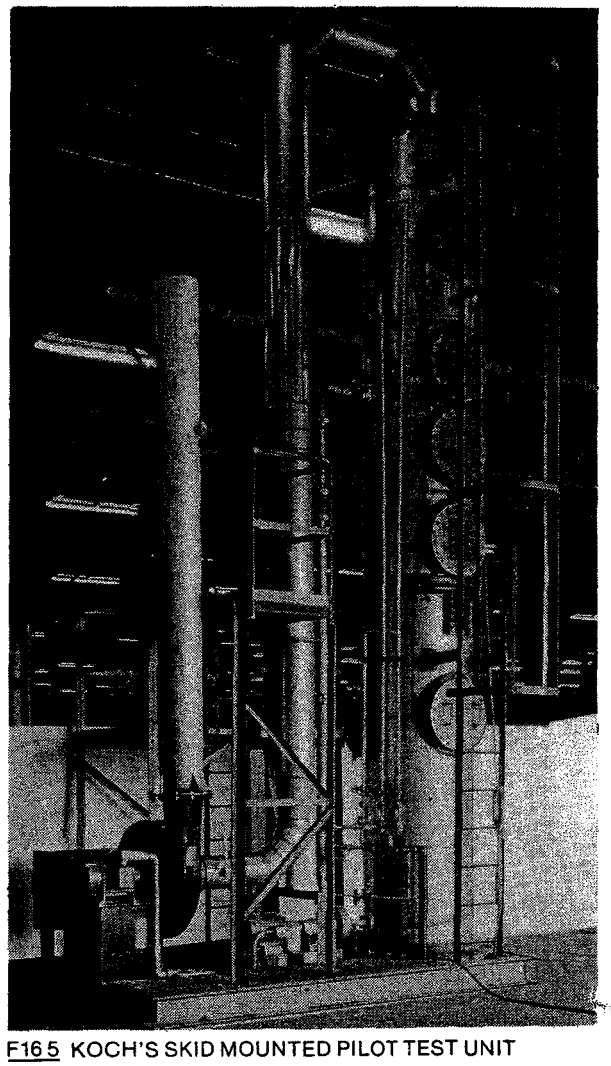


6. Compatability with other Mist Eliminators:

Because its best operating velocity is similar to mesh type designs, the chevron can replace mesh mist eliminators in equal size towers with little or no retrofitting required. Also, when extremely high droplet loading exists, the FlexiChevron can be used as a first step mist eliminator, followed by a mesh or other mist eliminator. The mesh can even be supported on top of the chevron blades.

Pilot Plant Available

Due to the difficulty of many mist removal services, Koch has a fully equipped skid mounted pilot plant available to be used either directly on the vent gases at the plant site or in a laboratory test.



F16 5 KOCH'S SKID MOUNTED PILOT TEST UNIT

Sample Ratings:

1. Existing Crude Distillation Column, Mesh Mist Eliminator is Plugging and Blinding:
   Gas Overhead Flow-58,700 Lbs./Hr.
   Pressure - 125 PSIG
   Temperature 275°F
   Molecular Weight of Gas - 44
   Existing Tower Diameter - 3 Feet (Area = 7.065 Ft.^{2})
   Calculation:
   Actual Gas Flow, Cubic feet per hour =

$$\left(\frac{58700}{44}\right)(379)\left(\frac{735}{520}\right)\left(\frac{14.7}{139.7}\right)$$

   $= 75202\ \text{Ft.}^3/\text{Hr.}$
   Gas Density = 58700/75202 = 0.781 Lbs./Ft.^{3}
   Gas Superficial Velocity = 75202/(3600)(7.065) = 2.96 Ft./Sec.
   'F' Factor = $2.96\sqrt{.781} = 2.61$
   - Therefore the Tower Diameter is acceptable (From Figure 3).
   - Efficient Turndown = 1.2/2.61 = 46 percent
   - Pressure Drop (Figure 4) = .18 IN. W.G.

2. Steam Exiting an Evaporator must be De-Entrained. Mesh Style Eliminators have Plugged previously in this service. Unit must operate at Half Design Rate.
   Design Steam Flow - 2,875 Lbs./Hr.
   Pressure - 1 PSIA
   From Steam Tables:
   Steam Density = 1/333.6 = .03 Lbs./Ft.^{3}
   'F' Factor =

$$\frac{2875}{3600 \times \text{Area} \times .003}\sqrt{.003} = \frac{14.58}{\text{Area}}$$

   Any 'F' factor at 2.4 or higher will permit a 2 to 1 turndown. For economy, Make 'F' 3.0.
   Area = $\frac{14.58}{3} = 4.86\ \text{Ft.}^2$
   Diameter = 2'6"
   Pressure Drop = .2 IN. W.G.

3. An existing High Energy (60 In. W.C.) Venturi is followed by Cyclone Mist Eliminator. Unfortunately, Cyclonic motion breaks down at 50 percent of Design Flow.
   Solution:
   a. Install Anti-Spin Vane in Tower to Break Cyclonic Motion
   b. Install Koch Closed Space FlexiChevron Design for Droplet Mist Elimination Over 3:1 Turndown.

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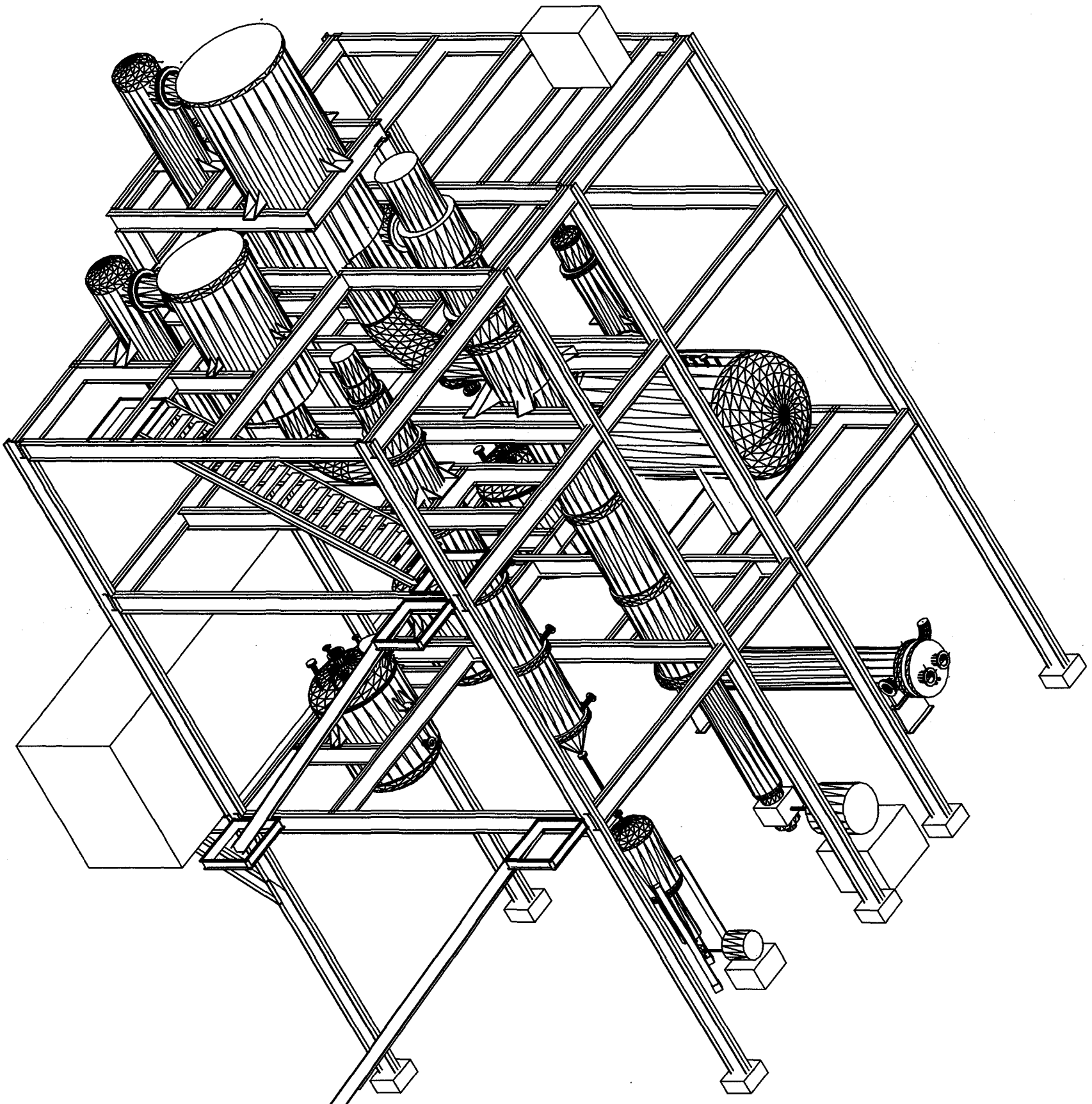

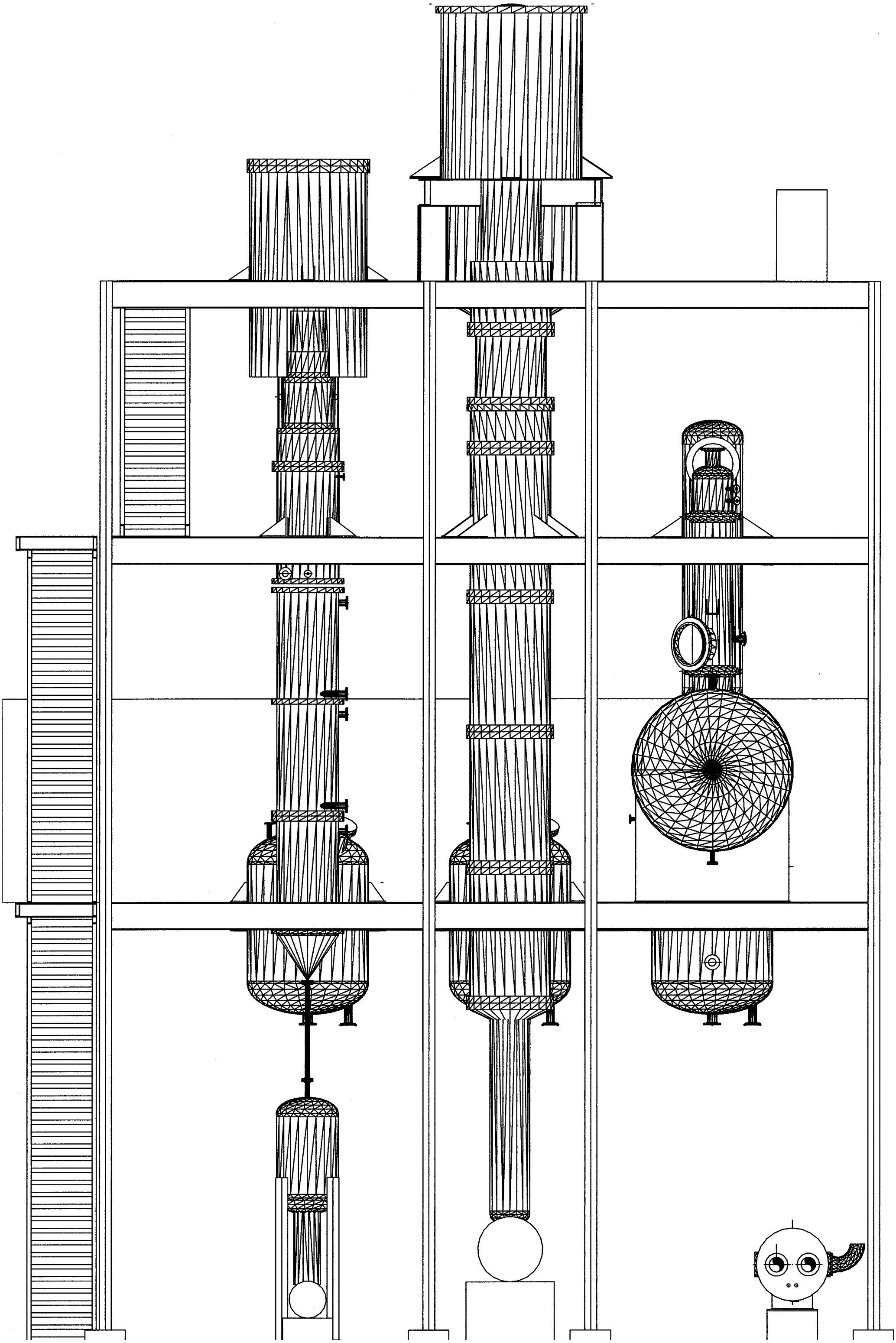

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Motor Oil Facility

EPAHO0440000814

CES Project Engineering and Tracking Form

Timeline

Note: CES Project Financial Viability Evaluation Form Must be completed and approved prior to listing on this Agenda

Main Project Name:	Motor Oil Plant	Project Priority Level:	
Sub-Project Name (if appl.)	Main Project Overview	Black Book Coding:	
Main Mgr. / Sub. Mgr.	CH		
Complete Description of Project and/or Subproject:	complete summarization of project outlined in sub-project sequence		

Action Item Description	Resp.	Seq. #	Deadline	Status Update	Budget $	Spent or committed$	Funding
Boiler 300hp (gas fired)	BW	6.21	2/30/2008	boiler in place, beginning to pipe up, waiting on burner	85,000	36,000	
concrete containment and oil storage area	mb	4	complete	complete	150,000	140,000	
new shop and maintenance building/office refurb and regrading/stabilization of site	bw/kg	7	3/31/2008	Still need to finish grading and stabilizing the site	325,000	307,000	
Pay off and repair Filter Vac clay system	ch	6.26	7/5/2008	coordinating meeting with contractor to troubleshoot	90,000	-	
Tanks (8)	bw/ch/ss	1	10/15/2007	complete	115,000	118,000	
Scrubber System and piping	bw/ch/ss	6.19	1/8/2007	complete	204,000	204,000	
Structural & Assembly in tank farm(piping & catwalks)	bw/ch/ss	3.3	2/29/2008	prints and contracts for piping complete accepting bids/ catwalks 80% complete	90,000	50,000	
Structural & Assembly in Process area(assembly and purchase)	bw/ch/ss	3.1	6/15/2008	prints complete and out for several bids(budget to include 80,000 for install	331,000	11,000	
PESCO Engineering for PID and TGCE for structural design drawings and piping	ch	6.2	3/25/2008	80 percent of structure done, PID preliminary, no piping done	150,000	68,000	
Utilities(power for site and operational areas	bw/ch/ss	7.8	5/3/2008	bid awarded, load analysis in to city for approval /estimate includes gas	120,000	16,500	
Forced circulation evaporator, fraction columns and related equipment(TOG) - Flash Tank column:	bw/ch/ss	6.01	6/6/2008	Nothing has been done	20,000	-	
One 129 sq/ft Luwa (300 N-40%) thin film evaporators with all related equipment (TOG): One 200sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment...this includes installation	bw/ch/ss	6.02	7/12/2008	These should be delivered in February..Installation cannot be done until after delivery of the structure	430,000	386,000	
Positive displacement gear pumps and centrifugal pumps with flameproof motors and high temp packing (process area)	bw/ch/ss	6.03	6/6/2008	Nothing has been done	40,000	-	
Liquid ring vacuum system, Vacuum skid, controls, tank cooler, positive displacement vacuum booster	bw/ch/ss	6.06	5/1/2008	Waiting on quote from Pesco	50,000	-	
Level, flow, pressure and temperature monitors controllers and alarms (including installation)	bw/ch/ss	6.08	7/6/2008	Nothing has been done	65,000	-	
PLC inclusive of the computer & software	bw/ch/ss	6.1	7/6/2008	Nothing has been done	37,000	-	
Valves and control valves with high temp packing and seals	bw/ss	6.11	7/6/2008	Nothing has been done	50,000	-	
Insulation of the system with high temperature insulation:	bw/ss	6.14	7/15/2008	Nothing has been done	150,000	-	
Thermic Fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump (includes oxidizer)	bw/ss	6.15	7/6/2008	Hot oil system has been repaired, oxidizer still needs repair, much more work needs to be done	140,000	33,000	
Evaporative cooling tower with 500T capacity as cooling water with its circulation pump with full installation	bw/ss	6.16	5/15/2008	Nothing has been done	45,000	-	
air compresssor and instrument air dryer with 20 cfm capacity at 7 atm pressure	bw/ss	6.17	6/8/2008	Nothing has been done	10,000	-	
Piping process system(interconnecting piping between areas)	bw/ch/ss	6.07	7/6/2008	Nothing has been done	150,000	14,500	
Process electrical equipment (motor and process controls including distribution)	bw/ch/ss	6.24	7/6/2008	We are trying set appt. with Pesco to visit and work on the design	200,000	5,000	
Pumps(oil tank farm)	bw/ch/ss	9.24	5/1/2008	Nothing has been done	20,000	-	
Spare Parts	ch	6.18	6/30/2008	Nothing has been done	35,000	-	
Regulatory Consulting (PBR) and structural	ch	9.3	2/29/2008	Working on structural permitting with COH using LDR Services, nothing done yet on PBR for oil project	5,000	-	
repair/paint/make-ready existing onsite equipment	ch	9.4	3/30/2008	Nothing has been done	50,000	-	
				Current Totals	3,157,000.0	1,336,500.0	

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**

	Item Assigned To:	Jan & Feb $27^{th}-2^{nd}$	February $3^{rd}-9^{th}$	February $10^{th}-16^{th}$	February $17^{th}-23^{rd}$	Feb &March $24^{th}-1st$	March $2^{nd}-8^{th}$	March $9^{th}-15^{th}$	March $16^{th}-22^{nd}$	March $23^{rd}-29^{th}$	Mar & Apr $30^{th}-5^{th}$	April $6^{th}-12^{th}$	April $13^{th}-19^{th}$
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: Field Construction Office Repair of Shop Building Repair of Field Office	BW KG												
4.A. Site Stabilization of Area Parking and Roadway: Around New Shop and Construction Office	BW KG												
4.B. Repair of Filter Vac Clay Unit: $50,000 and Final Payment: $40,000	CH					Define Repairs	--	--	Start Repairs	--	--	--	--
5. New Shop Fences:	BW & SS												
6. Tanks (8): $115,000	BW, CH, SS												
7. Scrubber System and Piping: $70,000	BW CH, SS												
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW CH, SS	In Construction	--	--	--	--	--	--	--	--	--	--	--
8.B. Structural and Assembly in Process Area: $40,000 (Assembly) and $240,000 (Purchase)	BW CH, SS	Place Order	1	2	3	4	5	6	7	8	9	10	11
9. PESCO Engineering:	CH	In Progress	--	--	--	--	--	--	--	--	--	--	--
10. Engineering /Structural Design Drawings:	CH	In Progress	3D Version	--	--	--	--	--	--	--	--	--	--
11. Utilities (Power for site and operational areas):	BW, CH, SS	--	--	--	--	--	--	--	--	--	--	--	--

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400816

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**

	Item Assigned To:	Jan & Feb $27^{th}-2^{nd}$	February $3^{rd}-9^{th}$	February $10^{th}-16^{th}$	February $17^{th}-23^{rd}$	Feb &March $24^{th}-1st$	March $2^{nd}-8^{th}$	March $9^{th}-15^{th}$	March $16^{th}-22^{nd}$	March $23^{rd}-29^{th}$	Mar & Apr $30^{th}-5^{th}$	April $6^{th}-12^{th}$	April $13^{th}-19^{th}$
12. OPS Process Equipment (A-Q below): Combined Total	CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG): $20,000	BW CH SS		Define Tower	--	--	Define Tower	Fab Tower By CES	1	2	3	4	5	6
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $235,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $195,000	BW CH SS	--	--	--	--	--	Ship 2 Units To CES						
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing:	BW CH SS		Define Pumps	--	--	--	Define Pumps	Obtain Quotes	Obtain Quotes	Obtain Quotes	Place Order	--	--
12.D. Liquid ring vacuum system.	BW, CH, SS	See 12F											
12.E. Vacuum skid, controls, tank cooler.	BW, SS	See12F											
12.F. Positive displacement vacuum booster (2). (D.E.F. Totals)	CH PESCO	Out for Bid		Out for Bid		Place Order	1	2	3	4	5	6	7
12.G. Pipe and fittings (covered by #13).	BW, CH, SS												
12.H. Level, flow, pressure and temperature monitors controllers and alarms: $65,000	BW CH SS				Define System	--	--	Order Systems	Order Systems	Order Systems	--	--	--
12.I. Motor control panel(s) (covered by #14).	BW CH, SS												
12.J. PLC inclusive of the computer: $25,000 / $12,000 (software)	BW, CH,SS			Place Order	--	--	--	--	--	--	--	--	--
12.K. Valves and control valves with High temperature packing and Seals: $50,000	BW SS			Define Systems	--	--	--	--	Order Systems	Order Systems	Order Systems	--	--
12. L. All flameproof electrical components (see #14).	BW CH, SS												
12.M. Metal skids, finish painted (covered by #8).	BW SS												

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400817

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**

	Item Assigned To:	Jan & Feb $27^{th}-2^{nd}$	February $3^{rd}-9^{th}$	February $10^{th}-16^{th}$	February $17^{th}-23^{rd}$	Feb &March $24^{th}-1st$	March $2^{nd}-8^{th}$	March $9^{th}-15^{th}$	March $16^{th}-22^{nd}$	March $23^{rd}-29^{th}$	Mar & Apr $30^{th}-5^{th}$	April $6^{th}-12^{th}$	April $13^{th}-19^{th}$
12.N. Insulation of the system with high temperature insulation:	BW SS												
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump:	BW SS	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
12.P. Evaporative cooling tower with 500T capacity as cooling water with its circulation pump: $30,000	BW SS	– –	– –	Define Systems	Find System	Find System	Place Order	– –	– –	– –	– –	– –	– –
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS					Order System	– –	– –	– –	– –	– –	– –	– –
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS	– –	Start In Tank Farm	– –	– –	– –	Define In Process Area	– –	– –	– –	Out For Bid PA	– –	– –
14. Process Electrical Equipment: $200,000 (motor and process controls including distribution)	BW CH SS	Define Equipment	Define Equipment	Define Equipment	Define Equipment	1	2	3	4	5	6	7	8
15. Pumps (Oil Tank Farm) $20,000	BW & SS												
16. Spare Parts: $35,000	CG												

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400081 8

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**												
	Item Assigned To:	**April 20th – 26th**	**April – May 27th- 3rd**	**May 4th – 10th**	**May 11th – 17th**	**May 18th – 24th**	**May 25th – 31st**	**June 1st – 7th**	**June 8th – 14th**	**June 15th – 21st**	**June 22nd – 28th**	**June – July 29th – 5th**	**July 6th – 12th**
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: Field Construction Office Repair of Shop Building Repair of Field Office	BW KG												
4. A. Site Stabilization of Area Parking and Roadway around New Shop and Construction Office:	BW KG												
4. B. Repair of Filter Vac Clay Unit: $50,000 Final Payment $40,000	CH			Pipe To PA	– –	– –	– –	Finish	Repair Debug	– –	– –	Start Operation	
5. New Shop Fences:	BW & SS												
6. Tanks (8): $115,000	BW & CH	8 New Tanks	Completed										
7. Scrubber System and Piping: $70,000	BW, CH SS												
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW, CH SS												
8.B. Structural and Assembly in Process Area: $240,000 / $40,000	BW, CH SS	12	13	14	Material Delivered	Set –up Structure	Set-up Structure	Set – up Structure	Set – up Structure	– –	– –	– –	End
9. PESCO Engineering:	CH	START	– –	– –	– –	– –	– –	– –	– –	– –	Start up	Support	Startup Support
10. Engineering /Structural Design Drawings:	CH												
11. Utilities (Power for site and operational areas):	BW SS & CH	– –	Finish										

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400819

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**												
	Item Assigned To:	**April 20th – 26th**	**April – May 27th - 3rd**	**May 4th – 10th**	**May 11th – 17th**	**May 18th – 24th**	**May 25th – 31st**	**June 1st – 7th**	**June 8th – 14th**	**June 15th – 21st**	**June 22nd – 28th**	**June – July 29th – 5th**	**July 6th – 12th**
12. OPS Process Equipment (A-Q below) Combined Total:	CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG). $20,000	BW CH SS	Assy Tower w/ Tank	Pressure Test System	– –	– –	Repair Modify Tower	– –	Place In Structure	Finish Piping	Start up Test	Repair Any Problems	Repair Any Problems	Test Units with Liquids
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $235,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $195,000	BW CH SS	– –	– –	– –	– –	– –	– –	Place LUWA's In Structure	– –	Finish Piping and Electrical Both Units	– –	– –	Start Up Test
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing:	BW CH SS					Deliver Pumps	– –	Install	– –	– –	Test Pumps	Fix Problems	Start Up
12.D. Liquid ring vacuum system.	BW, CH, SS												
12.E. Vacuum skid, controls, tank cooler.	BW, SS									– –	– –	– –	– –
12.F. Positive displacement vacuum booster (2): (Total for D.E.F.)	CH	8	9	10	11	12	13	14	System Delivered	Debug Install Syst	Retest Install Syst	Test	Start up Operation
12.G. Pipe and fittings (covered by #13).	BW, CH, SS												
12.H. Level, flow, pressure and temperature monitors, controllers and alarms: $65,000	BW CH SS	– –	– –	– –	– –	– –	– –	– –	Install Sustem	– –	– –	– –	Start Up
12.I. Motor control panel(s) (covered by #14).	BW, CH SS												
12.J. PLC inclusive of the computer: $25,000/ $12,000 (software)	BW, CH, SS	– –	System Delivery	Install	Install	Install	Install	Install	Install	Install	– –	Test System	Debug
12.K. Valves and control valves with High temperature packing and Seals: $50,000	BW SS	– –	– –	– –	– –	– –	– –	– –	Install System	Install System	– –	– –	Test

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400820

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	TIME LINE CHART												
	Item Assigned To:	April 20th – 26th	April – May 27th- 3rd	May 4th – 10th	May 11th – 17th	May 18th – 24th	May 25th – 31st	June 1st – 7th	June 8th – 14th	June 15th – 21st	June 22nd – 28th	June – July 29th – 5th	July 6th – 12th
12.L. All flameproof electrical components (see #14).	BW CH, SS												
12.M. Metal skids, finish painted (covered by #8).	BW SS												
12.N. Insulation of the system with high temperature insulation:	BW SS										Install	– –	– –
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump:	BW SS	– –	– –	– –	– –	– –	Piping	Piping	Piping	Piping	Test	Fix Problems	Start Operation
12.P. Evaporative cooling tower with 500T capacity as cooling water with its circulation pump: $30,000	BW SS	– –	Field Install	– –	– –	– –	– –	Piping	Piping	Piping	Piping	Test	Start Operation
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS	– –	– –	– –	Install	– —	– –	Finish	Test				
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS	Start Fab	– –	– –	– –	– –	– –	Start in Structure	– –	– –	– –	Fix Problems	Start up
14. Process Electrical Equipment: $200,000 (motor and process controls including distribution)	BW CH SS	9	10	11	12	13	14	Start In Structure	– –	Test System	Test System	Fix Problems	Start Up Operation
15. Pumps (Oil Tank Farm): $20,000	BW, SS												
16. Spare Parts: $35,000	CH												

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400821

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**												
	Item Assigned To:	**July 13 – 19**	**July 9 20 – 26**	**July 27 August 2**	**August 3 – 9**	**August 10 – 16**	**August 17 – 23**	**August 24 – 30**	**August 31 September 6**	**September 7 – 13**	**September 14 – 20**	**September 21 – 27**	**September 28 October 4**
1. Boiler 300HP (gas fired): $50,000	BW												
2. Concrete Containment Oil Storage/ Processing Area: $150,000 (Foundation and Wall Included) Tank Farm Area – 3,000 sq/ft Process Area – 4,000 sq/ft Tank-Truck Loading/ Unloading Area – 750 sq/ft	Completed												
3. New Shop and Maintenance Building: $30,000 Field Construction Office Repair of Shop Building Repair of Field Office	BW KG												
4. A. Site Stabilization of Area Parking and Roadway around New Shop and Construction Office:	BW KG												
4. B. Repair of Filter Vac Clay Unit: $50,000 Final Payment $40,000	CH												
5. New Shop Fences: $20,000	BW & SS												
6. Tanks (8): $115,000	BW & CH	8 New Tanks	Completed										
7. Scrubber System and Piping: $70,000	BW, CH SS												
8.A. Structural and Assembly in Tank Farm Area: $50,000	BW, CH SS												
8.B. Structural and Assembly in Process Area: $240,000 / $40,000	BW, CH SS												
9. PESCO Engineering:	CH												
10. Engineering /Structural Design Drawings:	CH												
11. Utilities (Power for site and operational areas):	BW SS & CH												

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04400822

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	**TIME LINE CHART**												
	Item Assigned To:	**July 13 – 19**	**July 9 20 – 26**	**July 27 August 2**	**August 3 – 9**	**August 10 – 16**	**August 17 – 23**	**August 24 – 30**	**August 31 September 6**	**September 7 – 13**	**September 14 – 20**	**September 21 – 27**	**September 28 October 4**
12. OPS Process Equipment (A-Q below) Combined Total: $882,000	CH PESCO												
12.A. Forced circulation evaporator, fraction columns and related equipment (TOG). $20,000	BW CH SS	Debug	Debug	Debug	Restart								
12.B. One 129 sq/ft Luwa (300 N-40%) thin evaporators with all related equipment (TOG): $235,000 One 200 sq/ft Luwa (100 N-60%) thin film evaporators with all related equipment: $195,000	BW CH SS	Debug	Debug	Debug	Restart								
12.C. Positive displacement gear pumps and centrifugal pumps with flameproof motors with high temperature packing: $40,000	BW CH SS	Debug	Debug	Debug	Restart								
12.D. Liquid ring vacuum system.	BW, CH, SS	Debug	Debug	Debug	Restart								
12.E. Vacuum skid, controls, tank cooler.	BW, SS	Debug	Debug	Debug	Restart					– –	– –	– –	– –
12.F. Positive displacement vacuum booster (2): (Total for D.E.F.) $50,000	CH	Debug	Debug	Debug	Restart								
12.G. Pipe and fittings (covered by #13).	BW, CH, SS	Debug	Debug	Debug	Restart								
12.H. Level, flow, pressure and temperature monitors, controllers and alarms: $65,000	BW CH SS	Debug	Debug	Debug	Restart								
12.I. Motor control panel(s) (covered by #14).	BW, CH SS	Debug	Debug	Debug	Restart								
12.J. PLC inclusive of the computer: $25,000/ $12,000 (software)	BW, CH, SS	Debug	Debug	Debug	Restart								
12.K. Valves and control valves with High temperature packing and Seals: $50,000	BW SS	Debug	Debug	Debug	Restart								

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04000823

Oil Purification Project Construction Priority Line Item List With Projected Cost February 6, 2008	TIME LINE CHART												
	Item Assigned To:	**July 13 – 19**	**July 9 20 – 26**	**July 27 August 2**	**August 3 – 9**	**August 10 – 16**	**August 17 – 23**	**August 24 – 30**	**August 31 September 6**	**September 7 – 13**	**September 14 – 20**	**September 21 – 27**	**September 28 October 4**
12.L. All flameproof electrical components (see #14).	BW CH, SS	Debug	Retest	Retest	Restart								
12.M. Metal skids, finish painted (covered by #8).	BW SS												
12.N. Insulation of the system with high temperature insulation: $50,000	BW SS	Finish	Finish	Finish									
12.O. Thermic fluid heating system (one of 10 mill BTU) complete with expansion tank and circulation pump: $100,000	BW SS	Debug	Retest	Retest	Restart								
12.P. Evaporative cooling tower with 500T capacity as cooling water with its circulation pump: $30,000	BW SS	Debug	Retest	Retest	Restart								
12.Q. Air compressor and instrument air dryer with 20cfm capacity at 7 atm pressure: $10,000	BW SS												
13. Piping Process System: $150,000 (interconnecting piping between areas)	BW CH, SS	Repair	Retest	Retest	Restart								
14. Process Electrical Equipment: $200,000 (motor and process controls including distribution)	BW CH SS	Modify Debug	Retest	Retest	Restart								
15. Pumps (Oil Tank Farm): $20,000	BW, SS												
16. Spare Parts: $35,000	CH												

B.W. – Brian Weathers
C.H. – Clark Hickman
K.G. – Karl Guidry

PESCO
S.S. – Steve Stricker

EPAHO04000824

CES Oil Project Action Plan Item List, February 21, 2008

1. We have been talking with John Winnick and Luke Staengl of PESCO to obtain information on the Vacuum System, PLC System, pumps, cooling tower, electrical system, flash tank and additional specs to define instrument and control valves.

   This process will continue for one to two weeks. The next step is to visit operating oil systems at Portland and Reno, for questions and observations by Steve, Brian and Rick.

   PESCO has furnished a list of instruments, types, and sources for oil project. PESCO (J. Winnick), LCI (J. Pauley), and C. Hickman have been going over the design and equipment specs for the units HE1, HE2, HE3 and HE4 to verify if the existing units will work.. HE1 will work. HE2 is in question because of no data. HE3 may not work. HE4 will not work according to LCI.

   We have been talking with LCI (Jim Pauley) on the possible changes and review to confirm the correct design for the HE2, HE3 and HE4. They will furnish the engineering cost to review and specify equipment required to make the LUWAs work.

2. We have obtained a bid on the vacuum system for oil project from PESCO. We have sent out a second package out for second bid (Steve). Brian is working on a third package to put out for bid.

3. We have checked the status of the LUWAs with LCI Corp. Delivery is projected for the end of March.

4. We have engaged a City of Houston Application Specialist, obtained forms for the application and, furnished data/drawings to All Texas Permits to prepare the application to the City of Houston for the structural.

5. TGCE (Texas Gulf Coast Engineers) has been started on the design of the process piping required in the Oil Process Area using PESCO-P&ID's and TGCE Structural Design Drawing. First, TGCE must produce a 3D version of the structural with equipment, before the piping is defined on drawings.

6. TGCE maybe required to furnish additional structural information for the COH Application.

7. Work on electrical power to oil area has been started by meeting with Coastline and furnishing data on power needs, including list of pumps, motors, blowers, and electrical uses.

8. Power has been connected to the instrument side of Fillervac Clay System.

   We will contact Fillervac. With the support of Rick (CES –E), we will start the phone discussions with Fillervac to evaluate the fillervac instrument and controls. We plan to have the Fillervac Technician visit asap for repair of the clay unit.

ITEM NUMBER 1

EPAHO044000826

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Wednesday, February 13, 2008 5:57 PM
To: Clark Hickman
Subject: HE1 Service Conditions

Clark,
The maximum service conditions expected for HE1, the Flash Tank Reboiler are as follows:

TUBE SIDE
Fluid: Use Motor oil. Recirculating at 1400 – 2000 GPM.
50 psig @ 575 F

SHELL SIDE
Fluid: Therminol 66 Heat Transfer Fluid
100 psig @650 Deg F.

Actual service conditions will be less severe.

Gasketing should be spiral wound, graphite filled.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000827

From: John Winnicki [johnj@swva.net]
Sent: Wednesday, February 13, 2008 6:01 PM
To: Clark Hickman
Subject: Front End Condenser Service Conditions

Clark,
Following are the service conditions for HE2, the Front End Condenser

TUBE SIDE
Inlet: 500 pound per hour Water and 1500 Pounds per hour light hydrocarbons at 500 Deg F and 100mmHg, abs.
Outlet: Condensed liquids at 130 deg. F

SHELL SIDE:
Fluid: Cooling water
30 psig @ 110 F

Hope this helps.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000828

Oil Project Heat Exchanger/Condenser Information, February 13, 2008

I.A. Flash Tank Heat Exchanger for Hot Oil (HE1 (JK) or HE1 A and HE1 B (PID 12-100A).

1. The exchanger is a one pass U shaped tube bundle with 187 tubes, ¾ in OD x 0.065" AW (16 BWG).
2. The total length per tube is approximately 40' 6" to 43' with a straight length of 20' before the bend.
3. The tubes are 304 SS
4. The unit, when built, was tested to 225 psi (tubes) and 675 psi (shell).
5. Manufacturer – Metal Forms, Inc. @ 160 Garth Road, Beaumont, TX 77705, phone number is 1-409-842-1626.

I.B. The maximum service conditions expected for HE1, the Flash Tank Reboiler are as follows:

Tube Side
Fluid: Used motor oil. Recirculating at 1400 – 2000 gpm.
50 psig @ 575 F.

Shell Side
Fluid: Therminol 66 Heat Transfer Fluid
100 psig @ 650 F.

Actual service conditions will be less severe.
Gasketing should be spiral wound, graphite filled.

II. The Condenser (C1 (JK) or HE2 PID 12-100B) on the Flash Tank R100 Receiver:

Tube Side
Inlet: 500 pound per hour Water and 1500 pounds per hour light hydrocarbons at 500 F and 100 mm Hg, abs.

Shell Side
Fluid: Cooling water
100 psig @ 100 F

III. The Condenser (C2 (JK) or HE3 (PID 12-200)) on LUWA 1 is:

1. Single Pass
2. with 433 Tubes
3. 1.25" OD x 0.125" AW x 8' LG
4. Material SA – 249 – TP 304L
5. Dia Tube Sheet 36"

IV. The Condenser (C3 (JK) or HE4 (PID 12-300)) on LUWA 2 is:

1. Single Pass
2. with 265 Tubes
3. 1" ODx 14 BWG (AW) x 10' – 0" LG
4. Material SA – 213 TD 304L
5. Shell ID 24"

EPAHO044000829

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Thursday, January 31, 2008 2:16 PM
To: Clark Hickman
Cc: Luke Staengl
Subject: Viking Pumps for your plant.
Attachments: Viking pumps for Oil Plant.doc

Clark,
It was good speaking with you and Steve and Brian yesterday. Regarding the information that I promised during our conversation:

1) A FAX will be heading your way shortly detailing the R100 Decanter Operation.

2) I am enclosing a spec/quote sheet for the Viking pumps that we usually reccommend for an oil Plant. Note that:

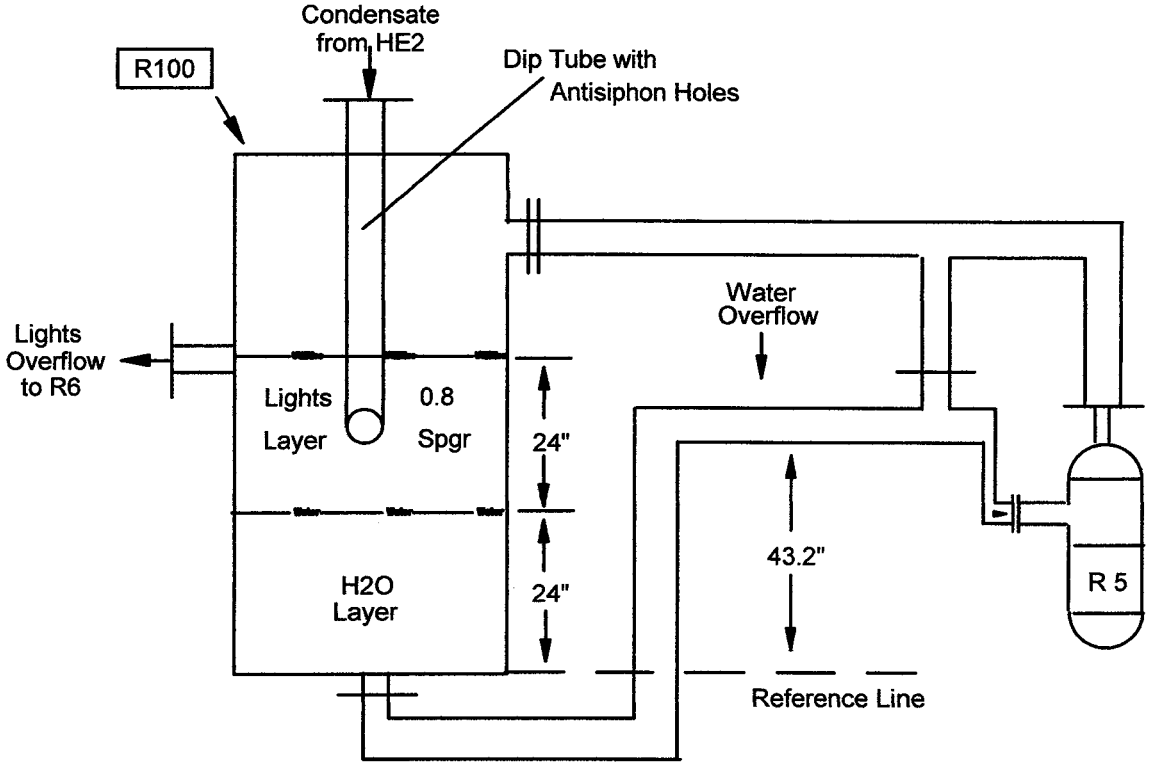
- This quote is almost 4 years old, so prices are up since then.
- This quote is for an 800GPH plant but the pumps are indeed oversized. We ran this plant with these pumps at a rate of 1200 GPH feed.

Calll if you have any questions.

Regards

John Winnicki
Design Engineer
PESCO - BEAM
(540)427-3588
Cell: (540)529-2112

R100 Decanter Operation
January 31, 2008



NOTES:

1. Dimensions are for concept demonstration only.
2. Water overflow line and R5 must share a vent with R100 for the decanter to work.
3. Weights above the Reference Line are equal.

24" H2O (1.0) + 24" Lights (0.8) = 43.2" H2O
24" + 19.2" = 43.2"

EPAHO044000831

WOOD EQUIPMENT COMPANY, INC

June 8, 2004 Page 1 of 4

PESCO
Mr. John Winnicki: Chemical Engineer
1866 Technical Street, South East
Roanoke, VA 24013

Reference: Viking Pump Quotation - India
Wood Equipment Reference # 06-060304-03 Revision 2

Hello John,

Wood Equipment appreciates the opportunity to provide you with this quotation and trust that it will meet with your approval. Please contact me anytime.

P-1
Service: 150 degree F 100 SSU bottoms
Conditions 14-32 GPM @ 75 PSI @ 100 SSU

Item 1. Complete Pump Unit. Price each. Viking Universal Bracket Internal Gear Pump Model HL4124A constructed as follows: 1.50" NPT ports, cast iron casing and bracket, plain head without relief valve, steel shaft, carbon graphite bracket and idler bushings, steel idler pin. Viton fitted internal mechanical seal. Pump is offered being driven by a Reliance 3 Hp, 1800 RPM, 3/60/230/460 Class 1 Group D explosion proof, inverter duty motor (10:1) in a 184T frame. No reducer required. 1750 RPM = 31.28 GPM, 840 RPM = 14 GPM. Pump is complete mounted on a common steel base with flexible coupling and guard.

Your Cost Each----------$1,860.00
For 2.00" 125# ANSI flanges add $157.00 per pump.

CONTINUED

P-201
Service: 150 degree F 100 SSUbottoms
Conditions 6-14 GPM @ 50 PSI @ 200 SSU

Item 2. Complete Pump Unit. Price each. Viking Universal Bracket Internal Gear Pump Model HL4124A constructed the same as item one. Pump is offered being driven by a c-face mounted Reliance 2 Hp, 1800 RPM, 3/60/230/460 Class 1 Group D explosion proof, inverter duty motor (10:1) in a 145TC frame. Pump speed is being reduced to 608 RPM's by way of a Viking c-face mounted reducer at 583 RPM = 10.00 GPM, 793 RPM = 14 GPM. Pump is complete mounted on a common steel base with flexible coupling and guard.

Your Cost Each----------$2,123.00
For 2.00" 125# ANSI flanges add $157.00 per pump.

P-206
Service: 600 degree F bottoms
Conditions 5-10 GPM @ 20 PSI @ 90 SSU

Item 3. Complete Pump Unit. Price each. Viking Universal Bracket Internal Gear Pump Model K224A constructed as follows: 3.00" 125# ANSI flanges, jacketed cast iron casing and bracket, plain non-jacketed head without relief valve, hardened cast iron shaft, carbon graphite bracket bushing, nitralloy idler pin with hardened cast iron idler bushing. High temperature packing and gaskets. Pump is offered being driven by a c-face mounted Reliance 2 Hp, 1800 RPM, 3/60/230/460 Class 1 Group D explosion proof, inverter duty motor (10:1) in a 145TC frame. Motor is c-face connected to a Viking in-line helical gear reducer at 7.16:1 for a final pump output speed of 244 RPM's. Pump is complete mounted on a common steel base with flexible coupling and guard.

Your Cost Each----------$4,209.00

CONTINUED

P-301
Service: 150 degree F 100 SSUbottoms
Conditions 6-10 GPM @ 50 PSI @ 450 SSU

Item 4. Complete Pump Unit. Price each. Viking Universal Bracket Internal Gear Pump Model HL4124A constructed the same as item one. Pump is offered being driven by a c-face mounted Reliance 2 Hp, 1800 RPM, 3/60/230/460 Class 1 Group D explosion proof, inverter duty motor (10:1) in a 145TC frame. Pump speed is being reduced to 608 RPM's by way of a Viking c-face mounted reducer at 568 RPM = 10.00 GPM, 783 RPM = 14 GPM. Pump is complete mounted on a common steel base with flexible coupling and guard.

Your Cost Each----------$2,123.00
For 2.00" 125# ANSI flanges add $157.00 per pump.

P-306
Service: 600 degree F bottoms
Conditions 2-8 GPM @ 30 PSI

Item 5. Complete Pump Unit. Price each. Viking Universal Bracket Internal Gear Pump Model K224A constructed as follows: 3.00" 125# ANSI flanges, jacketed cast iron casing and bracket, plain non-jacketed head without relief valve, hardened cast iron shaft, carbon graphite bracket bushing, nitralloy idler pin with hardened cast iron idler bushing. High temperature packing and gaskets. Pump is offered being driven by a c-face mounted Reliance 2 Hp, 1200 RPM, 3/60/230/460 Class 1 Group D explosion proof, inverter duty motor (10:1) in a 184TC frame. Motor is c-face connected to a Viking in-line helical gear reducer at 7.16:1 for a final pump output speed of 161 RPM's. Pump is complete mounted on a common steel base with flexible coupling and guard.

Your Cost Each----------$4,470.00

CONTINUED

Extra
Item 6. Pump Only. Price each. Viking Universal Bracket Internal Gear Pump Model K224A constructed as follows: 3.00" 125# ANSI flanges, jacketed cast iron casing and bracket, plain non-jacketed head without relief valve, hardened cast iron shaft, carbon graphite bracket bushing, nitralloy idler pin with hardened cast iron idler bushing. High temperature packing and gaskets.

Your Cost Each----------$2,370.00

Terms: Net 30 days
Freight: FOB shipping point
Delivery: 6-8 weeks

Best regards,

Tom DeNome

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Tuesday, February 05, 2008 10:57 AM
To: Clark Hickman
Subject: Information you requested
Attachments: Sample Vacuum Skid General Arrangement,1500 lph system, Indian Built.pdf

Clark,
The info you requested.

VACUUM SKID
I have attached a general arrangement of a vacuum skid that we have built at our shop in India for a 1500 liter per hour system. Just so that you could get an idea as to how we usuall arrange the equipment. Note that thins are a little cramped because this skid will be slipped into an open top container for overseas transport. Thus the 7'1" dimension. You have a larger area, so thins can be spread out a bit.

P3
Going with the 2000 GPM at 70 feet of head I would reccommend either:

- A Gould 3700 8 x 10 x 16 with a 14" Impeller. 1180 rpm. 50 hp. NPSHr = 14'
- A dean Brothers 480 6 x 8 x 15.5, 15" Impeller. 1180 Rpm. 50 hp. NPSHr = 10'
- Or equivelant centerline mount pump.

We have had some success with LCEC used pumps. I'm sure there are other used pump guys in Houston.

Notes on P3.
1) If you cannot find a centerline mount, you could go with something like a Goudls 3196 8 x 10 x 13 with a 13" Impeller. 40 hp. 1180 rpm. 11' NPSH,r
2) If you really want to look at a 1750 rpm, youu could go with a 6 x 8 x 12.5 with a 10.5" impeller. Npsh is at 20' for this pump which we usually try to avoid.
3) SS Impeller is our usual spec.

Biggest Note on P3.
BEFORE FINALIZING THE PUMP SELECTION YOU NEED TO HAVE YOUR HE1 PICKED OUT AND WE NEED TO KNOW THE ELEVATION OF THE LUWA 1 INLET. If the Luwa 1 inlet is too high or the exchanger pressure drop is too great, you will need more than 70 feet of head.

Talk to you this afternoon.

Regards
John Winnicki
Design Engineer
PESCO - BEAM
(540)427-3588
Cell: (540)529-2112

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Tuesday, February 05, 2008 5:04 PM
To: Clark Hickman
Subject: Information you requested
Attachments: Typical Oil Plant Pump Controls.xls; PESCO TYPICAL PLC CONTROL PANEL.pdf

Gentlemen,
The info you requested today.

PLC PANEL
I have attached a copy of our typical PESCO PLC Control Panel Dimensions.

PUMP CONTROLS
I have attached a copy of our typical oil plant pump controls.

MCC's
2 ways to go here.
1) You could go with a "Bucket style" MCC like GE makes. I'm sure others make this too.

2) You could make 4 or so MCC Panels of varying sizes. Maybe:

- One for the Process (Front End and Luwa Skids)
- One for the Vacuum skids.
- One for the Cooling Tower.
- One for theHot Oil Heater (Probably already attached to the heater that you have....)
- One for the tank farm pumps.....

Make sense? THese panels can be anywhere form 3' x 4' x 20" deep to 5' x 7' floor mounts like our PLC panel.

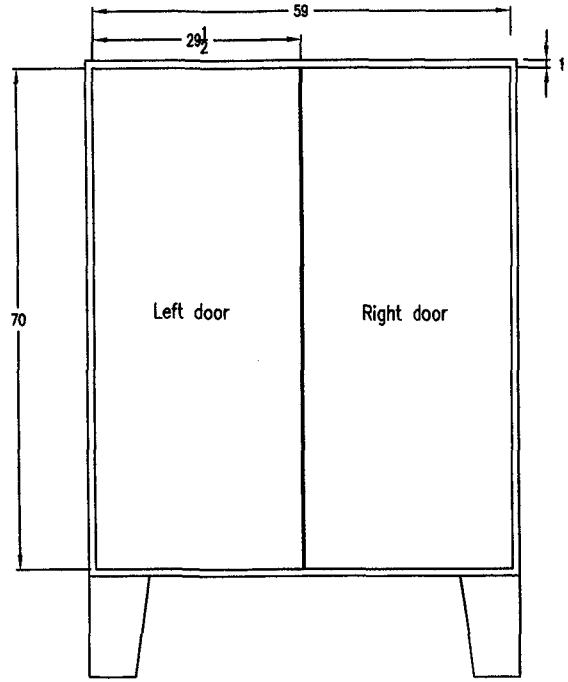
Hope this helps. Talk to you tomorrow.

Regards

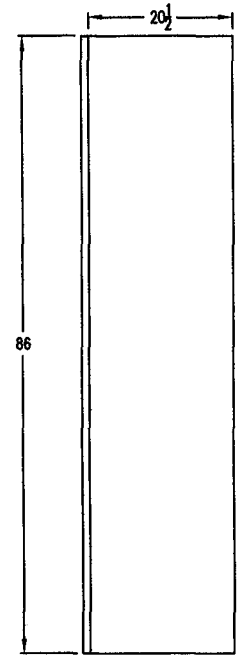
John Winnicki
Design Engineer
PESCO - BEAM
(540)427-3588
Cell: (540)529-2112

This Drawing is the Property of Pragmatic Environmental Solutions Co., and must not be passed on to any third person or firm not authorised by us,nor be copied/ made use in full or part by such person or firm without our prior permission in writing

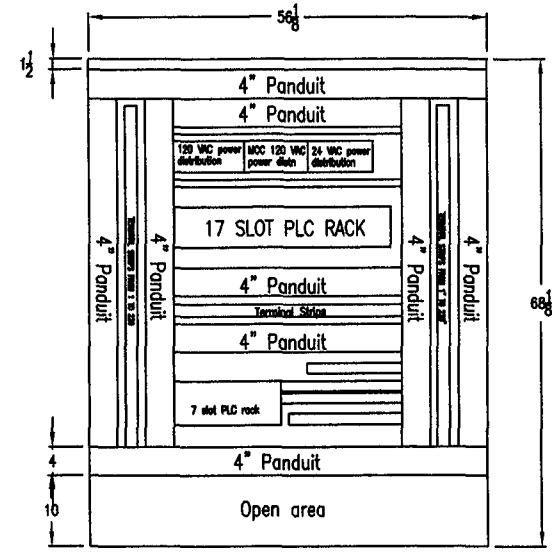
FRONT VIEW



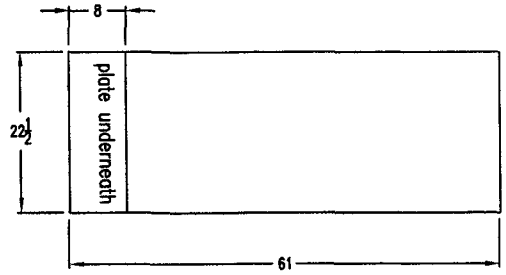
SIDE VIEW



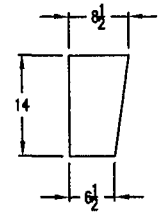
PANEL BACK PLANE



PLAN VIEW



LEG



NOTE:
ALL DIMENSIONS ARE IN INCHES

PESCO	Pragmatic Environmental Solutions Co., 1866 Technical Street, S.E., Roanoke Industrial Center, Roanoke, Virginia 24013, USA.				
PROJECT: TYPICAL PLC PANEL					REF. DRG. : NONE.
SCALE: NTS	DIAGRAM: PLC Panel General Arrangement				JOB NO:
DATE:					ORDER REF.:
SHEET: 1 of 2	DRN	CHD	APPD	DRG NO :	
	JJW	JJW	JJW	PLC-GA	REV: 0 DATE: AUG-30-07

EPAHO04400838

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Tuesday, February 12, 2008 3:27 PM
To: Clark Hickman
Subject: PESCO Instruments
Attachments: PESCO Typical Instruments.xlsx; LINC-L471 25Apr07.dwg

Clark,
I have enclosed our typical Instrument specs. I have put BOLD print on the ones we were talking about yesterday.

I have also enclosed a detail of how we mount the Linc Level Switches.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000839

JJW's SOP for Purchasing of Instruments etc...

Temperature Elements

Item	Description		VENDOR	Part Number	Price	Date	Contact	Phone
Thermocouples	J type, 6" Stem, 1/2"NPT, Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	200121	$82.80		John Odden	804-379-2729
Thermocouple with Thermowell	As Above with 1" Flanged Thermowell and Spring Loaded Thermocouple.		Quantum Controls		$302.40		John Odden	804-379-2729
Thermocouples	J type, 6" Stem, 1/2"NPT, **2 Sensors in One Sleeve,** Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	JJ48U-006-00-8HN71	$102.00	5-Sep-07	John Odden	804-379-2729
Thermocouples	J type, 9" Stem, 1/2"NPT, **2 Sensors in One Sleeve,** Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	JJ48U-009-00-8HN71	$102.00	5-Sep-07	John Odden	804-379-2729

Pressure Gauges

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Pump Pressure Gauges	WIKA, 1/4" lower connection, 0-60 psi		Daughtridge Sales	213.53, -02L-60 psi.	$13.11	31-Oct-07	Any	800-334-9720
Pump Pressure Gauges	WIKA, 1/4" lower connection, 30" Vac/30 psi		Daughtridge Sales	213.53, -02L-Vac/30 psi.	$12.60		Any	800-334-9720

EPAHO04400840

Pump Pressure Gauge, Hot	4" Face, 1/4" Lower Connection, 0 - 160 psi, Welded Socket,SS Case and tube, Liquid Filled		Daughtridge Sales	4EE-GF-02L-160	$77.29	31-Oct-07	Any	800-334-9720
Process Vacuum, Ambient Temp.	4" Face, 1/4" Lower Connection, 0 - 30 " HG., Vac.		Daughtridge Sales	100mm-1008A-02L-30/0imv	$24.85		Any	800-334-9720
Pump Pressure Gauges, Chemical Seal	1/4" Gauge Connection, 4" Face, 0 - 160 psi		Daughtridge Sales	40-242.53-02L-160	$51.23		Any	800-334-9720
	1/2" NPT Chemical Seal		Daughtridge Sales	05-101-0.5	$77.50		Any	800-334-9720
Process Pressure Gauge, Ambient Temp.	4" Face, 1/4" Lower Connection, Vac/15psi		Daughtridge Sales	100mm-1008A-02L-Vac/15	$24.85		Any	800-334-9720
Process Vacuum, Ambient Temp.	4" Face, 1/4" Lower Connection, 0 - 30 " HG., Vac.		Daughtridge Sales	100mm-1008A-02L-30/0imv	$24.85		Any	800-334-9720
Steam Pressure Gauge	2-1/2" Dial, 0 - 160 psi, SS Case		Daughtridge Sales	25-1008A-02L-160psi	$17.50		Any	800-334-9720
Steam Pigtail	1/4" NPT steel Pigtail		Daughtridge Sales		$1.63		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 15 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-15psi	$3.50		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 30 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-30psi	$3.50		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 160 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-160psi	$3.50		Any	800-334-9720
Moore Level Control Gauges	0 - 30 psi, 1/4" Back Connect, Imported		Daughtridge Sales	20YB4P02B30	$2.50		Any	800-334-9720
	0 - 30 psi, 1/4" Back Connect, Ashcroft		Daughtridge Sales	20100502B30	$7.88		Any	800-334-9720
Differential Pressure Gauges								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**

Hot Oil Heater DP Gauge	0 - 60 psid, 4.5" Gauge		Daughtridge Sales	45-1125	$707.78	########	Any	800-334-9720
Hot Oil Heater DP Gauge	0 - 60 psid, 4.5" Gauge. Brass		Carotek	45 - 1130	$227.00	########	Any	804-279-8800
Temperature Gauges								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**
Small Temperature Gauges	Imported, 3" Dial, 4" Stem, 1/2" rear connect, 0 - 250 Deg. F		Daughtridge Sales	T3-4" - 0-250F	$13.20		Any	800-334-9720
Large Temperature Gauges	Imported, 5" Dial, 4" Stem, 1/2" rear connect, 0 - 250 Deg. F		Daughtridge Sales	T5-4" - 0-250F	$16.20		Any	800-334-9720
Level Switches								
Item	**Description**		**VENDOR**	**Part Number**	**Price**	**Date**	**Contact**	**Phone**
Top Mounted Level Switch	**Slurry Switch. 2" NPT. Mechanism out of process. 24" Float**		**Innovative Components**	**Model HTS-2024. Stock # 93831**	**$404.00**		**Pete Meade**	**800-789-2851**
Interface Level Switch	Thermal Switch for detecting Interface. 24VDC Powered.		Ameritrol	Ix-0750-d	$350.00		John Jackson	800-910-6689
Interface Level Switch	Ametek Z-Tron III		United Controls		$335.00		Bill Fergeuson/ Mark Leonard	804-527-6500
Side Mounted Level Switch	**Linc Level Switch. 1-1/2" NPT which must be installed in a 3" Flange**		**AWC**	**L471-01**	**$216.13**	**########**	**Any**	**800-413-6623**
	High Temp Switch Cartridge (500F) for L471-01		AWC	24835	$138	14-Aug-07	Katie	800-413-6623
Differential Pressure Switch								

18

EPAHO0440000842

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Hot Oil Heater DP Switch	0 - 60 psid, Teflon/Viton Elastomers		Carotek	United Electric 24-031	$185.00	########	Any	804-279-8800

Current Transducer

Item	Description		VENDOR	Part Number	Price		Contact	Phone
AC Current Transducer	0 - 20 Amps clamp on Sensor, 4 - 20 mA output.		Riley Corp. Sales	Model 420	$198.00			800-545-5915

PID Controller

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Fuji Panel Mounted PID Controller	K Type Input, 4 - 20 output, 0 Alarm Contact		Hampton Controls	PXR4-REY1-4V0A1	$179.00		Jim	800-437-2664
Fuji Panel Mounted PID Controller	K Type Input, 4 - 20 output, 2 Alarm Contacts		Hampton Controls	PXR4-REY1-GV0A1	$309.00		Jim	800-437-2664

Pneumatic Level Controller

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Pneumatic Level Controller	Fisher L2 Pneumatic Level Controller, PVC Displacer		Control Dynamics		$519.58	May-07	Joel Webber	804-858-5800
Pneumatic Level Controller	**Fisher L2 Pneumatic Level Controller, 316SS Displacer**		**Control Dynamics**		**$601.75**	**Dec-07**	**Joel Webber**	**804-858-5800**

EPAHO04400843

Clark Hickman

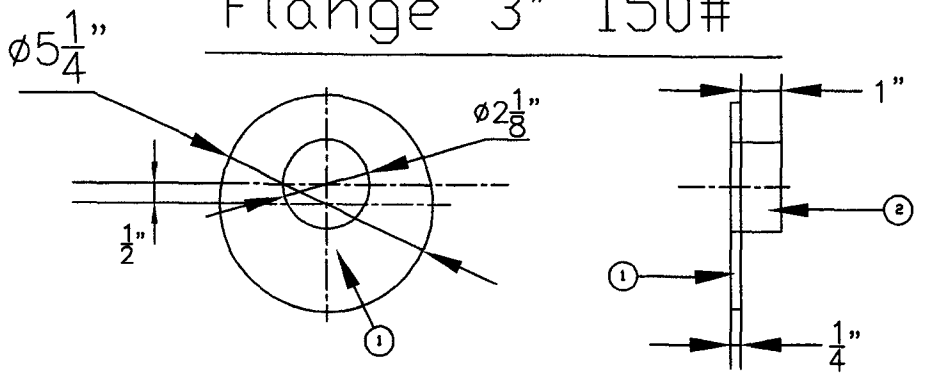
From: John Winnicki [johnj@swva.net]
Sent: Wednesday, February 13, 2008 5:50 PM
To: Clark Hickman
Subject: Linc Installation in PDF
Attachments: LINC-L471 25Apr07 - Install.pdf; LINC-L471 25Apr07- Flange.pdf

Clark,
Here are the Linc's in PDF Format.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000844

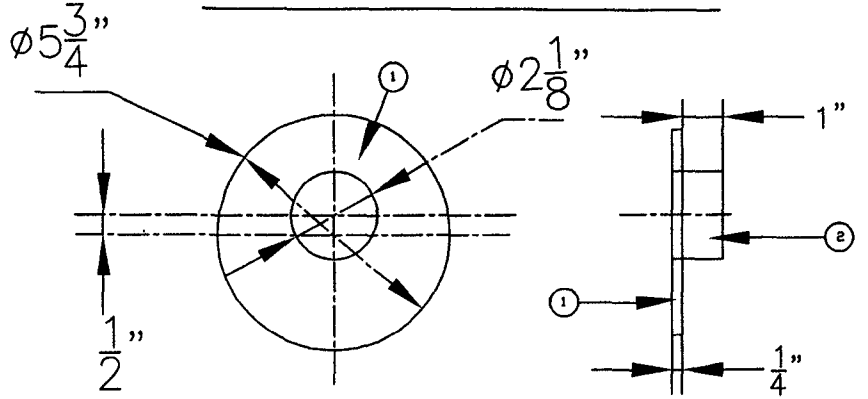
Flange 3″ 150#



① 1/4″ 304 SS plate

② 1 1/2″ 304 SS half coupling

Flange 3″ 300#

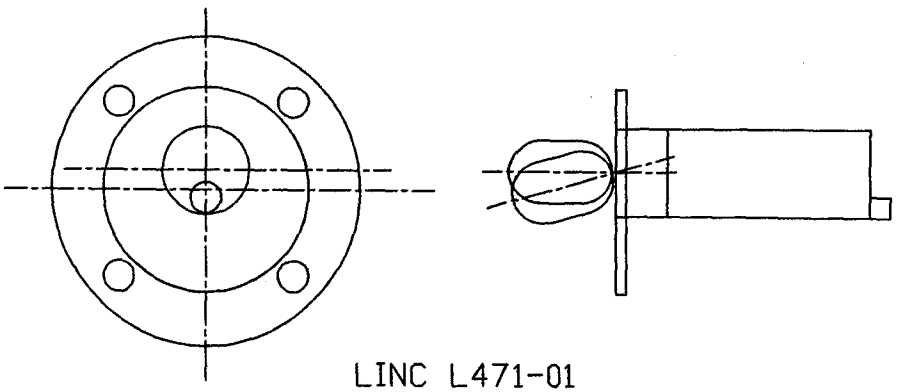


① 1/4″ 304 SS plate

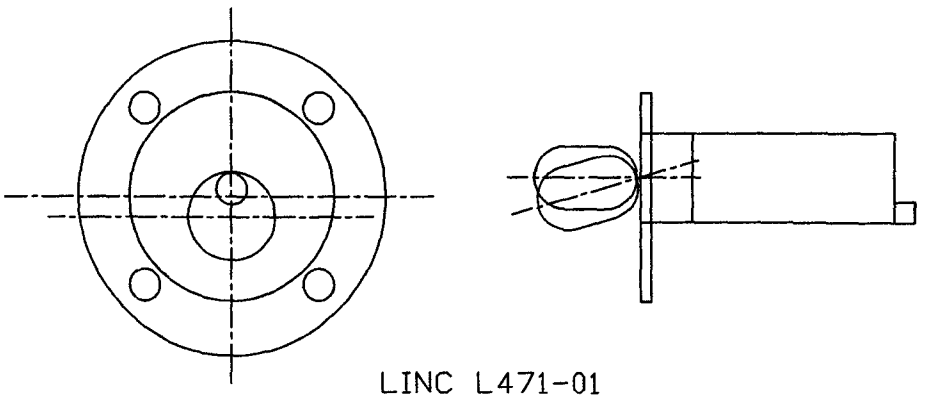
② 1 1/2″ 304 SS half coupling

PESCO	Pragmatic Environmental Solutions Co., 1866 Technical Street, S.E., Roanoke Industrial Center, Roanoke, Virginia 24013, USA.				
Plate for Linc L471-01					REF. DRG. : NONE.
SCALE: N.T.S.					JOB NO:
DATE:					ORDER REF.:
SHEET: 1 OF 1	DRN	CHD	APPD	DRG NO :	REV:0 DATE: 25APRIL07
	JJW	JJW	JJW		

EPAH04400845



LINC L471-01
Low level position



LINC L471-01
High level position

PESCO	Pragmatic Environmental Solutions Co., 1866 Technical Street, S.E., Roanoke Industrial Center, Roanoke, Virginia 24013, USA.				
Installation of Linc L 471-01					REF. DRG. : NONE.
SCALE: N.T.S.					JOB NO:
DATE:					ORDER REF.:
SHEET: 1 OF 1	DRN	CHD	APPD	DRG NO :	REV:0 DATE: 25APRLO7
	JJW	JJW	JJW		

EPAHO04400846

Clark Hickman

From: Phil Lutz [PLutz@apogee-engineering.com]
Sent: Monday, February 11, 2008 3:21 PM
To: Steve Small; Clark Hickman
Cc: Jim Pauley
Subject: RE: Evaporator Spread sheet

Steve,

I've just spoken with Clark and asked that he give you or Jim a call right away.

Phil Lutz
Representative, LCI Corporation
713.627.9173
plutz@apogee-engineering.com

-----Original Message-----
From: Steve Small [mailto:SSmall@lcicorp.com]
Sent: Monday, February 11, 2008 2:23 PM
To: chickman@cesenvironmental.com
Cc: Steve Small; Phil Lutz
Subject: Evaporator Spread sheet

Clark,

Please review this spreadsheet and contact Jim Pauley or me as soon as possible.

After Jim reviewed your drawing he found some problems that will need to be addressed before we proceed any further.

Thanks,

Steve Small
Customer Service Engineer
LCI Corporation
704-458-2823

-----Original Message-----
From: James Pauley
Sent: Wednesday, February 06, 2008 11:14 AM
To: Steve Small
Subject: Summary .xls

<<Summary .xls>>

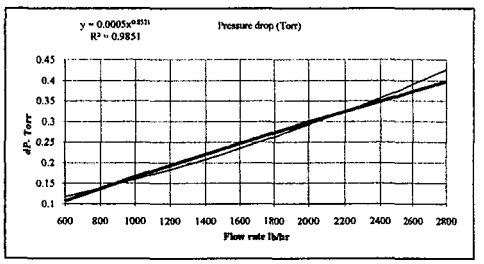
EPAHO044000847

CES Enviromental Review

		Size	Size
Main unit:	HS1800	12.0 M²	129.2 ft²
Est. Max. boilup	25.0 lb/hr/ft²		3229 lb/hr
Est. Mol. Wt			450 lb/lb-mole
Est. Vapor Temperature			550°F

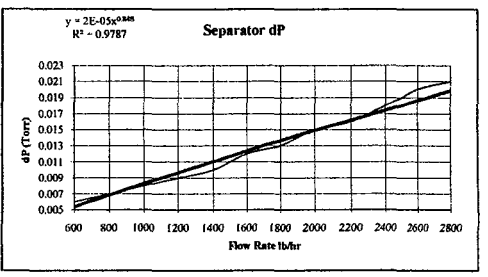
Vapor Pipe Dia.(1200 - separ)	24.0 "
Vapor Pipe Length	10.0 '
Velocity Heads	1.00
Pressure Drop	

Flow Rate (lb/hr)	Total Pressure drop (Torr)
600	0.027
800	0.046
1,000	0.072
1,200	0.103
1,400	0.139
1,600	0.181
1,800	0.228
2,000	0.281
2,200	0.338
2,400	0.402
2,600	0.47
2,800	0.544



Separator Dia.	60.0 "
Separoator Height	10.0 '
Velocity Heads	1.50
Pressure Drop	
Modeled as empty pipe - NO PAD	

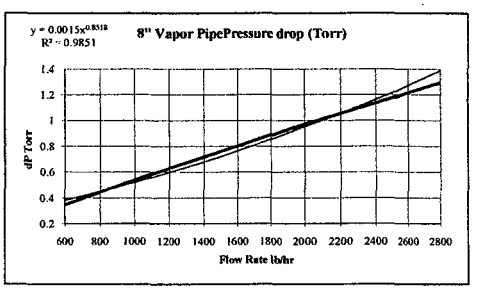
Flow Rate (lb/hr)	Total Pressure drop (Torr)
600	0
800	0.001
1,000	0.001
1,200	0.001
1,400	0.002
1,600	0.003
1,800	0.003
2,000	0.004
2,200	0.005
2,400	0.006
2,600	0.007
2,800	0.008



Vapor Pipe Dia.(Separ. - Condenser)	8.125 "
Vapor Pipe Length	13.0 '
Velocity Heads	1.5
Pressure Drop	

[illegible]

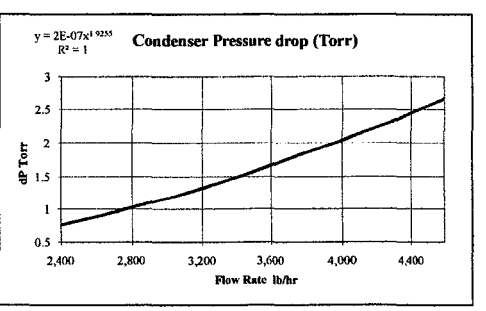
Flow Rate (lb/hr)	Total Pressure drop (Torr)
600	2.025
800	3.533
1,000	5.447
1,200	7.764
1,400	10.483
1,600	13.602
1,800	17.119
2,000	21.034
2,200	25.347
2,400	30.055
2,600	35.159
2,800	40.659



Condenser	185 ft²
Tubes	
Diameter	1.0 "
BWG	16
Count	109
Length	59.0 "
Pressure drop	
Area Required to Condense the vapor	76 ft²
Tube Length required to condense vapor	24.2 "
Number of velocity heads	2.0
Vacuum at condenser vent connection	

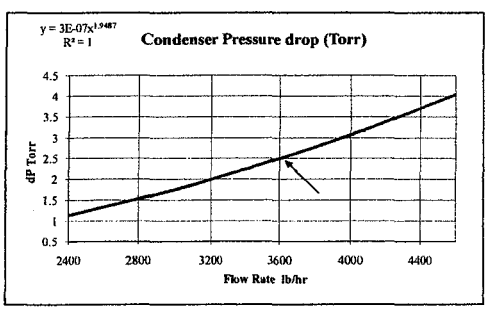
[illegible]

Flow Rate (lb/hr)	Total Pressure drop (Torr)
200	1.178
400	3.869
600	7.868
800	13.098
1,000	19.515
1,200	27.089
1,400	35.8
1,600	45.632
1,800	56.572
2,000	68.612
2,200	81.742
2,400	95.955



Total Delta P is Sumation of all With
ADDED fixed 0.75 Torr dP for both

Flow Rate	Overall dP
600	0.871013385
800	0.904623147
1000	0.936997867
1200	0.968421229
1400	0.999074887
1600	1.029084679
1800	1.058542665
2000	1.087518965
2200	1.116068664
2400	1.144236116
2600	1.172057754
2800	1.199564006
3000	1.226780644
3200	1.25372976
3400	1.280430486
3600	1.306899544
3800	1.333151664
4000	1.359199916



EPAHO044000848

B: Mr. Hickman

CALCULATION SHEET

PROCESS DIVISION

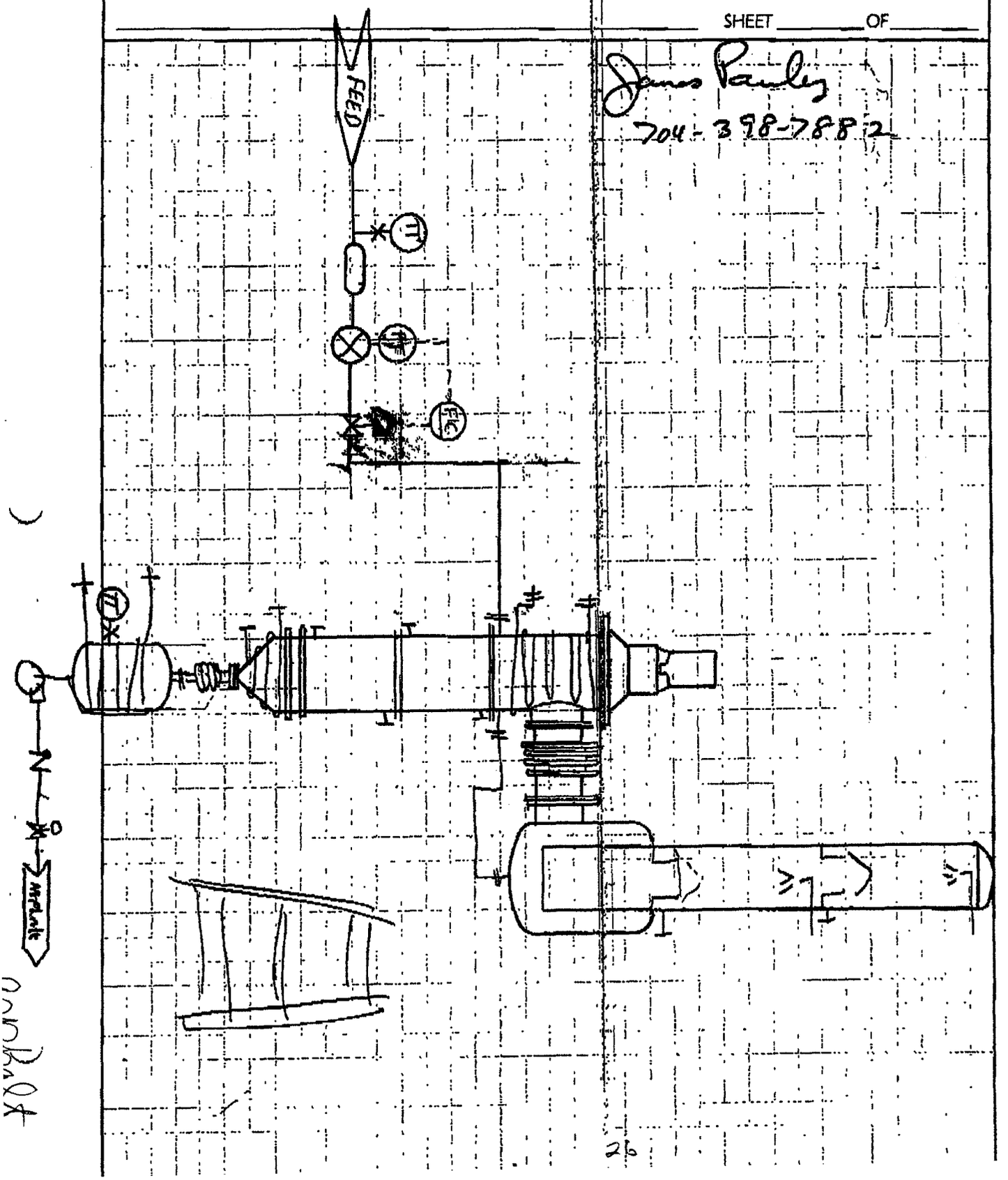
PROJECT _____ DATE 2/12/08

_____ PROJECT NO. _____

LOCATION _____ BY _____

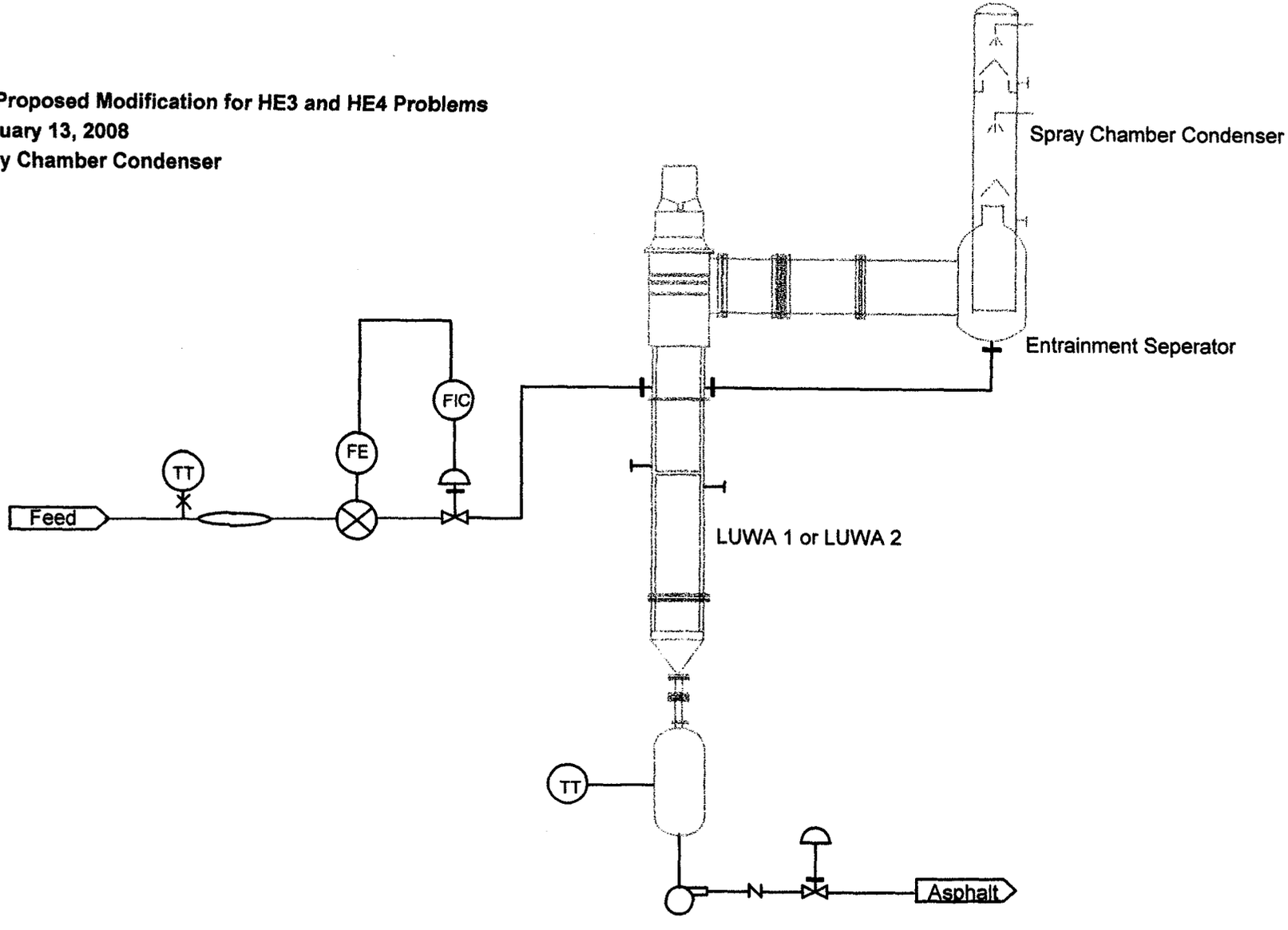
_____ SHEET _____ OF _____

James Pauley
704-398-7882



EPAHO044000849

LCI Proposed Modification for HE3 and HE4 Problems
February 13, 2008
Spray Chamber Condenser



EPAHO044000850

ITEM NUMBER 2

EPAHO044000851

From: "lukestaengl" <lukestaengl@mindspring.com>
To: "'Clarke Hickman'" <chickman7@comcast.net>
CC: "'Pat Therrien'" <pat@swva.net>
Subject: Vacuum System proposal
Date: Thursday, January 31, 2008 2:43:42 PM

One more try - Luke

Luke Staengl
President
PESCO-BEAM
1005 Industry Circle, SE
Roanoke, Virginia 24013
(540)206-2788 ~ cell(540)529-1588
FAX (540)206-2791 ~ Int'l (540)204-2015
lukestaengl@mindspring.com

(Attachments successfully scanned for viruses.)

Attachment 1: (application/msword)

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

To: Clark Hickman
CES Environmental Services
Houston, Texas

From: Luke Staengl, President

Re: Vacuum System budget proposal

Dear Clark,

PESCO-BEAM hereby proposes to design and build a multistage vacuum system for your company. The system will be designed and built to provide sufficient vacuum for your oil re-refinery to enable you to distill used motor oil in your multistage evaporation system.

The system will include positive displacement vacuum booster blowers, a liquid ring vacuum system, heat exchangers, strainers, receivers, pumps, and control components all assembled on a carbon steel skid. It will come with all the needed control valves, manual valves, fittings, piping as well as the electrical and electronic components necessary to reach the desired vacuums.

System parameters:

VACUUM PULLED

10 mmHg in 1st evaporator with a continuous air bleed up stream of an orifice plate in order to maintain pressure. This also provides a gas ballast for the KT Pump.

1.5 - 2 mmHg in 2nd Evaporator.

Maintenance

1) Operators change out 5 gallons of the pumps 10 gallon capacity with Detergent oil. They say they are using straight 40 Weight Detergent oil.

2)Operators add 2 cups of an additive with the 5 gallons above. The additive is Lubrizol 5347 from the Lubrizol Corporation. This additive is to buffer the acidity that is condensing in the KT Oil.

3)Operators peiodically check Total Acid Number (TAN). This number usually stays below 1.5. This is higher than the 0.3 recommended in the Kinney manual, but much less than the TAN's of 2.5 to 3 recorded at the Portland plant before the above treatment regime was initiated.

4)The first pump used with the above maintenance lasted 1 year.

EPAHO044000853

PESCO-BEAM Environmental Solutions Company, Inc.
1005 Industry Circle, SE
Roanoke, Virginia, USA 24013
Voice: 1-540-206-2788
FAX: 1-540-206-2791
Web: **www.pescova.com**
Email: **lukestaengl@mindspring.com**

The system will include all the components listed in the accompanying P & I Diagram which accompanies this proposal, assembled and ready to be installed on your system.

The lead-time for the system will be 14 – 16 weeks.

This budget price is good for 30 days from today.

The system will be guaranteed to be perform as specified for one year.

The budget price (+/- 5%) for the system f.o.b. Roanoke will be $244,800.00

Please review this budget proposal (including the diagram attached) and get back to me if you wish to proceed. We will then prepare a formal agreement which will be signed by all parties.

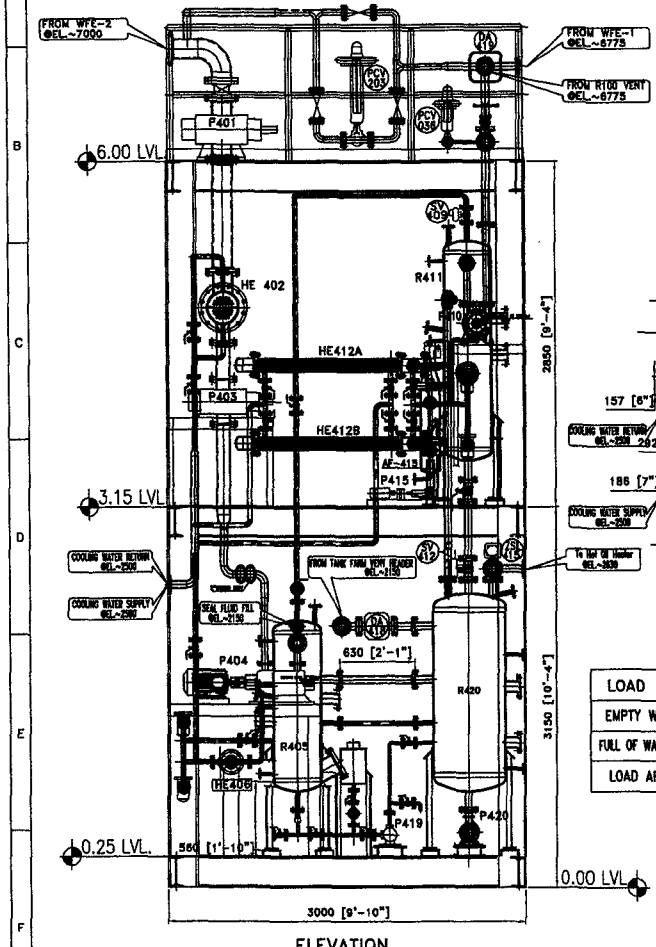
Yours truly,

Luke Staengl
Luke Staengl

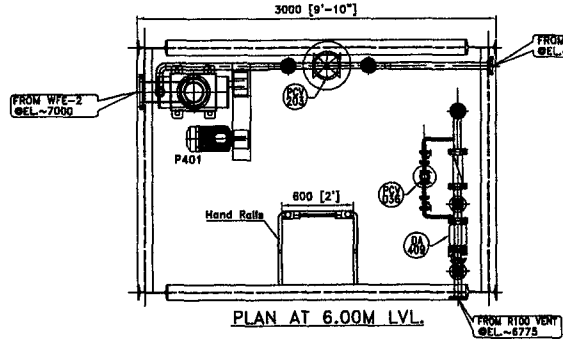
EPAHO044000854

This Drawing is the Property of Beam Engineering Private Limited and must not be passed on to any third person or firm not authorised by us,nor be copied/ made use in full or part by such person or firm without our prior permission in writing

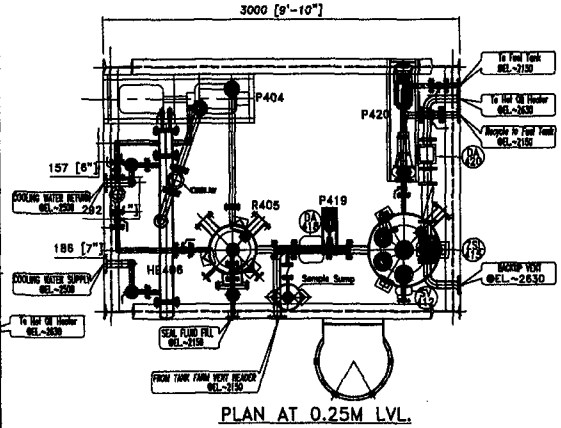
IF IN DOUBT, PLEASE ASK.



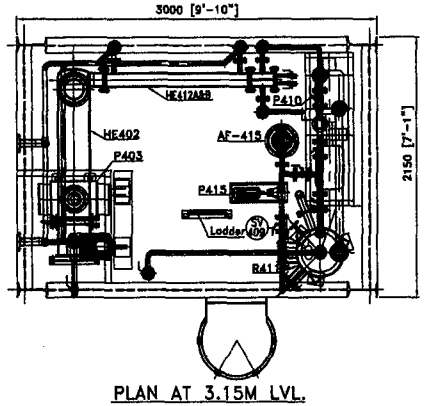
ELEVATION



PLAN AT 6.00M LVL.



PLAN AT 0.25M LVL.



PLAN AT 3.15M LVL.

LOAD DATA	VACUUM SKID
EMPTY Wt. (MT)	9.0
FULL OF WATER Wt (MT)	12.0
LOAD AREA (M^2)	6.45

NOTES:
1. UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN mm.

BEAM ENGINEERING PVT LIMITED
12 EAST CLUB ROAD, SHENOY NAGAR
CHENNAI 600 030 (INDIA)

Project: SAUDI ENVIRONMENT WORKS, SAUDI ARABIA.			REF DRG NO: 08-400
DESIGN: PRAGMATIC ENVIRONMENTAL SOLUTION Co., ROANOKE, VA, USA.			
SCALE: NTS	LAYOUT OF VACCUM SKID		JOB NO: 446
SHEET: 1 OF 1			ORDER/LOI NO:
PROJ:	DRN: Loga	CLRD: JJW	DRG NO: 446-24
			REV: -4- DATE: 07Jan,2007

446-24

EPAHO04400085

ITEM NUMBER 3

EPAHO044000856

ITEM NUMBER 4

EPAHO044000857

MEMO

TO: Diane Wilson

FROM: Clark Hickman

DATE: February 18, 2008

RE: Attached Documents

Item number 1 – Proposed Address of the New Construction:

4904 Griggs Road ,Houston, TX 77021

Item number 2 – Project Contact Person:

Clark Hickman, 281-488-0848 celtel, 713-676-1460 office

Item number 3 – Cost of Structural Improvements at:

4904 Griggs Road, Houston, TX 77021

$320,000

Item number 4 – List of Attachments

1. Copy of Purchase Order including assigned number
2. Copy of Documents Returned from the City of Houston after approval of Foundation Plans
3. Copy of Proposed New Structural Drawings for City of Houston approval
4. Previously Submitted Foundation Plans on which Structure will be Built

EPAHO044000858

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021 PHONE: (713) 676-1460 FAX: (713) 6761676

Order Request Form

Purchase Order No.: 374266

Date: 2/15/08

Vendor: All Texas Permits Inc
Address: 11322 Richmond Ave Suite 235
Houston TX 77082
Contact: Diana Wilson
Phone: 281-752-7800
Fax: 281-752-7900

ITEM NO.	DESCRIPTION	QUANTITY	$ COST
	Consulting Services To Process City of Houston Permit Application For OPA Structure in regard to expediting and obtaining Permit to Construct at 4904 Griggs		$ 1200.00

Motor OIL PLANT - Item 9.3

Submitted By: Clark Hickman (281-488-0848)
Approved By: [signature]
Printed Name: Matt Bowman

OPS ☑ Yes ☐ No
Lab ☐

OFFICE USE ONLY

Internal Expense:

_____CS
_____FS
_____Trans
_____SGA
_____MRI
_____DRM

Job Expense:

What Job?: _____

☐ Give Vendor Re-Sale Certificate
☐ Vendor to Charge Sales Tax

CES:D24:6807

EPAHO044000859

Clark Hickman

From: Laurie Ramirez [lramirez89@comcast.net]
Sent: Tuesday, February 19, 2008 8:27 AM
To: Clark Hickman
Subject: City of Houston Permits

I have been extremely busy the last two weeks and have not had time to talk with you. If you still need help with you permit can you tell me the scope of your project. It is so much easier for me to communicate via email because of my schedule. I don't get much time to talk on the phone during the day so email helps me communicate faster.

Thanks.

Laurie Ramirez
LDR Services
Cell 832-526-8630
Fax 713-895-0595
lramirez89@comcast.net

ITEM NUMBER 5

EPAHO044000861

Clark Hickman

From: John Yonkers [jyonkers@tgcengineers.com]
Sent: Tuesday, January 08, 2008 1:34 PM
To: Clark Hickman
Cc: 'Jim Atkinson'
Subject: Oil Processing Structure Drawings - Issued for Construction
Attachments: T27-1352-002 Drawings.zip; T27-1352-002.pdf

Clark,

Attached are the issued for construction drawings with holds for the Oil Processing Structure.

For the 3D model you inquired about, we estimate the following:

1) To produce a 3D model showing the structure only: $7,000.00
2) To produce a 3D model showing the structure and equipment: $16,000.00

Once we have all of the equipment information and get if modeled, I would recommend having TGCE also modeling piping and generating piping isometrics.
There are at least a couple pieces of equipment that will probably need to be rotated in order to have room for the piping to fit up.

John Yonkers
Project Manager, P.E.
Texas Gulf Coast Engineers
713-477-8682

ITEM NUMBER 6

EPAHO044000863

ITEM NUMBER 7

EPAHO044000864

Pump Summary

Project: Typical Motor Oil Recycling Plan
Date: February 6, 2008

Group I: Oil Process Area

Tag	Description	Start Stop	Comments	cfm	HP	RPM	Head	GPM	Comments
P1	Feed Pump	3 Wire	Varispeed				170'	40	VFD / Gear Pump
P2	Caustic Pump	2 Wire	Varispeed				8'	0.5	@ 8 bar VFD
P3	Flash Tank Circulation Pump (Dosing Pump)	3 Wire	Soft Start				70'	2000	Centrifugal Pump
P5	Process Water Pump	3 Wire					100'	16	Centrifugal Pump
P6	Lights Product Pump	3 Wire					100'	16	Centrifugal Pump
M200	Luwa 1 Rotor (M201)	3 Wire	Varispeed						
P201	Light Lube Product Pump	3 Wire					100'	18	Gear Pump
P206	Luwa 1 Bottoms Pump	3 Wire	Varispeed				100'	15	Gear Pump
M300	Luwa 2 Rotor	3 Wire	Varispeed						
P301	Heavy Lube Product Pump	3 Wire					100'	18	Gear Pump
P306	Luwa 2 Bottoms Pump A	3 Wire	Varispeed				100'	15	Gear Pump
P307	Luwa 2 Bottoms Pump B	3 Wire	Varispeed				100'	15	Gear Pump
P401	Vacuum Blower 1	2 Wire		800	10	3550			800 CFM @ 1 mm Hg
P403	Vacuum Blower 2	2 Wire		160	3	1750			160 CFM @ 5 mm Hg
P404	Luwa Liquid Ring Vacuum Pump	2 Wire		37	7.5	1750			
P410	Front End Liquid Ring Vacuum Pump	2 Wire		100	7.5	1750			
P420	R420 Drain Pump	2 Wire			3	3460			
P505	Thermic Fluid Pump	2 Wire	Soft Start				240'	~970	Centrifugal Pump
M522	Cooling Tower Fan	2 Wire	Varispeed						
P521	Cooling Water Pump	2 Wire					60'	1200	
P601	Process Water Transfer Pump (Out Water)	3 Wire					100'	500	Centrifugal Pump
P699	Load In Pump (Black Oil Load In Transfer)	3 Wire					100'	200	
P702	Lights Transfer Pump	3 Wire					100'	100	Centrifugal Pump
P703	Heater Fuel Circulation Pump (Fuel Oil)	3 Wire					45'	15	Centrifugal Pump
P704	Lights Load Out Pump	3 Wire					100'	300	Centrifugal Pump
P705	Asphalt Load Out Pump	3 Wire					120'	100	Gear Pump
P706	Product Load Out Pump (Lube)	3 Wire					100'	200	Gear Pump

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EPAHO044000865

Group II: Clay System

Tag	Description	Start Stop	Comments	cfm	HP	RPM	Head	GPM	Comments
									125 AMP @ 480V

EPAHO04000866

ITEM NUMBER 8

EPAHO044000867

ITEM NUMBER 9

EPAHO044000868

CURRENT MAJOR PROBLEM AREAS

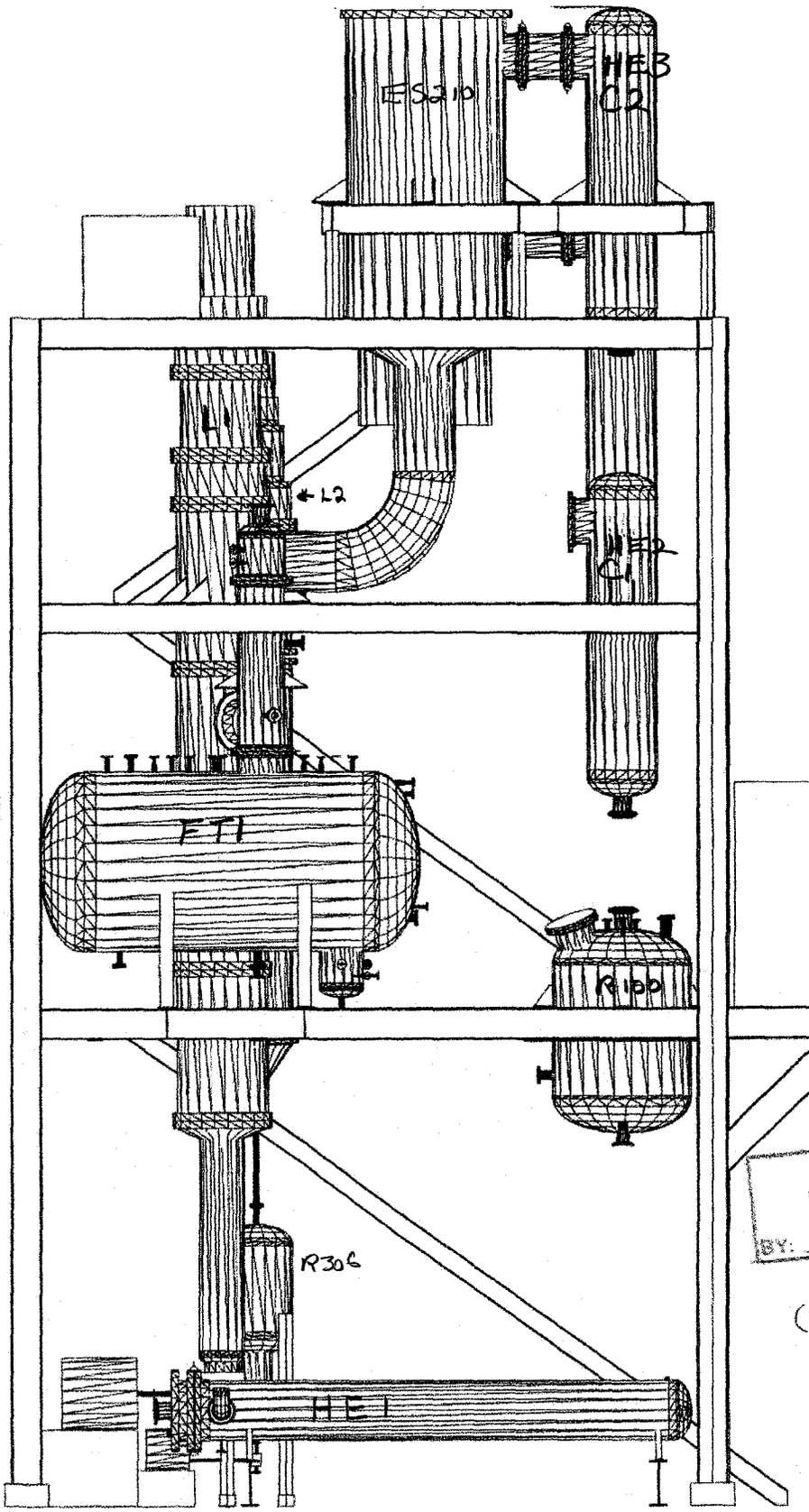
1. HE2, HE3, and HE4
2. Vacuum System

EPAHO044000869

ISSUED
FOR APPROVAL
BY: [illegible] DATE 1-30-07

PLAN-001

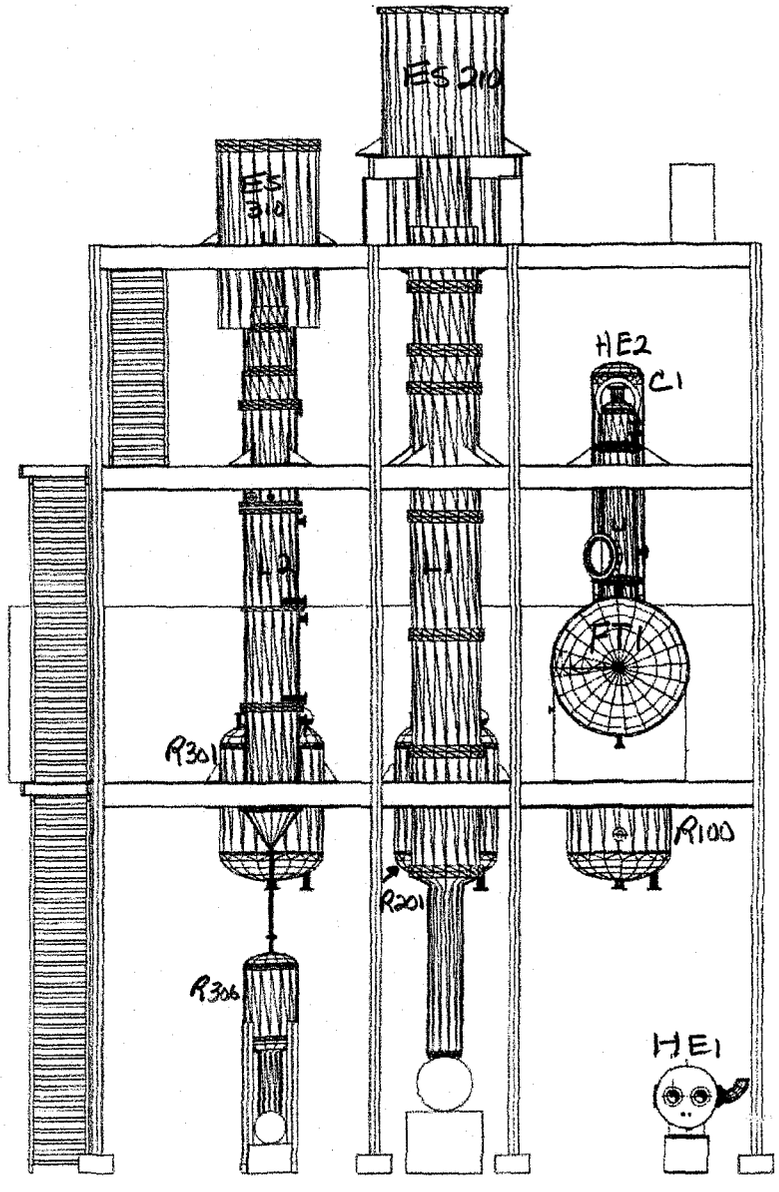
EPAHO044000870



ISSUED
FOR APPROVAL
BY: DATE 1/30/03

EAST ELEV-001
(LOOKING WEST)

EPAHO044000871



ISSUED
FOR APPROVAL
BY: [illegible] DATE 1/30/07

SOUTH ELEV-001
(LOOKING NORTH)

49

EPAHO04400872

ISSUED
FOR APPROVAL
BY [illegible] DATE 1/30/07

SOUTH-EAST ELEV.-001
(ISOMETRIC)

EPAHO044000873

ISSUED
FOR APPROVAL
BY: DATE 1/30/07

SOUTH-WEST ELEV-001
(ISOMETRIC)

EPAHO044000874

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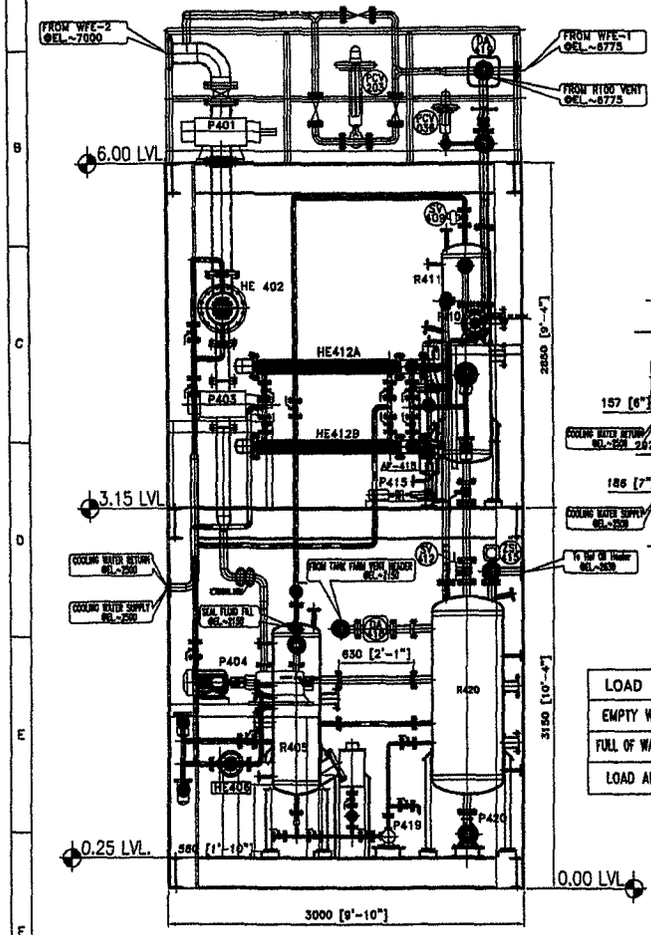
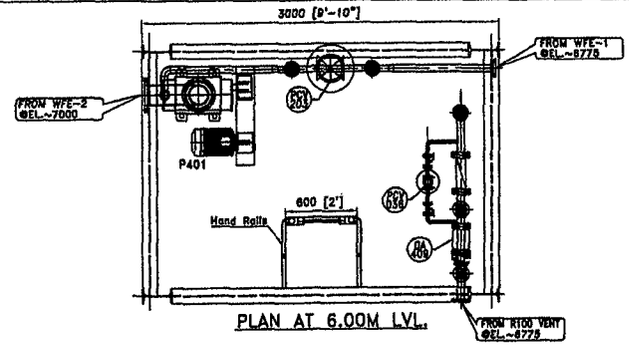
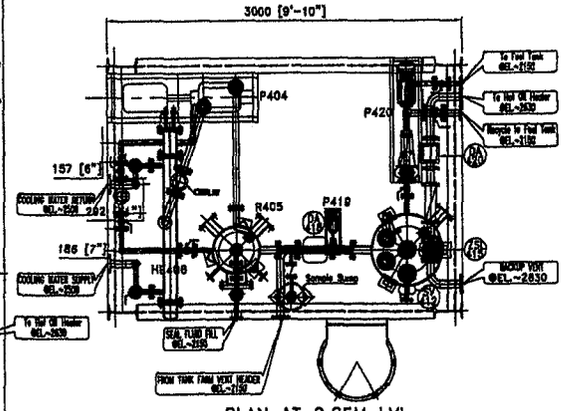
IF IN DOUBT, PLEASE ASK.



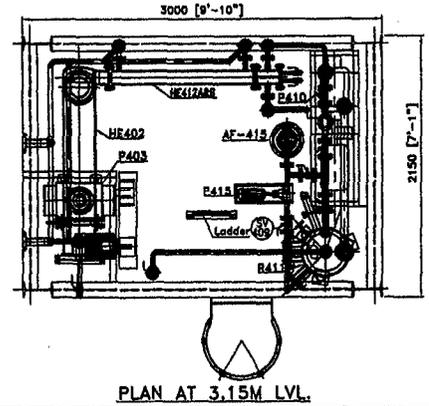
ELEVATION



PLAN AT 6.00M LVL.



PLAN AT 0.25M LVL.



PLAN AT 3.15M LVL.

LOAD DATA	VACUUM SKID
EMPTY Wt. (MT)	9.0
FULL OF WATER Wt (MT)	12.0
LOAD AREA (M^2)	6.45

NOTES:
1. UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN mm.

BEAM ENGINEERING PVT LIMITED
12 EAST CLUB ROAD, SHENOY NAGAR
CHENNAI 600 030 (INDIA)

Project: SAUDI ENVIRONMENT WORKS, SAUDI ARABIA.			REF DRG NO: 08-400
DESIGN: PRAGMATIC ENVIRONMENTAL SOLUTION Co., ROANOKE, VA, USA.			JOB NO: 446
SCALE: NTS	LAYOUT OF VACCUM SKID		ORDER/LOI NO:
SHEET: 1 OF 1	DRN: Loga	CLRD: JJW	DRG NO: 446-24
PROJ:			REV: -4- DATE: 07Jan,2007

446-24

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EPAHO044000875

Clark Hickman

From: John Winnicki [johnj@swva.net]
Sent: Tuesday, February 12, 2008 3:27 PM
To: Clark Hickman
Subject: PESCO Instruments
Attachments: PESCO Typical Instruments.xlsx; LINC-L471 25Apr07.dwg

Clark,
I have enclosed our typical Instrument specs. I have put BOLD print on the ones we were talking about yesterday.

I have also enclosed a detail of how we mount the Linc Level Switches.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000876

JJW's SOP for Purchasing of Instruments etc...

Temperature Elements

Item	Description		VENDOR	Part Number	Price	Date	Contact	Phone
Thermocouples	J type, 6" Stem, 1/2"NPT, Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	200121	$82.80		John Odden	804-379-2729
Thermocouple with Thermowell	As Above with 1" Flanged Thermowell and Spring Loaded Thermocouple.		Quantum Controls		$302.40		John Odden	804-379-2729
Thermocouples	J type, 6" Stem, 1/2"NPT, **2 Sensors in One Sleeve,** Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	JJ48U-006-00-8HN71	$102.00	5-Sep-07	John Odden	804-379-2729
Thermocouples	J type, 9" Stem, 1/2"NPT, **2 Sensors in One Sleeve,** Ungrounded, Cass 1 Div. 2 Group D		Quantum Controls	JJ48U-009-00-8HN71	$102.00	5-Sep-07	John Odden	804-379-2729

Pressure Gauges

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Pump Pressure Gauges	WIKA, 1/4" lower connection, 0-60 psi		Daughtridge Sales	213.53, -02L-60 psi.	$13.11	31-Oct-07	Any	800-334-9720
Pump Pressure Gauges	WIKA, 1/4" lower connection, 30" Vac/30 psi		Daughtridge Sales	213.53, -02L-Vac/30 psi.	$12.60		Any	800-334-9720

EPAHO04000877

Pump Pressure Gauge, Hot	4" Face, 1/4" Lower Connection, 0 - 160 psi, Welded Socket,SS Case and tube, Liquid Filled		Daughtridge Sales	4EE-GF-02L-160	$77.29	31-Oct-07	Any	800-334-9720
Process Vacuum, Ambient Temp.	4" Face, 1/4" Lower Connection, 0 - 30 " HG., Vac.		Daughtridge Sales	100mm-1008A-02L-30/0imv	$24.85		Any	800-334-9720
Pump Pressure Gauges, Chemical Seal	1/4" Gauge Connection, 4" Face, 0 - 160 psi		Daughtridge Sales	40-242.53-02L-160	$51.23		Any	800-334-9720
	1/2" NPT Chemical Seal		Daughtridge Sales	05-101-0.5	$77.50		Any	800-334-9720
Process Pressure Gauge, Ambient Temp.	4" Face, 1/4" Lower Connection, Vac/15psi		Daughtridge Sales	100mm-1008A-02L-Vac/15	$24.85		Any	800-334-9720
Process Vacuum, Ambient Temp.	4" Face, 1/4" Lower Connection, 0 - 30 " HG., Vac.		Daughtridge Sales	100mm-1008A-02L-30/0imv	$24.85		Any	800-334-9720
Steam Pressure Gauge	2-1/2" Dial, 0 - 160 psi, SS Case		Daughtridge Sales	25-1008A-02L-160psi	$17.50		Any	800-334-9720
Steam Pigtail	1/4" NPT steel Pigtail		Daughtridge Sales		$1.63		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 15 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-15psi	$3.50		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 30 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-30psi	$3.50		Any	800-334-9720
Air Pressure Gauge for I/P Outputs	0 - 160 psi, 1/4" Bottom Connect		Daughtridge Sales	25YL4P02L-160psi	$3.50		Any	800-334-9720
Moore Level Control Gauges	0 - 30 psi, 1/4" Back Connect, Imported		Daughtridge Sales	20YB4P02B30	$2.50		Any	800-334-9720
	0 - 30 psi, 1/4" Back Connect, Ashcroft		Daughtridge Sales	20100502B30	$7.88		Any	800-334-9720
Differential Pressure Gauges								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**

EPAHO04400878

Hot Oil Heater DP Gauge	0 - 60 psid, 4.5" Gauge		Daughtridge Sales	45-1125	$707.78	########	Any	800-334-9720
Hot Oil Heater DP Gauge	0 - 60 psid, 4.5" Gauge. Brass		Carotek	45 - 1130	$227.00	########	Any	804-279-8800
Temperature Gauges								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**
Small Temperature Gauges	Imported, 3" Dial, 4" Stem, 1/2" rear connect, 0 - 250 Deg. F		Daughtridge Sales	T3-4" - 0-250F	$13.20		Any	800-334-9720
Large Temperature Gauges	Imported, 5" Dial, 4" Stem, 1/2" rear connect, 0 - 250 Deg. F		Daughtridge Sales	T5-4" - 0-250F	$16.20		Any	800-334-9720
Level Switches								
Item	**Description**		**VENDOR**	**Part Number**	**Price**	**Date**	**Contact**	**Phone**
Top Mounted Level Switch	**Slurry Switch. 2" NPT. Mechanism out of process. 24" Float**		**Innovative Components**	**Model HTS-2024. Stock # 93831**	**$404.00**		**Pete Meade**	**800-789-2851**
Interface Level Switch	Thermal Switch for detecting Interface. 24VDC Powered.		Ameritrol	Ix-0750-d	$350.00		John Jackson	800-910-6689
Interface Level Switch	Ametek Z-Tron III		United Controls		$335.00		Bill Fergeuson/ Mark Leonard	804-527-6500
Side Mounted Level Switch	**Linc Level Switch. 1-1/2" NPT which must be installed in a 3" Flange**		**AWC**	**L471-01**	**$216.13**	########	**Any**	**800-413-6623**
	High Temp Switch Cartridge (500F) for L471-01		AWC	24835	$138	14-Aug-07	Katie	800-413-6623
Differential Pressure Switch								

EPAHO04400879

Item	Description		VENDOR	Part Number	Price		Contact	Phone
Hot Oil Heater DP Switch	0 - 60 psid, Teflon/Viton Elastomers		Carotek	United Electric 24-031	$185.00	########	Any	804-279-8800
Current Transducer								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**
AC Current Transducer	0 - 20 Amps clamp on Sensor, 4 - 20 mA output.		Riley Corp. Sales	Model 420	$198.00			800-545-5915
PID Controller								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**
Fuji Panel Mounted PID Controller	K Type Input, 4 - 20 output, 0 Alarm Contact		Hampton Controls	PXR4-REY1-4V0A1	$179.00		Jim	800-437-2664
Fuji Panel Mounted PID Controller	K Type Input, 4 - 20 output, 2 Alarm Contacts		Hampton Controls	PXR4-REY1-GV0A1	$309.00		Jim	800-437-2664
Pneumatic Level Controller								
Item	**Description**		**VENDOR**	**Part Number**	**Price**		**Contact**	**Phone**
Pneumatic Level Controller	Fisher L2 Pneumatic Level Controller, PVC Displacer		Control Dynamics		$519.58	May-07	Joel Webber	804-858-5800
Pneumatic Level Controller	**Fisher L2 Pneumatic Level Controller, 316SS Displacer**		**Control Dynamics**		**$601.75**	**Dec-07**	**Joel Webber**	**804-858-5800**

EPAHO04400880

Clark Hickman

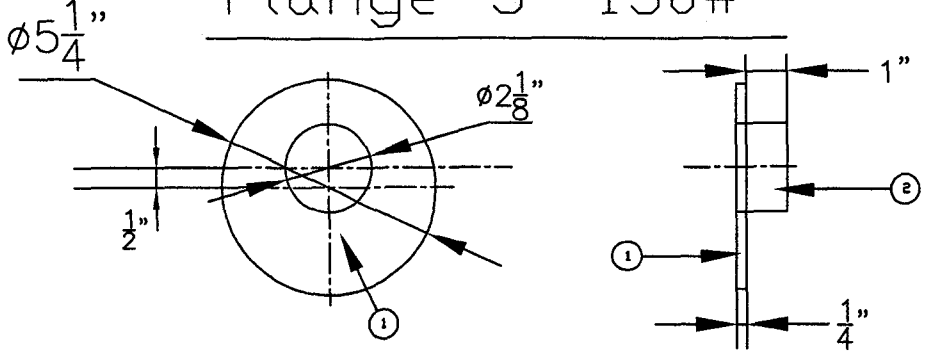
From: John Winnicki [johnj@swva.net]
Sent: Wednesday, February 13, 2008 5:50 PM
To: Clark Hickman
Subject: Linc Installation in PDF
Attachments: LINC-L471 25Apr07 - Install.pdf; LINC-L471 25Apr07- Flange.pdf

Clark,
Here are the Linc's in PDF Format.

John Winnicki
Design Engineer
PESCO - BEAM
540-427-3588 (o)
540-529-2112 (cell)

EPAHO044000881

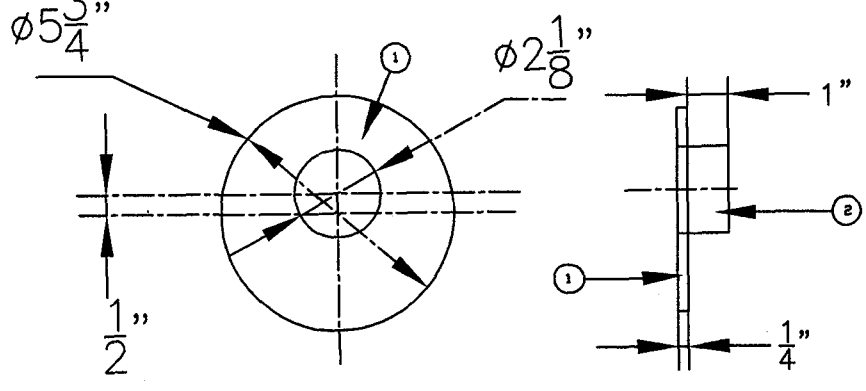
Flange 3″ 150#



① 1/4″ 304 SS plate

② 1 1/2″ 304 SS half coupling

Flange 3″ 300#

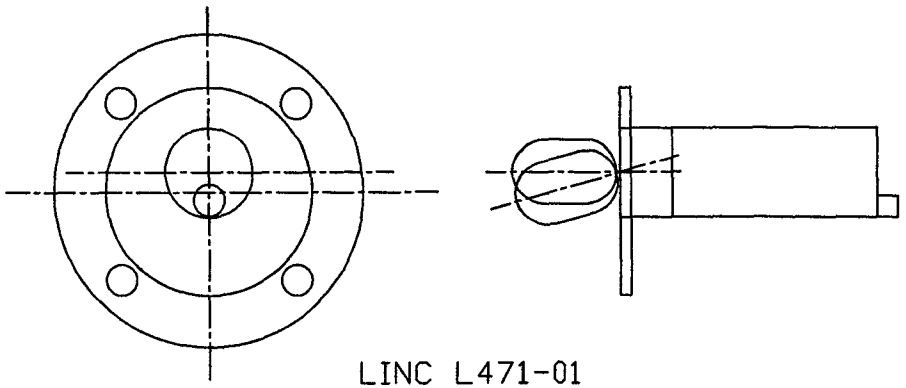


① 1/4″ 304 SS plate

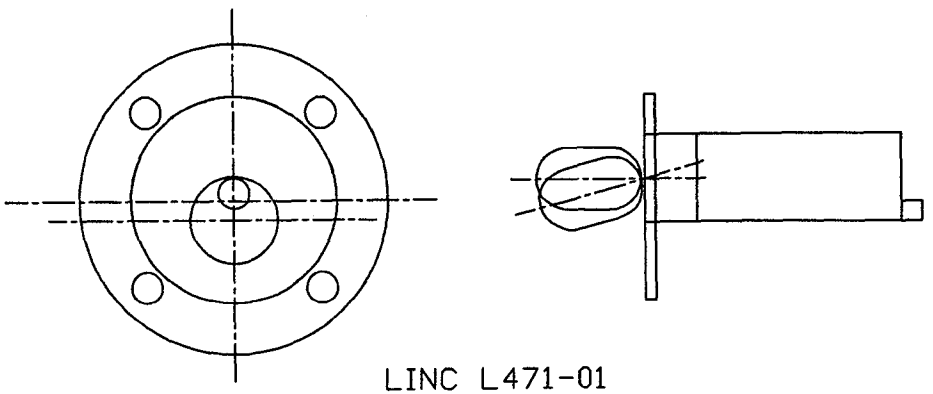
② 1 1/2″ 304 SS half coupling

PESCO	Pragmatic Environmental Solutions Co., 1866 Technical Street, S.E., Roanoke Industrial Center, Roanoke, Virginia 24013, USA.				
Plate for Linc L471-01					REF. DRG. : NONE.
SCALE: N.T.S.					JOB NO:
DATE:					ORDER REF.:
SHEET: 1 OF 1	DRN: JJW	CHD: JJW	APPD: JJW	DRG NO :	REV:0 DATE: 25APRIL07

EPAHO044000882



LINC L471-01
Low level position



LINC L471-01
High level position

PESCO

Pragmatic Environmental Solutions Co.,
1866 Technical Street, S.E.,
Roanoke Industrial Center,
Roanoke, Virginia 24013, USA.

Installation of Linc L 471-01					REF. DRG. : NONE.
SCALE: N.T.S.					JOB NO:
DATE:					ORDER REF.:
SHEET: 1 OF 1	DRN	CHD	APPD	DRG NO :	REV:0 DATE: 25APRIL07
	JJW	JJW	JJW		

EPAHO044000883

Port Arthur facility

EPAHO04400884

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

June 11, 2008

Gary Livengood
Chief Executive Office
LA Ash, Inc.
P.O.Box 1728
Sulphur, LA 70664

Re: Purchase and sale of land and building located in Port Arthur, Texas, consisting of approximately 12.067 acres – legal description attached as Exhibit 1 (hereafter referred to as "Property").

Dear Gary:

The purpose of this letter is to establish a binding agreement regarding the general terms and intent of the parties with respect to the purchase of the Property. In furtherance of our recent conversations and meeting, we (LA Ash, Inc. and CES Environmental Services Inc {or related entity controlled by Matt Bowman} – "CES") envision the following transaction:

a) We will divide the Property into two tracts. One tract will contain the barge dock, the existing warehouse (approximately 112,000 sq. ft.), and about 1.5 acres additional land ("Tract A"). The other tract will consist of the remaining acreage (approximately) 8 acres ("Tract B"). Unless LA Ash provides prior written consent, the sale and closing will involve both tracts (A & B). Together, Tract A and B will include the entire property described as Exhibit 1.

b) CES will purchase Tract A from LA Ash for a $3 million purchase price. Within 25 days from the date of this letter, we (CES) will diligently seek financing sources to purchase Tract A, as follows: a third party first lien note of at least $ 3 million, due in full on or after 10 years, payable in monthly payments of principal and interest, with interest not exceeding 7.8% per annum throughout the term of the loan. Financing shall be deemed to have been obtained when CES has satisfied all of lender's financial conditions. If financing is not obtained by October 1, 2008, this letter agreement shall be null and void, and LA Ash shall have no further liability or obligation to CES.

c) CES will purchase Tract B for a $ 2 million purchase price. LA Ash will provide CES with interest only owner financing at 7% per annum interest on outstanding balance where the full $ 2 million principle is payable on or before 5/31/13. Moreover, we will lease Tract B back to you after closing on mutually agreeable terms for the term of the lease) for a period not to exceed 5 years or until such time as we repay the outstanding balance of owner financing. Such lease terms will be non-assignable without prior written consent of CES and include the following:

- A monthly lease payment of $ 11,666.67
- Usage rights contained in the lease will provide equal access to the barge dock for loading and unloading (each party may have one vessel at the dock at one time for up to 3 consecutive days), equal access to the road, and equal access to the truck scale;
- CES will maintain the property in its current or better condition, except to the extent damage is caused by LA Ash;

CES Environmental Services, Inc.

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- Each party shall name the other a party as an additional insured on its general liability insurance policies (limits of $2M minimum);
- The parties will work together and communicate promptly to provide for an efficient and mutually beneficial operation of the Property.

If, for any reason, CES fails to fully liquidate the outstanding balance of owner financing before 5/31/13, LA Ash may exercise its lien rights to foreclose Tract B.

d) The promissory notes shall be secured by vendor's and deed of trust liens. No financing shall be subject to a prepayment penalty.

e) CES, at CES's expense, will provide title insurance for the closing.

f) CES will accept the Property in its present AS-IS condition, subject to acceptable environmental survey results. CES, at its expense, may perform physical inspections of the property (e.g., environmental surveys or assessments).

g) CES, at CES's expense, will promptly furnish to LA Ash a plat of a current survey identifying Tract A and Tract B by meets and bounds.

h) CES has not and will not involve a real estate agent and/or broker in this transaction. LA Ash is responsible for any real estate and/or broker(s) fees associated with this transaction.

i) We intend to close the sale of Tracts A & B on or before September 30, 2008. You shall deliver possession of the Property to us at closing. In the interim, CES will lease the Property from you for a lease rate of $ 40,000.00 per month (30 days) or part thereof. If closing is delayed for any reason not directly caused by either CES or LA Ash, we agree to maintain this lease until closing. CES intends to make reasonable improvements to Tract A during the lease term prior to closing. Such improvements may include setting of tanks, piping, providing power to process vessels and equipment, upgrades to the dock, establishing a temporary mobile office, lighting, and other similar improvements. Until closing, CES will operate in good faith to insure LA Ash is aware of improvements prior to installation. If this letter agreement becomes null and void for any reason, at the request of LA Ash, CES will promptly remove, at its own expense, any improvements installed by CES. Further, until closing, CES will name LA Ash as an additional insured with waiver of subrogation on our General Liability and Pollution policies.

j) CES will pay for all closing costs except real estate agent fees as otherwise indicated in this agreement. Such closing costs will include, but not limited to, title insurance, financing cost, and survey cost. We agree to prorate Property taxes for the current year based on the closing date.

k) The closing of this transaction by CES is subject to the following:

- CES obtaining financing acceptable to CES as described above.

CES Environmental Services, Inc.

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Houston, TX 77021
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- The Property being usable for the purposes for which we intend (i.e., waste processing, recycling, and transportation facility).
- Environmental survey results acceptable to CES.

CES, at CES's expense, may perform physical inspections of the Property. CES has 30 days from the date hereof to perform such inspections and in this regard, CES or CES's designated agents may enter upon the Property for purposes of such inspections. If CES determines that the Property is not suitable for CES's intended use or in satisfactory environmental condition, then CES may, on written notice to LA Ash on or before 35 days from the date hereof terminate this letter agreement and it shall be null and void.

l) If there is a material default of this letter agreement by CES, then LA Ash shall promptly give CES specific written notice of such default. CES has thirty (30) days, to cure such default. If CES fails to cure such default of this letter agreement within the 30 days, then this letter agreement shall be null and void, and LA Ash shall have no further liability or obligation to CES.

m) It is the intent of both parties to work in good faith to achieve a prompt closing of the sale. This letter agreement contains the entire agreement of the parties and cannot be changed except by their written agreement. Time is of the essence.

If this letter of intent accurately expresses your understanding of our mutual agreement, please sign and date below and return to us promptly. Unless accepted by you sooner, this offer becomes null and void on close of business June 15th, 2008.

Sincerely,

Greg Bowman
Vice President, Finance and Administration

Agreed to this 12thd day of June, 2008.

LA Ash, Inc.

By_____
Its_____

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Exhibit 1: Property (as depicted by Soutex Surveyors, Inc.; Section No. 122, Abstract No. 485 Jefferson County, Texas)

Together, the descriptions Tract I and Tract II below identify the entire property being conveyed in this sale transaction. As indicated in the Letter of Agreement, CES will pay to have the existing parcels surveyed and redefined as Tract A and Tract B as depicted in the attached diagram. Tract A will incorporate the warehouse, dock, and adjacent areas (approximately 4 acres). Tract B is the remaining property (approximately 8 acres).

TRACT I
11.110 ACRES OF LAND, OUT OF THE
T.& N.O.R.R. SURVEY, SECTION NO. 122, ABSTRACT NO. 486,
JEFFERSON COUNTY, TEXAS

BEING 11.110 acres of land and water out of and a part of the T.& N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being part of a (Called 12.811) acre tract of land conveyed to M & M Industrial Services, Inc., recorded in File No. 2000048320, Official Public Records of Real Property, Jefferson County, Texas; said 11.110 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a 2" steel pipe found for the Northwest corner the (Called 12.811) acre tract; said 2" steel pipe being the Southwest corner of a (Called 4.6) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records of Real Property, Jefferson County, Texas; being on the Easterly right of way line of a 100' wide Santa Fe Railroad right of way and being the Northwest corner of the herein described tract;

THENCE, Ref. Line = North 68 deg., 45 min., 52 sec., East, on the South line of the (Called 4.6) acre tract, same being the North line of the (Called 12.811) acre tract, a distance of 732.03' to a 2" steel pipe found for the Northwest corner of a tract of land conveyed to BJJ Enterprises, recorded in File No. 2005042372, Official Public Records of Real Property, Jefferson County, Texas; said 2" steel pipe being the most Northerly Northeast corner of the herein described tract;

THENCE, South 21 deg., 18 min., 41 sec., East, on the Westerly line of said BJJ Enterprises tract, a distance of 278.36' to a punch mark found in a fence footing for the Southwest corner of said BJJ Enterprises tract; said punch mark being an interior corner of the herein described tract;

THENCE, North 68 deg., 36 min., 54 sec., East, on the Southerly line of said BJJ Enterprises tract, a distance of 304.65' passing a ½" steel rod found for reference point; continuing for a total distance of 462.40' to a point for corner in the water for the most Easterly Northeast corner of the herein described tract;

CES Environmental Services, Inc.

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Houston, TX 77021
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Tract 1 (Continued)

THENCE, South 42 deg., 56 min., 25 sec., East, a distance of 300.51' to a point for corner in the water for the Southeast corner of the herein described tract;

THENCE, South 68 deg., 45 min., 58 sec., West, a distance of 237.03' to a ½" steel rod found for reference point being on the North line of a (Called 29.0522) acre tract of land conveyed to KMCO Inc., know as Tract II, recorded in File No. 9519107, Official Public Records of Real Property, Jefferson County, Texas; continuing on the Northerly line of the (Called 29.0522) acre tract, a total distance of 363.03' to a ½" steel rod, capped and marked "SOUTEX", found for the Southeast corner of a (Called 1.708) acre tract of land conveyed to KMCO Port Arthur, Inc., recorded in File No. 2006017962, Official Public Records of Real Property, Jefferson County, Texas;

THENCE, North 21 deg., 16 min., 40 sec., West, on the East line of the (Called 1.708) acre tract, a distance of 46.73' to a ½" steel rod, capped and marked "SOUTEX", found for the Northeast corner of the (Called 1.708) acre tract;

THENCE, South 68 deg., 43 min., 20 sec., West, on the North line of the (Called 1.708) acre tract, a distance of 537.08' to a ½" steel rod, capped and marked "SOUTEX", found for point of curvature;

THENCE, on the arc of a curve to the right having a radius of 500.00', an arc length of 496.24', a chord bearing of North 82 deg., 31 min., 46 sec., West, a chord distance of 476.12' to a ½" steel rod, capped and marked "SOUTEX", found for point of tangency; said ½" steel rod being on the Easterly line of said Sante Fe Railroad 100' wide right of way and being the Southwest corner of the herein described tract;

THENCE, North 18 deg., 49 min., 54 sec., West, on the Easterly line of said Sante Fe Railroad 100' wide right of way, a distance of 281.58' to the POINT OF BEGINNING and containing 11.110 acres of land and water, more or less.

CES Environmental Services, Inc.

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TRACT II
0.9657 ACRE OF LAND, OUT OF THE
T.& N.O.R.R. SURVEY, SECTION NO. 122, ABSTRACT NO. 486,
JEFFERSON COUNTY, TEXAS

BEING 0.9657 acre of land out of and a part of the T.& N.O.R.R. Survey, Section No. 122, Abstract No. 486, Jefferson County, Texas; being the same land conveyed to United State Steel, (Called 0.967) acre tract, recorded in Volume 857, Page 12, Deed Records, Jefferson County, Texas; said 0.9657 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a 3/8" steel rod found on the Easterly right of way line of a dedicated road named State Highway 87; said 3/8" steel rod being the Southwest corner of a (Called 0.85) acre tract of land conveyed to TDI Halter, recorded in File No. 9505316, Official Public Records of Real Property, Jefferson County, Texas and being the Northwest corner of the herein described tract;

THENCE, North 68 deg., 20 min., 57 sec., East, on the South line of the (Called 0.85) acre tract, a distance of 79.90' to a 5/8" steel rod found for the Southeast corner of the (Called 0.85) acre tract; said 5/8" steel rod being on the Westerly line of a 100' wide Santa Fe Railroad right of way and being the Northeast corner of the herein described tract;

THENCE, South 18 deg., 49 min., 54 sec., East, on the Westerly line of said Santa Fe Railroad right of way, a distance of 557.88' to a point for corner being the Northeast corner of a (Called 2.4662) acre tract of land conveyed to KMCO, Inc, known as Tract 2 A, recorded in File No. 9519107, Official Public Records of Real Property, Jefferson County, Texas; said point for corner being the Southeast corner of the herein described tract;

THENCE, South 68 deg., 33 min., 43 sec., West, on the North line of said Tract 2 A, a distance of 71.17' to a 5/8" steel rod found for the Northwest corner of said Tract 2 A; said 5/8" steel rod being on the Easterly right of way line of said State Highway 87, and being the Southwest corner of the herein described tract;

THENCE, North 19 deg., 43 min., 40 sec., West, on the Easterly right of way line of said State Highway 87, a distance of 557.08' to the POINT OF BEGINNING and containing 0.9657 acre of land, more or less.

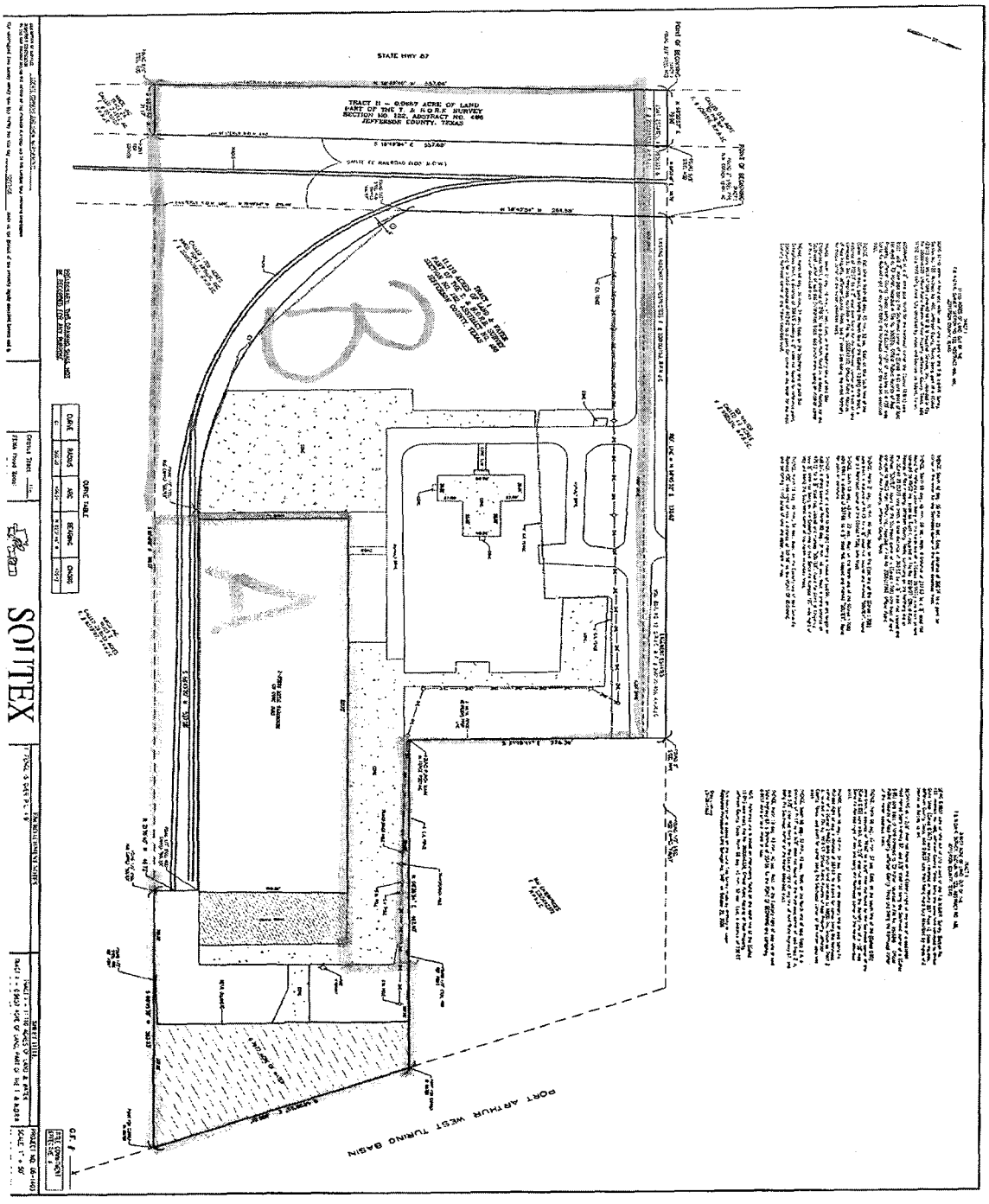
NOTE: Reference line is based on monuments found on the North line of the (Called 12.811) acre tract, File No. 2000046320, Official Public Records of Real Property, Jefferson County, Texas, North 88 deg., 45 min., 52 sec., East, a distance of 732.03'.

This description is based on the Land Title Survey made by Anthony M. Leger, Registered Professional Land Surveyor No. 5481, on October 25, 2006.

Gray Livinday
LS-06-1403

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676



CES Environmental Services, Inc.

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Tel. (713) 676-1460
Fax. (713) 676-1676

- The Property being usable for the purposes for which we intend (i.e., waste processing, recycling, and transportation facility).
- Environmental survey results acceptable to CES.

CES, at CES's expense, may perform physical inspections of the Property. CES has 30 days from the date hereof to perform such inspections and in this regard, CES or CES's designated agents may enter upon the Property for purposes of such inspections. If CES determines that the Property is not suitable for CES's intended use or in satisfactory environmental condition, then CES may, on written notice to LA Ash on or before 35 days from the date hereof terminate this letter agreement and it shall be null and void.

l) If there is a material default of this letter agreement by CES, then LA Ash shall promptly give CES specific written notice of such default. CES has thirty (30) days, to cure such default. If CES fails to cure such default of this letter agreement within the 30 days, then this letter agreement shall be null and void, and LA Ash shall have no further liability or obligation to CES.

m) It is the intent of both parties to work in good faith to achieve a prompt closing of the sale. This letter agreement contains the entire agreement of the parties and cannot be changed except by their written agreement. Time is of the essence.

If this letter of intent accurately expresses your understanding of our mutual agreement, please sign and date below and return to us promptly. Unless accepted by you sooner, this offer becomes null and void on close of business June 15th, 2008.

Sincerely,

Bowman 6/11/08

Greg Bowman
Vice President, Finance and Administration

Agreed to this 12thd day of June, 2008.

LA Ash, Inc.

By _____ 6/12/08
Its _____

Due Diligence Questions
Louisiana Ash property – Port Arthur, TX

Property (real estate) questions

1. *How much is owed on this property? (Does Louisiana Ash own it outright?)*
   LA ASH OWNS THE PROPERTY THROUGH A BANK LOAN.
2. *Are there any liens on the property? YES. BANK IS WILLING TO RELEASE LIEN ON PART OF THE PROPERTY AS LONG AS THE APPRAISED VALUE FOR THE REMAINDER IS EQUAL TO OR LARGER THAN THE OUSTANDING LOAN.*
3. *Are there any industrial designs of this property? NOT SURE. WE CAN GET ACCESS TO THIS FROM LA ASH OR FROM THEIR REALTOR...*

City/County Zoning questions

1. *Is the property in Port Arthur city limits or Jefferson County? Taxed by Jefferson County and Port Arthur.*
2. *What is the zoning? (Light Industrial vs. Heavy Industrial. We need heavy industrial zoning because of the chemical processes – treating hazardous waste)*
3. *Any restrictions against handling hazardous wastes?*
4. *What licenses and permits do we need to start doing business within 90 days?*
5. *What licenses are needed to build permanent structures for industrial processes?*
6. *What city/county services provided on site (wastewater -no, electricity - yes, natural gas – line stubbed up at front of property)?*

Environmental questions

1. *What are the environmental quality rules (air quality, soil, etc)?*

Tax questions

1. *Assessed tax value of property?$ 432,680.00*
2. *When was last assessment?*
3. *Are there any tax credits available that could reduce our tax base?*

Matt Bowman

From: Greg Bowman
Sent: Sunday, May 25, 2008 6:06 PM
To: glivengood@laash.net; jhite@laash.net
Cc: Matt Bowman
Subject: Port Arthur Property

Gary & Jesse:

It was a pleasure to meet you last week. Our entire team was impressed with your operation and with you as individuals.

We really appreciate your time and would like to make an offer. I feel certain that if we can agree on the pricing, and the terms and conditions, the financing and arrangements with the bank will fall into place.

We know you'd like to get your investment out of the proeprty and put the money to work someplace else. We'd like to acquire the entire site but are somewhat limited in our ability to make full use of the location at this juncture. As we discussed in your office, this offer will be a little give and take.

We want to purchase the property in stages. $ 3 million for the first half of the property - $ 1.5 million immediately upon funding from the bank, $ 1.5 million after 3 years. CES pays 7% interest on the outstanding balance until the $ 3 million is liquidated. At this point we would each own half the property with unrestricted access to the dock and rail if/when available. At the end of 5 years, CES would pay an additional 2.5 million to acquire the remainder of the site.

Other conditions:

- CES has the option, without penalty, to accelerate payment (liquidate $ 3 million early and/or $ 2.5 million final buyout).
- Both parties agree that the final outcome of the agreement is full purchase by CES on or before the timeline detailed above. This element of the agreement is binding on both parties.
- CES would engage in immediate lease ($ 40K per month) until the deal closes (funds).
- Until full acquisition by CES, each party would be responsible for 50% of the real property tax. Each party would be responsible for its own personal property tax. Both parties will operate in good faith to insure the successful utilization of the site by the other party.
- This offer is contingent upon securing third-party funding for the purchase of the property.

We definitely want to purcahse the site. This offer is a place to start us down that path. Please give me a call on my cell once you've had time to review the offer (713-419-6076).

EPAHO04400894

Matt Bowman

From: Maury Hudson [Maury.Hudson@cheniere.com]
Sent: Thursday, April 03, 2008 8:37 AM
To: Matt Bowman; Greg Bowman
Subject: Distillation

Matt/Greg,
If you are interested, and "just for kicks", pull together a little info on the distillation split you are trying to make and send it to me. I'll take a look and see if anything jumps out at me.

Data on the process stream:

- What is the composition of the feed stream? (including contaminating salts...if they are low boilers, they may actually vaporize into the vapor stream)
- What is the daily volume you wish to process? How many hours a day do you wish to run the operation? (trying to determine flow rate requirements)
- What are the purities you wish to achieve on the product streams?

Data on your existing equipment:

- I need a basic sketch of the distillation apparatus showing all the components (with volumes/capacities) and piping (with diameters/sizes) and how it is arranged.
- Are you running it as a batch still or continuous distillation? If continuous, what is the feed flow rate?
- The trailer seems to act as a bottom holding area for the fluid, does it have any internals...or is it just an open tank?
- Does the separation occur in the trailer (if has internals)? Or in the main central pipe leaving the trailer? Is the pipe packed or trayed or just open?
- At what pressure are you running the apparatus?
- Are you providing reflux (part of condensed liquid flow from overhead routed back to the top of the apparatus)? At what rate?
- What are the capabilities of the boiler? Flow rate? Pressure/Temperature?
- What are the capabilities of the chiller? Btu's removed, temperature of cooling fluid?
- Are you using a heat exchanger for putting heat in and recovering all the condensate back to the boiler or using direct steam injection to the still?
- I think I saw a heat exchanger...what are its specs...heat transfer area, number of tubes, number of passes, pressure and temperature ratings, etc?
- What kind of instrumentation do you have and in what locations for flow, temperature, pressure? (You need a temperature profile on your separation column to see if/where your split is occurring; you need pressures to check differential pressure across apparatus...high delta P corresponding to high flow rate and overloading the equipment can hurt separation efficiency; you need flow rates to match your liquid draw rate on the overhead to the amount of the overhead purified component contained in the feed stream)

I can take a quick look and see what might be going on. Just my first glance yesterday, it looks like you guys may be wasting a lot of energy...but maybe not, I just need to look at it. I'm also hoping it is run at atmospheric pressure...I didn't see any relief valves, although they may have been there. If not, we may need to talk about a relief case. I can approach it from a couple of directions too, making your existing equipment work...or laying out the design for a more efficient new setup...you can buy distillation equipment used from a lot of sources.

Let me know what you think. If interested,send the info to my home email: mauryhudson@comcast.net. If I design something for you and it works we can work out a consulting fee of some kind.
Thanks.

Maury B. Hudson
Senior Process Engineer
Cheniere LNG O&M Services, L.P.

713 375 5642 (office)
maury.hudson@cheniere.com

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3/31/2008

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Gary Livengood
Chief Executive Office
LA Ash, Inc.
P.O.Box 1728
Sulphur, LA 70664

Re: Purchase and sale of land and building known as _____, Port Arthur, Texas, consisting of approximately 12.067 acres – legal description attached ("property")

Dear Gary:

In furtherance of our recent conversations and meeting, we (LA Ash, Inc. and CES Environmental Services Inc {or related entity controlled by Matt Bowman} – "CES") envision the following transaction:

a) We will divide the property into two tracts. One tract will contain the barge dock, the existing warehouse (approximately 112,000 sq. ft.), and about 1.5 acres ("Tract A"). The other tract will consist of the remaining acreage (approximately) 8 acres ("Tract B").

b) CES will purchase Tract A from LA Ash for a $3 million purchase price. We (CES) will promptly seek financing from our bank to purchase Tract A.

c) CES will purchase Tract B for a $ 2 million purchase price. LA Ash will provide CES with interest only owner financing at 7% per annum interest on outstanding balance where the full $ 2 million principle is payable on or before 5/31/13. Moreover, we will lease Tract B back to you after closing on mutually agreeable terms ($ 11,666.67/month) for a period not to exceed 5 years or until such time as we repay the outstanding balance of owner financing. Such terms will include very favorable Tract A use rights during the term of the lease (including equal access to use of the dock and road). If, for any reason, CES fails to fully liquidate the outstanding balance of owner financing before 5/31/13, LA Ash may retake possession of the property without recourse from CES.

d) We will use Stewart Title Company as the title company. It will furnish, at our expense, title insurance at closing.

e) CES will accept the property in its present AS-IS condition, subject to acceptable environmental survey results.

f) CES will pay for and furnish the two surveys.

g) CES will not involve a broker in this transaction. LA Ash is responsible for any broker(s) fees associated with this transaction.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

h) We intent to close the sale on or before September 30, 2008. You shall deliver possession of the property to us at closing. In the interim, CES will lease the property from you for a lease rate of $ 40,000.00 per month (30 days) or part thereof. If closing is delayed for any reason not directly caused by either CES or LA Ash, we agree to maintain this lease until closing.

i) CES will pay for all closing costs. We agree to prorate Property taxes for the current year based on the closing date.

j) The closing of this transaction is subject to our obtaining bank financing acceptable to us and the property being usable for the purposes for which we intend.

k) This letter agreement contains the entire agreement of the parties and cannot be changed except by their written agreement. Time is of the essence.

If this letter of intent accurately expresses you understanding of our mutual agreement, please sign and date below and return to us promptly. Unless accepted by you sooner, this offer becomes null and void on close of business June 15th, 2008.

Sincerely,

Greg Bowman
Vice President, Finance and Administration

Agreed to this 2nd day of June, 2008.

_____, Inc.

By_____
Its_____

CES Environmental Services, Inc.

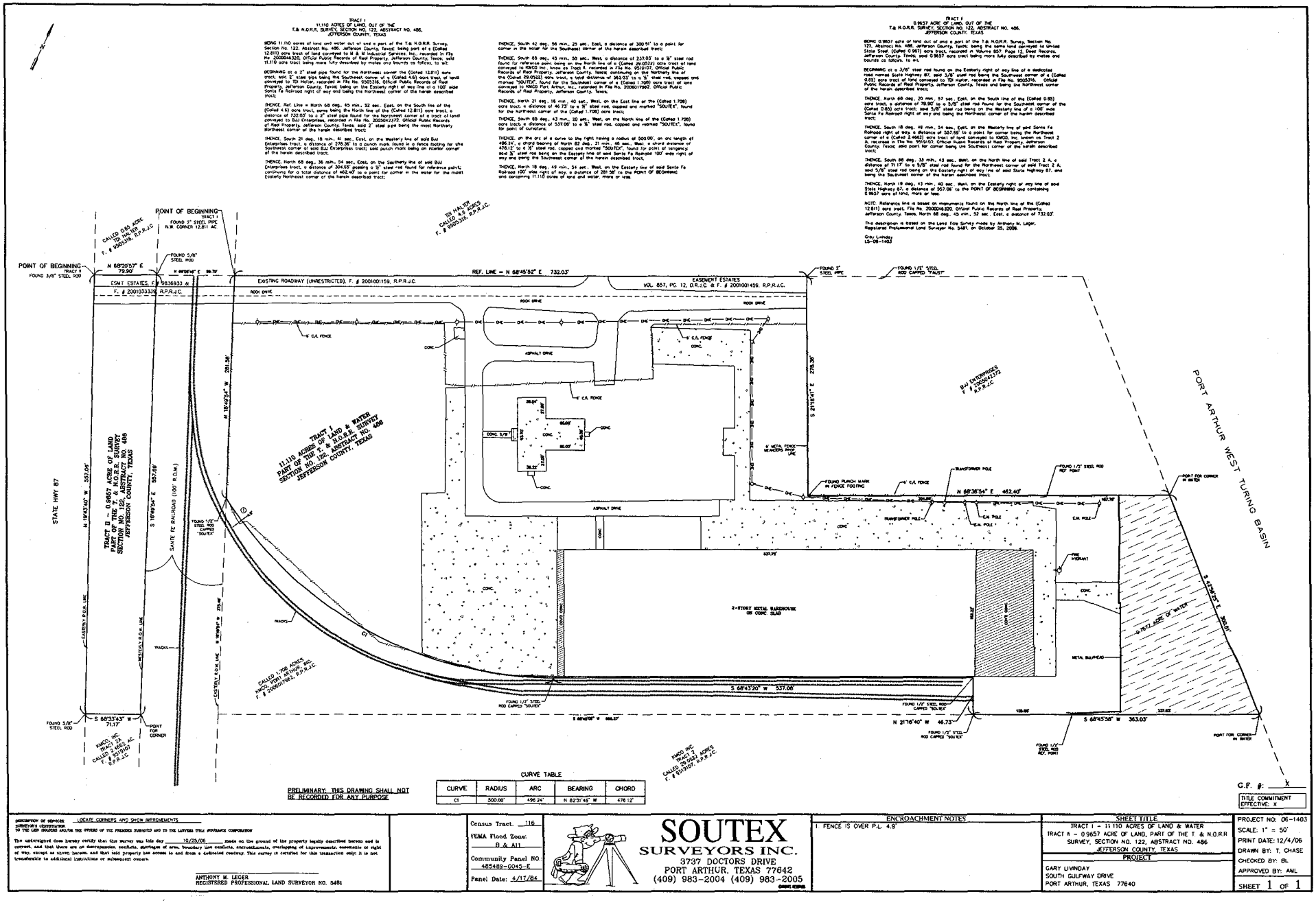
4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Property (as depicted by Jefferson County Appraisal District)

Parcels below do not designate Tract A and Tract B as described in the note above. Tract A will incorporate the warehouse and dock and adjacent area (approximately 4 acres). Tract B is the remaining property (approximately 8 acres).

HIGHWAY87 PORT ARTHUR
TRS 7 & 11
486 M BROUSSARD 11.100
ABSTRACT 300486
JCAD account number: 300486-000-003000-00000-5

PORT ARTHUR
TR 19
486 M BROUSSARD .967
ABSTRACT 300486
JCAD account number: 300486-000-003050-00000-0



CURVE TABLE				
CURVE	RADIUS	ARC	BEARING	CHORD
C1	500.00'	496.24'	N 82°31'46" W	476.12'

PRELIMINARY: THIS DRAWING SHALL NOT BE RECORDED FOR ANY PURPOSE

G.F. #: X
TITLE COMMITMENT EFFECTIVE: X

DESCRIPTION OF SERVICES: LOCATE CORNERS AND SHOW IMPROVEMENTS
SURVEYOR'S CERTIFICATION
TO THE USE PERSONS AND/OR THE OWNERS OF THE PREMISES SUBMITTED AND TO THE LAWYERS TITLE INSURANCE CORPORATION

The undersigned does hereby certify that this survey was this day 10/25/06 made on the ground of the property legally described hereon and is correct, and that there are no discrepancies, conflicts, shortages of area, boundary line conflicts, encroachments, overlapping of improvements, easements or right of way, except as shown hereon, and that said property has access to and from a dedicated roadway. This survey is certified for this transaction only; it is not transferable to additional institutions or subsequent owners.

ANTHONY M. LEGER
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481

Census Tract: 116
FEMA Flood Zone: B & A11
Community Panel NO.: 485469-0045-E
Panel Date: 4/17/84

SOUTEX
SURVEYORS INC.
3737 DOCTORS DRIVE
PORT ARTHUR, TEXAS 77642
(409) 983-2004 (409) 983-2005

ENCROACHMENT NOTES
1. FENCE IS OVER P.L. 4.9'

SHEET TITLE
TRACT I – 11.110 ACRES OF LAND & WATER
TRACT II – 0.9657 ACRE OF LAND, PART OF THE T. & N.O.R.R SURVEY, SECTION NO. 122, ABSTRACT NO. 486
JEFFERSON COUNTY, TEXAS

PROJECT
GARY LIVINDAY
SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

PROJECT NO: 06-1403
SCALE: 1" = 50'
PRINT DATE: 12/4/06
DRAWN BY: T. CHASE
CHECKED BY: BL
APPROVED BY: AML
SHEET 1 OF 1

EPAHO044000900

HERCULES
TRANSPORT, INC.
3452 Hwy 145 N, PO Box 536
Choudrant, LA 71227
Phone: 318-768-4129
Fax: 318-768-2050

TANKS	TYPE	MKT VALUE
Tank 45,501 Gallon	Propane	$ 40,000.00
Tank 45,501 Gallon	Propane	$ 40,000.00
Tank 39,138 Gallon W-76153	Butane	$ 20,000.00
Tank 22,500 Gallon 103975	Butane	$ 12,000.00
Tank 42,000 Gallon	Propane	$ 40,000.00
Tank 42,000 Gallon	Propane	$ 40,000.00
Tank 42,000 Gallon	Propane	$ 40,000.00
	Total	$232,000.00

713-748-8664

Steve S.

From Jackie Shields
318-548-9886

EPAHO044000901

RAIL

RAILWORKS Track Systems – Texas, Inc.
P.O. Box 15217 Houston, Texas 77220
6060 Armour Dr. Houston, Texas 77020

ATTACHMENT B (Pg. 1 of 1)

Effective Jan. 2007 supersedes previous versions

Standard Terms and Conditions

For track repairs in the State of Texas, labor and equipment are taxable while materials are not, provided the owner gives a tax exemption certificate to us. For new construction (State of Texas), taxes are not applicable on any portion of the contract provided the client (or owner, user, et.) gives a tax exemption certificate to us. Unless stated otherwise **RAIL**WORKS Track Systems - Texas, Inc. and/or **RAIL**WORKS Track Systems, Inc. (hereinafter referred to as **RAIL**WORKS) pricing is without taxes. **Tax laws for other States in which work is performed, though not included in this proposal unless stated to the contrary, will apply.**

Identifying, locating, relocating, removal, replacement and/or repairs of any existing underground pipes, utilities, wires, cables, concrete, asphalt or other structures are the responsibility, and to the account of, the client.

The Client (or owner, user, et.) shall apply for and obtain all permits and licenses required for the Work at its' expense and be responsible for securing inspections and approval of the Work from all authorities having jurisdiction over the Work unless stated otherwise in the proposal.

Tie disposal is not included in this proposal unless stated otherwise in the scope of work. Old ties will be stockpiled at a designated location on the jobsite. Old rail and other metal track material will be hauled off site unless stated otherwise in the scope of work. Should tie disposal be specifically included in the proposal to your company, the actual disposal may be subcontracted to a company with the proper credentials to legally do so. Before disposal can take place, papers clearly indicating whom the "Generator" (i.e. owner, user, et.) is will be provided to the customer for the Generator to sign. Should an entity, other than the customer, be the Generator it will be the responsibility of the customer to obtain the signature of the Generator for the purposes of legal disposal. If arrangements can be made for a method of legal disposal, other than that described above, you will be notified. Should any contaminants be identified during or after the disposal of the ties, any and all remediation (and associated) costs will be to the account of the Generator and/or client, owner, user, etc. Excavated materials such as dirt, ballast, base, concrete, asphalt, et al will require verification of non-contamination from the Generator (i.e. owner, user, et.) to the Landfill Owner prior to any dumping of the material in question. However, should any contaminants be identified during or after the dumping of this material, any and all remediation (and associated) costs will be to the account of the Generator and/or client, owner, user, et. Unless stated otherwise, excavated material and other spoil will be stockpiled on site.

Overtime, weekend work and/or shift work is not included unless stated otherwise in the proposal.

We hereby warrant all work constructed under this proposal to be free from defects in materials and/or workmanship for a period of one year from date of substantial completion or the date of beneficial occupancy by the client, whichever comes first. **RAIL**WORKS is not bound to repair, replace or be otherwise held responsible for material, equipment and/or workmanship that has been improperly maintained and inspected, altered or tampered with by unauthorized personnel, subjected to abrasive or corrosive conditions, normal wear and tear, damage caused by rolling stock, or has been used improperly. Exceptions taken to this warranty may be noted in the proposal. Repairs, or other work, classified as "temporary" do not carry any warranty.

Customer agrees that it will not recruit, interview, solicit or hire **RAIL**WORKS employees, whose job responsibilities require them to have contact with the customer, without prior written consent from **RAIL**WORKS unless such employee has been voluntarily separated from **RAIL**WORKS for more than one year or involuntarily separated from **RAIL**WORKS by **RAIL**WORKS. Customer and **RAIL**WORKS agree, due to the difficulty of determining the damages to **RAIL**WORKS for breach of this paragraph, that **RAIL**WORKS, at its option, may select liquidated damages in the amount of $50,000 or 100% of the employee's annual salary, whichever is greater, as its remedy for each violation as an alternative to injunctive relief. This provision shall survive the termination, expiration or cancellation of this agreement for a period of one year.

RAILWORKS will progress invoice not less than monthly with no retainage withheld and due Net 30 days from invoice date unless specifically negotiated otherwise and confirmed by purchase order or contract. Invoices over 30 days past due will be charged Interest at 1.5% per month.

RAILWORKS will complete the Work within the times specified in the proposal provided however, that **RAIL**WORKS will not be liable directly or indirectly, for delays of carriers or delays from labor difficulties, shortages, strikes or stoppages of any sort, fires, accidents, failure or delay in obtaining materials or manufacturing facilities, delays caused by customer, acts of government, war, bad weather, or any causes beyond the control of **RAIL**WORKS or causes commonly designated Acts of God or force majeure, and when such delays arise, the completion date shall be extended accordingly.

Bonding (financial), though available, is not included for this Work unless stated otherwise in the proposal.

Authorization to do the work in question signifies the Client's acceptance of these Terms and Conditions including any mutually agreed upon exceptions and/or clarifications.

Our Standard Insurance Coverages are as follows:

(Additional Coverages and higher Limits may be available if necessary.)

General Liability		**Excess Liability (Umbrella)**	
General Aggr.	$ 4 Mill.	Each Occurrence	$ 10 Mill.
Products - Comp/Op Aggr.	$ 4 Mill.	Aggregate	$ 10 Mill.
Personal & Adv. Injury	$ 2 Mill.	**Workers Compensation & Employer Liability (Texas)**	
Each Occurrence	$ 2 Mill	EL Each Accident	$ 1 Mill. (Each Accident)
Fire Damage (Any one fire)	$ 100 Thou.	EL Disease - Policy Lim.	$ 1 Mill.
Med Exp (Any one person)	$ 5 Thou.	EL Disease -	$ 1 Mill. (Each Employee)

Auto Liability----------Combined Single Limit $ 1 Mill.

Esequiel "Zeke"

(713) 673-6208 | Fax: (713) 672-9614 | eescatel@railworks.com

HONEYWELL Distillation
UNIT

EPAHO04400904

Date: 8/7/2008

Subject: Request for Approval / Signature

To: Matt Bowman
4904 Griggs Road, Houston, TX 77021

Attached are two duplicate originals of a Non-Disclosure Agreement with CES Environmental Services, Inc. for counter-signature. After signature, please return one signed original to: Honeywell Electronic Materials, Attn: Jonell DesMarais, 15128 E. Euclid Ave., Spokane, WA 99216.

Thank you for your consideration

EFFECTIVE DATE: July 1, 2008

NON-DISCLOSURE AGREEMENT

Honeywell International Inc., through its Electronic Materials business ("Honeywell" or "Discloser") owns or possesses certain information relating to electronic polymers, ink jettable dopants (and other printed electronic materials), interconnect and packaging materials, wet process chemicals, products, processes and services useful in semiconductor, microelectronic, optoelectronic and microfabrication applications, and wishes to provide such information and samples of materials ("Samples") to CES Environmental Services, Inc. ("Recipient") for the purpose of: determining whether to enter into a transaction with Honeywell; purchasing and using products, equipment, or services supplied by Honeywell; and/or providing products and services to Honeywell. Said information and Samples are proprietary as to Honeywell and said information (including trade secrets, know-how, techniques and specifications) regarded by Discloser as confidential (hereinafter referred to as "Confidential Information"). Without limiting the generality of the foregoing definition, Confidential Information shall specifically include any and all information which may come into Recipient's knowledge as a result of any visit to Discloser's facility, inclusive of the form, materials and design of the various elements of the plant and the parts and equipment which may be seen at such facility as well as the plant as a whole, the methods of operation thereof and the various applications thereof.

Honeywell agrees to disclose and the receiving party ("Recipient") agrees to receive such Confidential Information and Samples (whether provided for free or purchased by Recipient) on the following terms and conditions:

1. Recipient shall use the same degree of care as it uses with its proprietary information of a like nature (but in no event less than a reasonable degree of care) to hold Confidential Information in confidence and shall not disclose the same to others, or use the same except for purposes of this Agreement, without the written consent of Discloser for a period of five (5) years from the date of disclosure of the Confidential Information. However, Recipient may disclose Confidential Information to its officers and employees who have a need to know the same for purposes of this Agreement and who have signed a non-disclosure agreement with their employer.

2. This Agreement shall govern disclosures of Confidential Information and Samples made within three (3) years from the Effective Date.

3. To the extent practicable, Confidential Information disclosed in writing shall be marked "Confidential" or bear a similar legend, and Confidential Information disclosed orally or visually shall be confirmed as such in writing within thirty (30) days of disclosure.

4. Confidential Information shall not include any information which Recipient can show:

   (a) was in the public domain prior to disclosure to Recipient, or thereafter comes into the public domain without the fault or breach of any confidentiality obligation by Recipient; or

   (b) was known by Recipient prior to disclosure as shown by written records; or

   (c) was disclosed to Recipient by a third party not in violation of any obligations of confidentiality to Discloser.

Any combination of known information shall be within any of the foregoing exclusions only if the combination as such is within such exclusion. Confidential Information shown to fall within the foregoing exclusions shall not be identified by Recipient as information which was received from, is used by or considered proprietary by Discloser.

5. Recipient agrees that all information, including drawings, designs, specifications, formulations, flowsheets, sketches, descriptions, data, Samples and other material pertaining to Confidential Information and obtained from or through Discloser shall remain the property of Discloser. Recipient agrees to return all such Confidential Information to Discloser, and all copies thereof, at the request of Discloser.

6. Recipient shall not analyze or have others analyze the Samples to determine their composition or method of manufacture. Recipient shall retain the Samples solely within its possession and control and shall not make them available to any third party. Recipient shall destroy or return any unused portions of the Samples, as directed by Discloser and Recipient shall not disclose that the Samples are from Discloser. Samples specifically include materials in their precursor form, as well as in their film form. Recipient shall maintain all test and evaluation results of Honeywell Samples as Honeywell Confidential Information.

7. No right or license is granted hereby to Recipient, expressly or by implication, with respect to the Confidential Information, Samples or any patent, patent application or other proprietary right of Discloser, notwithstanding the expiration of the confidentiality obligations of this Agreement. Nothing in this Agreement shall be construed as a representation that either party will not independently pursue similar opportunities, provided that the obligations of this Agreement are not breached.

8. Recipient agrees that it will not publish or release any information pertaining to Confidential Information or Samples without the written consent of Discloser.

9. Recipient shall not export or re-export any Confidential Information or Samples, except after compliance with the U.S. Export Administration laws and regulations.

10. Honeywell's Affiliates may disclose Confidential Information to Recipient. Such disclosure shall be treated in accordance with the terms of this Agreement as if such information had been disclosed directly to Recipient by Honeywell. "Affiliates" means any company or entity directly or indirectly owned or controlled by Honeywell through ownership of at least fifty percent (50%) or the shares or other ownership interest of that company normally entitled to vote for the election of directors.

11. Honeywell may freely assign this Agreement without Recipient's consent. This Agreement shall not be assigned by Recipient except with the prior written consent of Honeywell, which consent shall not be unreasonably withheld. This Agreement represents the entire agreement and understanding between the parties with respect to the subject matter hereof. No modification to this Agreement shall be effective unless made in writing and signed by both parties. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, U.S.A., without regard to its conflicts of law principles.

IN WITNESS WHEREOF, the parties have caused the Agreement to be signed by their duly authorized representatives.

HONEYWELL INTERNATIONAL INC.
ELECTRONIC MATERIALS

By: Rebecca Liebert

Name: Rebecca Liebert

Title: VP and General Manager

CES ENVIRONMENTAL SERVICES, INC.

By: Matt Bowman

Name: Matt Bowman

Title: President

EFFECTIVE DATE: July 1, 2008

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Honeywell International Inc., through its Electronic Materials business ("Honeywell" or "Discloser") owns or possesses certain information relating to electronic polymers, ink jettable dopants (and other printed electronic materials), interconnect and packaging materials, wet process chemicals, products, processes and services useful in semiconductor, microelectronic, optoelectronic and microfabrication applications, and wishes to provide such information and samples of materials ("Samples") to CES Environmental Services, Inc. ("Recipient") for the purpose of: determining whether to enter into a transaction with Honeywell; purchasing and using products, equipment, or services supplied by Honeywell; and/or providing products and services to Honeywell. Said information and Samples are proprietary as to Honeywell and said information (including trade secrets, know-how, techniques and specifications) regarded by Discloser as confidential (hereinafter referred to as "Confidential Information"). Without limiting the generality of the foregoing definition, Confidential Information shall specifically include any and all information which may come into Recipient's knowledge as a result of any visit to Discloser's facility, inclusive of the form, materials and design of the various elements of the plant and the parts and equipment which may be seen at such facility as well as the plant as a whole, the methods of operation thereof and the various applications thereof.

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1. Recipient shall use the same degree of care as it uses with its proprietary information of a like nature (but in no event less than a reasonable degree of care) to hold Confidential Information in confidence and shall not disclose the same to others, or use the same except for purposes of this Agreement, without the written consent of Discloser for a period of five (5) years from the date of disclosure of the Confidential Information. However, Recipient may disclose Confidential Information to its officers and employees who have a need to know the same for purposes of this Agreement and who have signed a non-disclosure agreement with their employer.

2. This Agreement shall govern disclosures of Confidential Information and Samples made within three (3) years from the Effective Date.

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5. Recipient agrees that all information, including drawings, designs, specifications, formulations, flowsheets, sketches, descriptions, data, Samples and other material pertaining to Confidential Information and obtained from or through Discloser shall remain the property of Discloser. Recipient agrees to return all such Confidential Information to Discloser, and all copies thereof, at the request of Discloser.

6. Recipient shall not analyze or have others analyze the Samples to determine their composition or method of manufacture. Recipient shall retain the Samples solely within its possession and control and shall not make them available to any third party. Recipient shall destroy or return any unused portions of the Samples, as directed by Discloser and Recipient shall not disclose that the Samples are from Discloser. Samples specifically include materials in their precursor form, as well as in their film form. Recipient shall maintain all test and evaluation results of Honeywell Samples as Honeywell Confidential Information.

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8. Recipient agrees that it will not publish or release any information pertaining to Confidential Information or Samples without the written consent of Discloser.

9. Recipient shall not export or re-export any Confidential Information or Samples, except after compliance with the U.S. Export Administration laws and regulations.

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IN WITNESS WHEREOF, the parties have caused the Agreement to be signed by their duly authorized representatives.

HONEYWELL INTERNATIONAL INC.
ELECTRONIC MATERIALS

By: Rebecca Liebert

Name: Rebecca Liebert

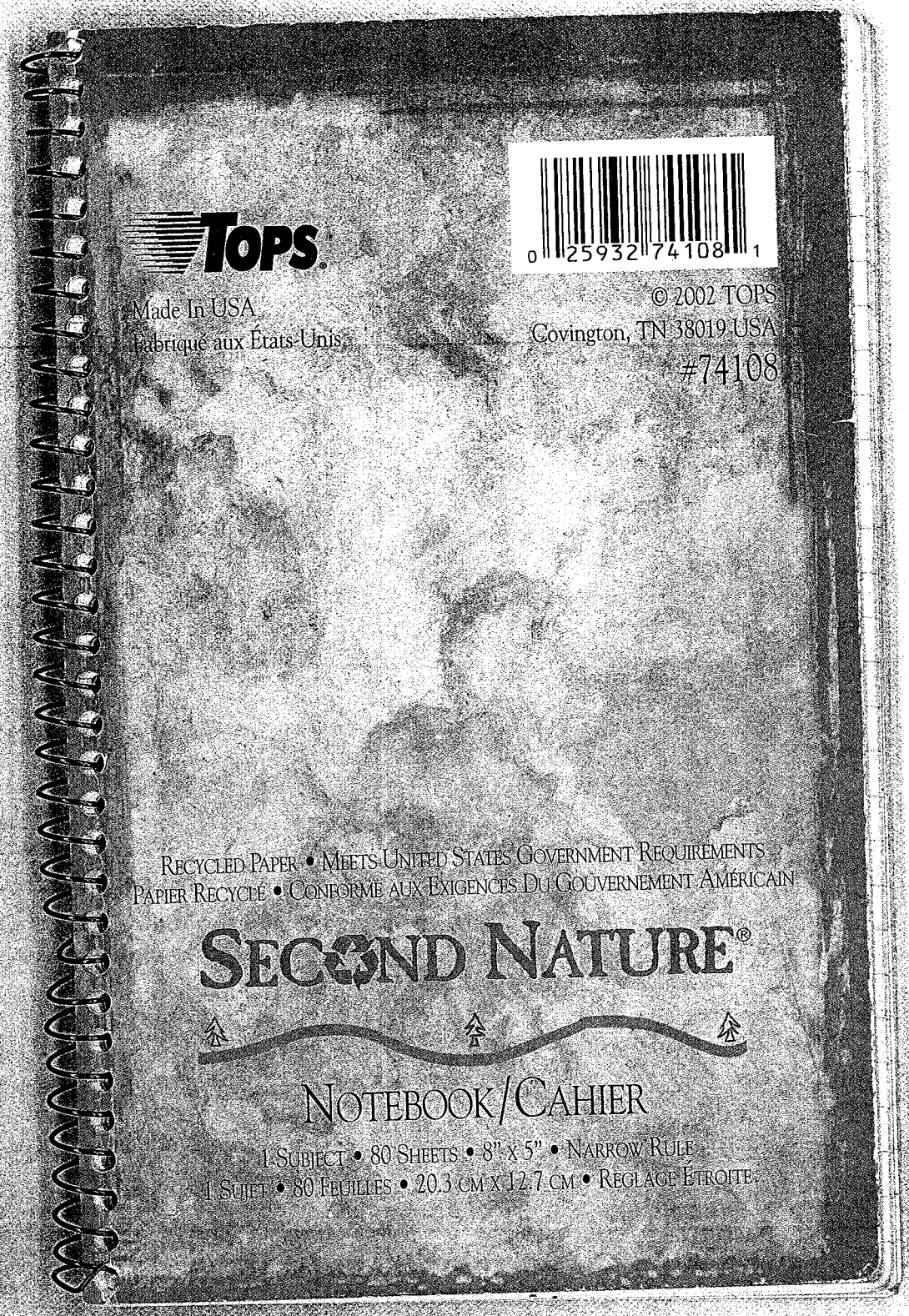
Title: VP and General Manager

CES ENVIRONMENTAL SERVICES, INC.

By: Matt Bowman

Name: Matt Bowman

Title: President



EPAHO044000910

BRIAN WEATHERS
Cell → 832-248-1105
Home - 281-883-4993

FOR Pavan

~~Spinach & Beans~~

~~Chicken~~

~~[illegible]~~

~~[illegible]~~

~~[illegible]~~

~~Rubbu Kathi~~

~~Chamadumpala~~

~~Peas carrots Potatos~~

~~Thursday~~

~~Wednesday night~~

~~Rubbu Kathi~~

appadams

~~[illegible]~~

Noodles cut vegetables

~~Coop~~

buy eggrolls

appadams

Manchurian

Wed

✓ Chicken ~~Chicken Shrimp~~
✓ Kathe
~~Beans~~ Chole
✓ Peas carrots pot
✓ Perugu

Thurs

French fries

Lunch Tacos
Rice Pilar
Perugu

Dinner Eggrolls
Turkey
Dressing Veg Broc & corn
mash pot
Cranberry sauce
green beans
[redacted]
corn
Noodles
pumpkin pie
Salad
Manchurian + rice
Sweet Potatos
~~Ea~~
Edemame

Friday
- Biscuits
- Eggs

Lunch
✓ Sambaar
~~Peas~~ Rice
Shrimp ~~Shrimp~~ ~~Egg kura~~
Potatos
Appadams

Snack ~~Nachos~~
Manchurian

Dinner
Peas Rubber kathe ✓
Spinach Popu
~~Sh~~ ✓ chicken
Beans & carrot Popu ✓
Cabbage Ppu kura ✓

Sat

~~Eggrolls~~
Eggs & Biscuits
Idlis

Lunch ✓
~~Potato~~ Tomato Pappu
~~Egg kura Potato~~
aratikaya
Dondakayalu ✓
"

Dinner
Rice
~~Butter chicken (Thai)~~
Leftovers

EPAHO044000912

Garlic Butter + Salt Pepper

Turkey

Season with Salt pepper
worshester Sauce
celery & onions
under skin

Bake 5 hrs
350

Tandoori

Shan Tandoori Masala
Salt
chilli Pond
Garm Masala
Cumin Dahi
adrak Lassan
Vinegar
Marinate + Oil
overnight

EPAHO044000913

Mon

Shrimp
Perogie
Turkey Stew
Greenbeans
Corn
Carrots cut for Noodles

Tuesday

Turkey Marinate

Monday

Shrimp

Wed

Dad Def

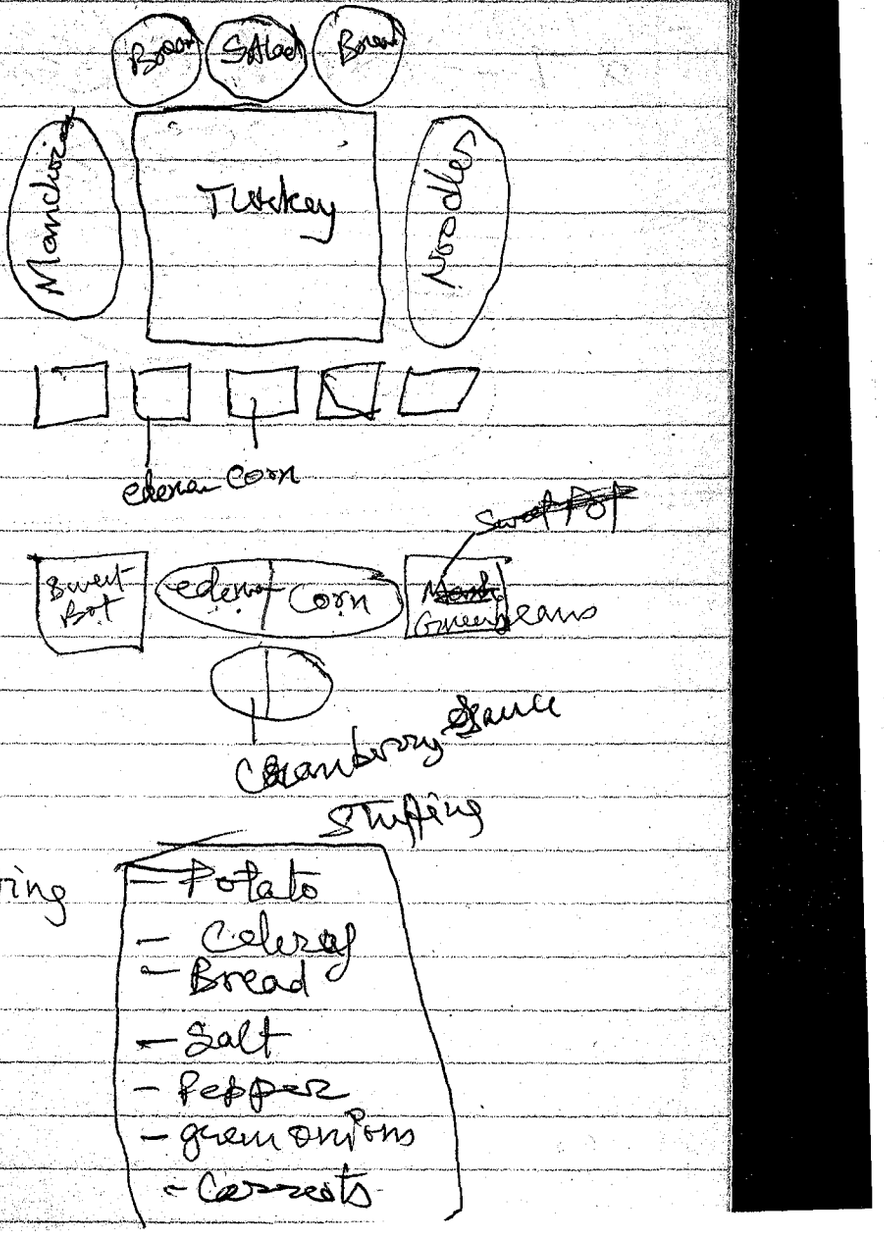
Thursday

Cookies

EPAH04400914

Wed

Pappu
Chole
~~Peas carrots Pot~~
~~Perugu~~
Manchurian ✓
green beans
~~Cauli flower Purree~~
~~Nodd~~ Boil Noodles
Steam Edamame
Corn Sauce
Fry Appadams
Marinate Turkey
~~Sue~~



EPAHO04400916

50 – 204021
24 – Exp Acct (Vendor)
1025262

~~192-6~~ 1934

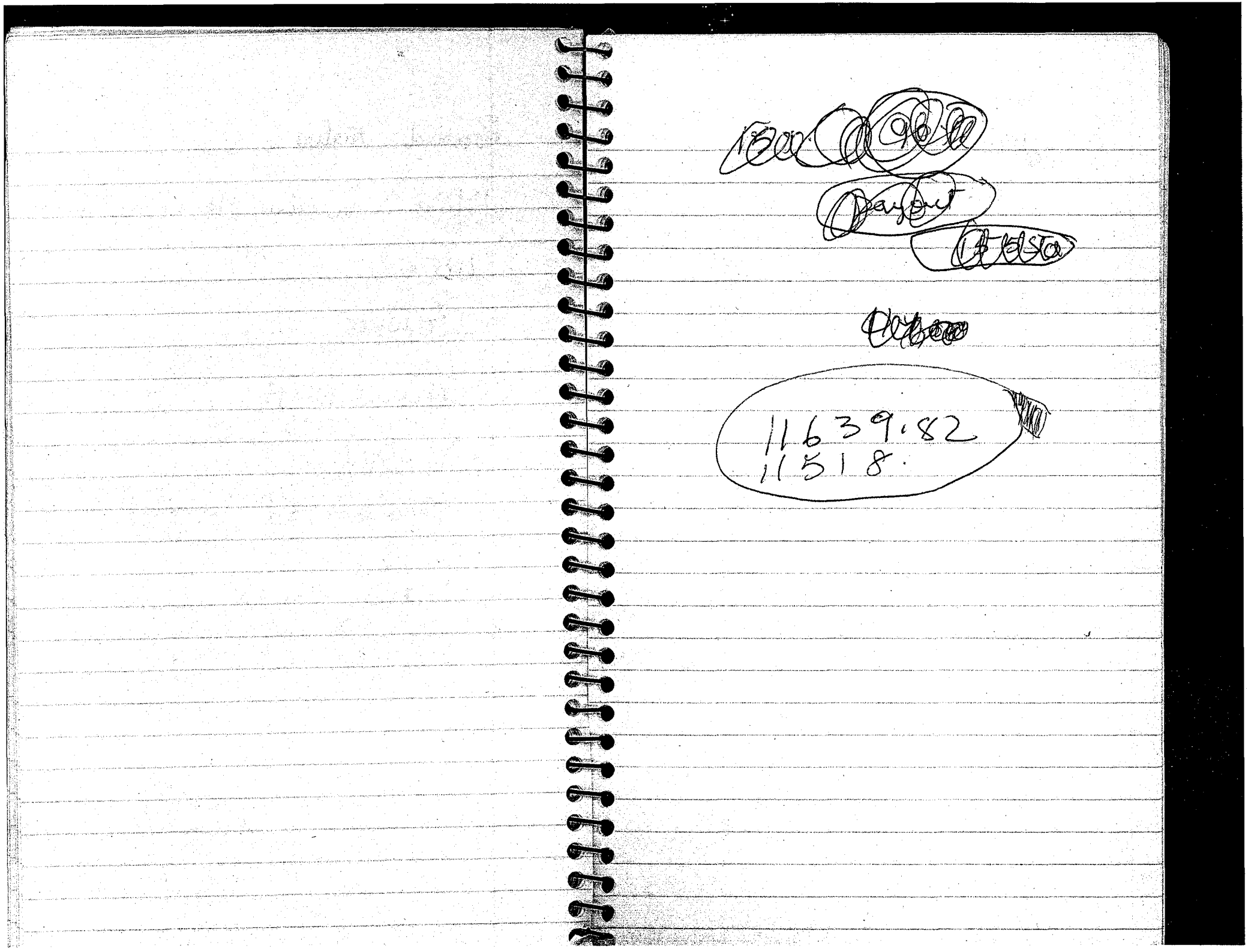
1023733

Prasad Kalva

1482 W Sam Houston Pkwy

45N
↓
I10 west
↓
Beltways North
↓
One Mile
Shadowood right
↓
Right complex

EPAHO04400917



EPAHO04400918

Medical

Blocking Reasons

@ Mgmt
(b) workflow
(c) ~~XT~~
(d) ~~Feature~~ functional
(e) Multi task

786-493-3124

305-865-6267

Cobra →

Mary → WNS

Conditions →

EPAHO04400091 9

~~Market conditions~~

$160/month cell phone useage

→ Lisa Plan for Phone.

Blackberry

→ Uk or US

Tmobile

Tandoori chicken

chicken

Mixed grill

Lamb

Tan quail

chicken Tikka

Lamb

Paneer wrap

19.95 or 24.95

EPAH04400920

ConAgra 3.1.0.6

No postings

Patch installed

(1) 3.1.1

EPAHO04400921

First Steps to recov/ue

X

JP Morgan

(1) Non Business

Arapa small - 1
Sweet POT 2
Arati 2
Carrots 4
Beans 40

EPAHO04400923

~~ULA~~

ULA Taxes not calculating

[1] Simulate

Chase

STATEMENT

PVSNET 2:00 P.M

(a) Expense type SAO — separate auth object

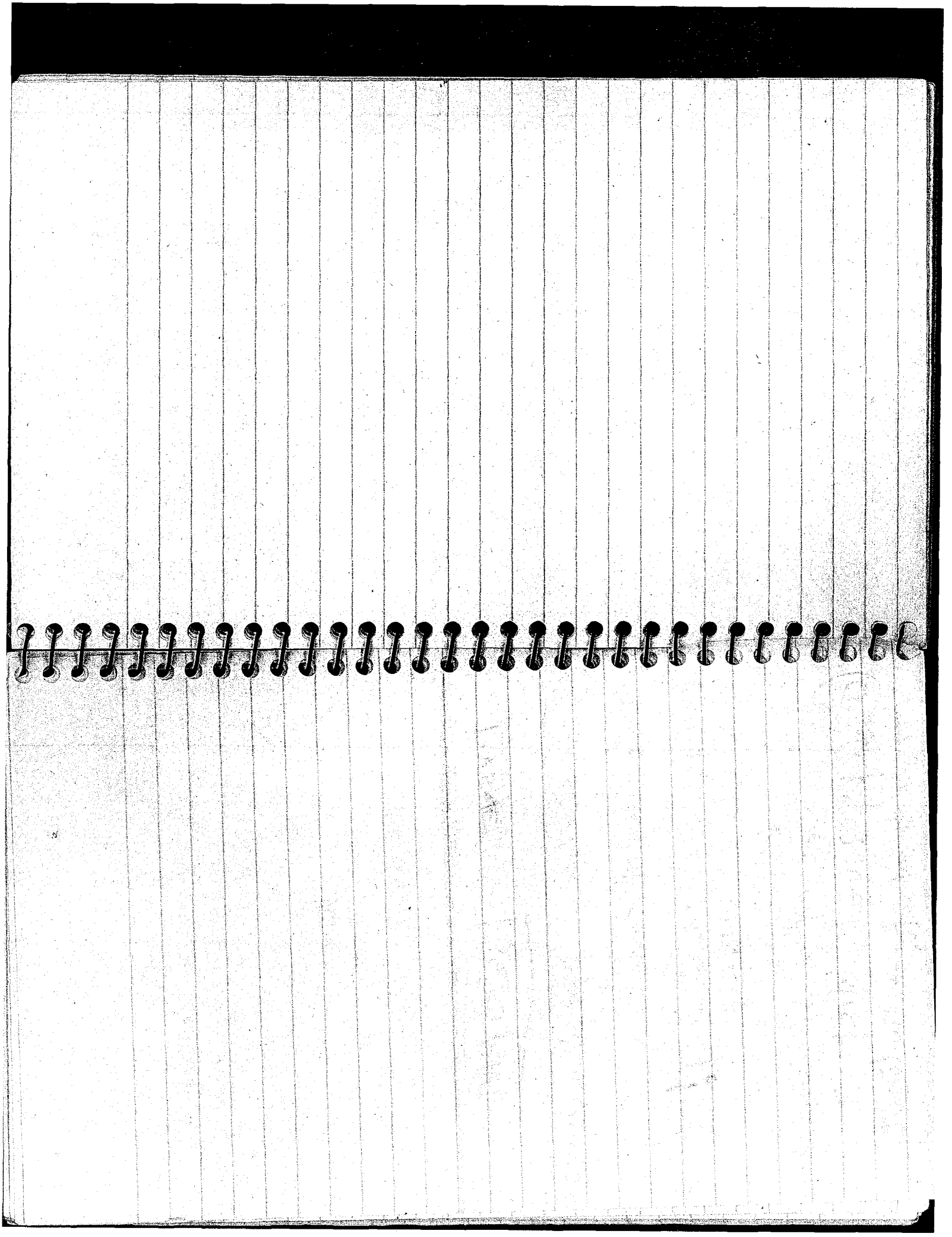
(b) Confidential cards

(c) Go-Live March end!
Mid-Feb

PO interface
Files from JP Morgan chase

(d) approval Strat 3
→ fix for fast entry → no limit

EPAHO044000924



EPAHO044000925

① Pushups 1 leg each 20 times

② Pushups both legs down. ~~Arms~~ ~~or~~ elbows on floor & arms on floor

③ weights Jump

④ Knee bend weights rowing

⑤ Triangle bend knees & bend 50 reps each leg

⑥ Arms
90° (Par to head) Bend parallel to ground & Stay in positi. Move arms forward & back Push & pull weights

⑦ Ball → Toes on Ball Hands on floor Pushups.

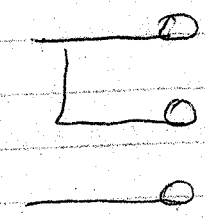
hands ○ Ball

⑧

hands ○

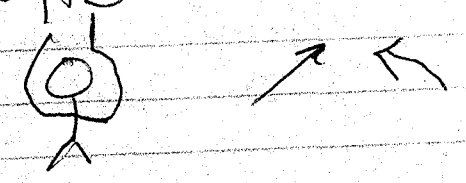
EPAH004000926

8) Lay flat on Bench



Repeat.
Hands go up & down across body

9) Crunch for Ab Moves

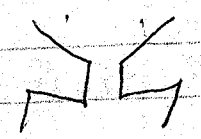


Standing Bike

Self winder

Seesaw

Forward Bend



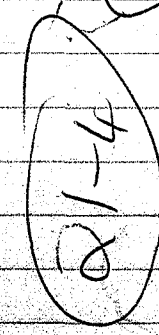
Arms
Bowling Throw

@ Tax Juris from where

Exp types

1) Chose GL Acct # Create PM ticket

2) Exchange fees



EPAH04400927

Clark

H2S Training by Martin on 9-10-08

Martin
Bo
Larry
Joey Sutter
[redacted]
Brian

Participants

EPAHO04400092 8

5-11-09

PACES Safety Training

House keeping :- dust out, pressure wash & get liquid out
- any spill - clean, bleach it, methy mercaptan
- H_2S - 10ppm will suffocate
muster point
- PEL 8hr exposure limit
- STEL 10ppm H_2S
- IDLH 100ppm H_2S
- Alarm goes off - evacuate
- personal H_2S monitor

Fall protection :- in NAP & wastewater area

Container Labelling :
Hazcom : label all containers
maintain MSDS data - index
Separate medical records from safety records

Respirator protection
PPE
Chemical specific
H_2S - mandatory

- Pressure hoses - need pressure tested
- SPCC & SWPPP
↓
Training
↓
Team
↓
Rain Gauge

Lab Hygiene

Steve - chain, Fall protection, retractor
Tie into flare - stainless - blower
Jay - House keeping, labeling all containers
Sudhir - New H_2S program
Prabhakar - Train & document
Right to know - station - revalidate at PACES
Aftan - MSDS
Bo - handle propane tank
Ellen - SPCC, SWP3 - Prabhakar
Prabhakar - SCBA move it to PACES from CES
Prabhakar - Training and cleaning of full face respirator & H_2S training.

AC
713-553-5618

Pleading

49 CFR 172-504

Jose Dominguez
3910 Fairmont J292
Pasadena, TX 77504
(713) 515-3027 cell

EPAHO04000930

6-12-09

Duratherm Audit

Jack/

US Ecology
Cantas
Veolia
Clean Harbors

– On site Centrifuges – Duratherm can do

EPAHO04400093 1

Training Records

Manifests of Trainers in shop
sample of to

Breaks -
Cody -
Tony -
Dennis -
Ricky -

- We Need Normal Parameters versus this particular Lead

EPAHO04400093

Do not lie to OSHA Inspector

Crowcon Tetra ~~and~~ Air meter #14 was brought to PACES from CES to perform Continuous monitoring at the request of OSHA Inspector. Air meter #14 ~~is at PACE~~ will remain at PACES with Brian. OSHA inspector said he wants to take split samples. He will take his samples with him with Chain of Custody and PACES can do the same and send for analytical. The inspector said he wants video / pictures taken when samples are taken. Clark said he will take care of the sampling and pictures.

EPAH04400934

Brenta tanker
260 Tanker

4-15-09
Came to PACES with Glen Olson in his pickup at 8:15am. OSHA Inspector was already on site ~~and~~ The OSHA inspector complained that we were supposed to be present at 8:00am and that we were late. Glen explained to him that we were in traffic.

Ryan came in @ 1:03pm

4-15-09
meeting with OSHA inspector 8:45am

1. Gas bottles - put caps and secure them
2. Secure oxygen bottle
3. SNA-PAK
   Air bottle ~~54~~ # 546469
   mask # 559218
   OSHA investigator asked that we put it in a bag
4. ~~Sample trailers 260 and 266~~
5. ~~Also Sample the tanks where it is going into Staple NV~~
6. ~~Sample results to OSHA & CES~~
   Decon biohazard and dispose of the material. STEVE
7. OSHA need's Ryan's phone #

DEC 22

Dec 23 ↔ Dec 29th Andhra.

Dec 30 – Agra & Jaipur

Dec 31 – Delhi Site Seeing

Jan 1 – Jan 4 spend time

Buzlak 902349035

EPAH04400936

Hat Doc

Box 44

M. Bowman email

RE: OSHA

7-28-09 NEW LIST

Matt Bowman

To: Jose Acosta
Cc: Greg Bowman; Clark Hickman; Steve Stricker; Jennifer Rust; Bo Cumberland; Ramiz Tafilaj; Dennette Sartin; Rick Tullos; Don Lighty; Jorge Martinez; SDesai1485@aol.com; Miles Root
Subject: OSHA issues at PACES

Jose,
I did my depo. With OSHA today and we still need to address the following items asap. You will be the tracker behind getting all these remaining items addressed but the tasks are assigned to those names listed in red after the task.

- They want something that shows we have determined the need for pressure relief valves on our vessels (Clark)
- They want an explanation of the know-out tank and scrubber system to clarify the safety of such system (Clark)
- We need to be sure that the lab containers/chemicals are all properly labeled (Jay, Bo, Miles, Johnstone)
- Establish program to test and monitor wall thicknesses of piping and vessels for corrosion...we need an SOP on this (Steve, Melissa)
- Review manufacturer recommendations of fire system maintenance and testing and put this in our Access system to be sure it is done on the required intervals. Be sure that we document such testing and maintenance....we need an SOP on this (Rick, Melissa)
- OSHA is concerned about the cracking of the cinder blocks under the tank. We need to go ahead and put some metal saddles under the tank to alleviate potential issues with the cracked cinder blocks (Jorge)
- Another issue on the propane tank is that OSHA believes that we may need barricades/bollards around the propane tank so that a forklift or truck does not bump into the tank. Since the tank is temporary and out of the way of any equipment working, I do not want to install permanent bollards. We need to look into the exact OSHA standard and ensure that we meet the standard (Sudhir may be able to help us address this issue). (Jorge, Jose, Sudhir)
- OSHA wants us to write specific lock-out tagout procedures for each vessel. We can get this done with one SOP (Jose, Melissa, Jay)
- We need to be sure to install a ladder on the dock that leads down into the water. The ladder will need to meet OSHA standards. This is in case someone falls into the Port Arthur Turning Basin (Jose, Jorge)
- Get data on Joey's and Brent's monitors to OSHA (Clark). If Brent's data was not downloadable and/or retained by the instrument, we just need an affidavit to this effect.

We need to get on these issues asap as I have Basil breathing down my neck on these items. Of the above items, only a few are from the old list....most are new items that were brought up in the meeting today. By the way, both Joann and Basil were very complimentary of you. They said you were a very good hire!!!!!!

Thanks,
Matt

EPAHO04400938

Port Arthur ~~OSHA Items~~ OLD LIST = Completed Items

7-20-09

- Hazard assessment by Sudhir Desai and identification of responsive measures and proper PPE during all phases of the operation at the Port Arthur Plant; focus on all processing, sampling and lab procedures, as well as operations on the barge
  - Assessment will also include determination of the necessity of pressure relief valves on the vessels and H2S monitor maintenance, readings and documentation
  - **Due: May 15, 2009**
- Provide training to employees based upon Sudhir Desai's findings and document such training
  - **Due: May 20, 2009**
- Provide Sudhir Desai's area and personal monitoring test results to OSHA
  - **Due: May 14, 2009**
- Provide OSHA an explanation of the knock-out tank and "scrubber" system to clarify the safety of such system
  - **Due: May 14, 2009**
- Ensure sufficient number breathing air equipment for on-site storage
  - **Due: May 15, 2009**
- Continue attempts to contact Coast Guard regarding resuming operation on the barge (multiple attempts to contact already)
  - **Due: Ongoing**
- Provide OSHA copies of confined space permits for prior confined space entry at the Port Arthur plant
  - **Due: May 22, 2009**
- Label all confined spaces as "Confined Space / Permit Required"
  - **Due: May 22, 2009**
- Ensure all chemical containers are properly labeled
  - **Due: May 22, 2009**
- Provide site specific training regarding personal H2S monitors and facility operations with new policies, including the following:
  - Training on evacuation to collection point in event of H2S alarm; designate someone to be responsible for accounting for all employees at the collection point; establish procedure for re-entering facility following alarm; rehearse evacuation in response to alarms sounding.
  - Utilizing H2S sniffer vs. personal H2S monitor for sampling head space in vessels
  - Training on rescue procedures
  - **Due: May 20, 2009**
- Install barricade chains in warehouse alongside rail tracks (south wall)
  - **Due: May 22, 2009**
- Install / provide fall protection
  - **Due: May 27, 2009**
- Enclose wiring on H2S alarm system panel
  - **Due: May 20, 2009**

Not sure if we provided Answers in Subpoena

Not sure if we provided Answers in Subpoena

Lab?

- Regular maintenance programs:
  - Establish program to test and monitor wall thicknesses of piping and vessels for corrosion
  - Schedule regular maintenance on the H2S and fire alarm systems
  - **Due: May 22, 2009**
- Install eye wash near bleach container
  - **Due: May 22, 2009**
- Review training records of all Port Arthur employees to ensure proper training
  - **Due: May 15, 2009**
- Update logistics of rescue protocol relating to confined space work
  - **Due: May 22, 2009**
- All new training information included in written materials
  - **Due: May 15, 2009**
- Relocate flammable drums in warehouse to locations equipped to handle potential fires
  - **Due: May 15, 2009**
- Ensure proper installation of propane tank
  - **Due: May 22, 2009**

Working on this

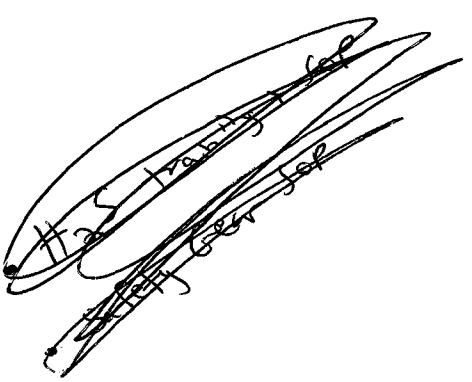
Fire Alarm not done yet.

He wants us to Look into this
- cinderblocks
- no Barricades

- He wants specific Lockout-Tagout procedures for PACES Equipment

Need H_2S monitor for Joey or Data and Brent

- Ladder installed into water



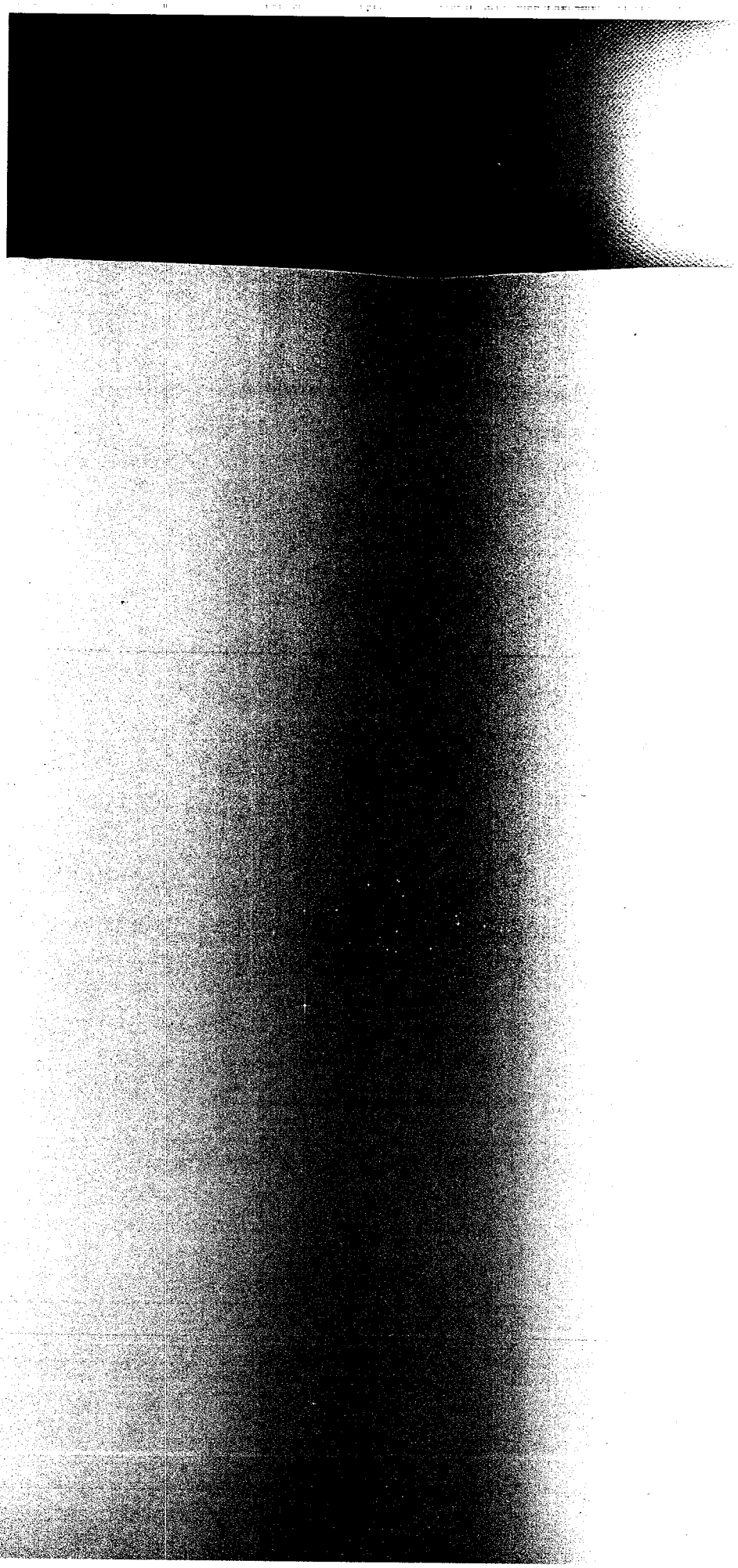
8/4/09
D.S.

[redacted]
from CORK Board
above K-1
#5

[redacted]

TCEQ ISSUES : PORT ARTHUR

EPAHO04000942



8/4/09
W9
K-3 (2)

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 9, 2009

CERTIFIED MAIL – 7001 0320 0004 8872 9928
RETURN RECEIPT REQUESTED

Mr. Matt Bowman
President
Port Arthur Chemical & Environmental Services
PO Box 218
Port Arthur, Texas 77641-0218

Re: Notice of Enforcement for the Complaint Investigation at:
Port Arthur Chemical & Environmental Services, 2420 South Gulfway Drive, Port Arthur (Jefferson County), Texas
Investigation No: 744458
TCEQ ID No.: RN105156111

Dear Mr. Bowman:

On May 1, 2009, Mr. Dave Letourneau of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for air quality. During this investigation, certain outstanding alleged violations were documented. Enclosed is a summary which lists the investigation findings.

In the listing of alleged violations, the applicable requirements have been cited, including TCEQ rules. If you would like to obtain a copy of the applicable TCEQ rules, you may contact any of the sources listed in the enclosed brochure entitled Obtaining TCEQ Rules.

One or more of the violations documented during the subject investigation includes unauthorized activity, and you are hereby advised that continued operation is not authorized.

Also, please be advised that the Legislature has granted enforcement powers to the TCEQ to carry out its mission to protect human health and the environment. Due to the apparent seriousness of the alleged violations, formal enforcement action has been initiated, and additional violations may be cited upon further review. We encourage you to immediately begin taking actions to address the outstanding alleged violations. **In responding with prompt corrective action, the administrative penalty to be assessed may be limited.**

The Commission recognizes that the great majority of the regulated community wants to prevent pollution and to comply with environmental laws. We dedicate considerable resources toward making voluntary compliance achievable. But where compliance has not been met it is our duty to protect the public and the environment by enforcing the state's environmental laws, regulations, and permits.

Also, if you believe the violations documented in this notice have been cited in error, **and** you have additional information that we are unaware of, you may request a meeting to discuss this enforcement matter. To request a meeting, submit a letter describing the additional information to the address shown below:

Manager, Air Section
Enforcement Division, MC 219
Re: Enforcement Meeting Request
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

If you or members of your staff have any questions, please feel free to contact Mr. Letourneau in the Beaumont Region Office at 409-898-3838.

Sincerely,

Heather Ross
Air Section Manager
TCEQ Beaumont Region Office

HR/pbv

Enclosures: Summary of Investigation Findings
Obtaining TCEQ Rules

Summary of Investigation Findings

PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES — Investigation # 744458
2420 GULFWAY DR — Investigation Date: 05/01/2009
PORT ARTHUR, JEFFERSON COUNTY, TX 77640

Additional ID(s): 86173

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 352943 **Compliance Due Date: To Be Determined**
30 TAC Chapter 111.111(a)(4)(A)(ii)
5C THSC Chapter 382.085(b)

Alleged Violation:
Investigation: 707677 Comment Date: 12/19/2008

Failure to properly maintain a flare observation log.

Title 30 Texas Administrative Code (TAC) 111.111(a)(4)(A)(ii) states that beginning September 1, 1993, compliance for process gas flares shall be determined by a daily notation in the flare operation log that the flare was observed, including the time of day and whether or not the flare was smoking, with the flare operator recording at least 98% of the required observations.

For the 31 days the facility's flare was in operation during the period of September 22, 2008, to November 30, 2008, the investigator documented the regulated entity had failed to document the time of the flare observations.

Investigation: 744458 Comment Date: 07/07/2009

For the 25 days the facility's flare was in operation during the period of April 1, 2009, to May 28, 2009, the investigator documented the regulated entity had failed to document the time of the flare observations.

It should be noted that a similar violation was previously documented in Investigation 707677. Based on this investigation, it appears that the violation has not been resolved.

Recommended Corrective Action: Submit a written plan necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 366943 **Compliance Due Date: To Be Determined**
30 TAC Chapter 106.6(b)
30 TAC Chapter 106.6(c)
5C THSC Chapter 382.085(b)

REG 86173, Site Review / Distance Limit Section
The Site Review / Distance Limit Section of Permit by Rule 86173 states the company claims that 200 feet exists to the nearest property line and 250 feet exists to the nearest off property structure.

Alleged Violation:
Investigation: 744458 Comment Date: 07/07/2009

Failure to comply with representations submitted with the Permit by Rule (PBR) applications.

30 TAC 106.6(b) states all representations with regard to construction plans, operating procedures, and maximum emission rates in any certified registration under this section become conditions upon which the facility permitted by rule shall be constructed and operated. 30 TAC 106.6(c) states it shall be unlawful for any person to vary from such representation if the change will cause a change in the method of control of emissions, the character of the emissions, or will result in an increase in the discharge of the various emissions, unless the certified registration is first revised.

EPAHO044000946

In the PBR application, the facility claimed that 200 feet exists from the process to the nearest property line, and 250 feet exists to the nearest off property structure.

During the second visit on May 22, 2009, the investigator measured the distances from various parts of Port Arthur Chemical and Environmental Services (PACES) to the nearest property line with a measuring tape. The distance from the barge to the nearest property line was measured at 47 feet. The distance from the end of the hose out of the barge, where the trucks were loaded, to the nearest property line was measured at 55 feet. The distance from the nearest part of the production facility (the Process Acid Holding Tank) to the nearest property line was measured at 79 feet. The distance from the nearest property line to the nearest off property structure was estimated at 8 feet. Based on these measurements, PACES is not meeting the distance representations made in the PBR application for this facility.

Recommended Corrective Action: Submit a written plan and/or documentation necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 366954 **Compliance Due Date: To Be Determined**

30 TAC Chapter 106.472
30 TAC Chapter 116.110(a)
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 744458 Comment Date: 07/07/2009

Failure to obtain authorization to load or unload barges.

30 TAC 116.110(a) requires that before any actual work is begun on the facility, any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state shall either obtain a permit, satisfy the conditions for a standard permit, satisfy the conditions for a flexible permit, satisfy the conditions of a Permit by Rule (PBR); or satisfy the criteria for a de minimis facility.

During the investigation on May 1, 2009, the investigator documented that the facility was unloading sulfidic caustic from Barge CCL 26. In addition, records were reviewed which document the following barges were loaded at the CITGO Refinery located in Lake Charles, Louisiana and unloaded at this facility: September 23, 2008 (spent sulfuric acid), February 21, 2009 (spent caustic), March 17, 2009 (sulfidic caustic), March 30, 2009 (spent caustic), and April 12, 2009 (spent caustic). The facility stated that the barge unloading / loading operations are authorized by 30 TAC 106.472.

30 TAC 106.472 states that liquid loading or unloading equipment for railcars, tank trucks, or drums; storage containers, reservoirs, tanks; and change of service of material loaded, unloaded, or stored is permitted by rule. Since loading or unloading barges is not listed in this PBR, barge loading and unloading is not authorized by this PBR.

Recommended Corrective Action: Submit a written plan and/or documentation necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 366957 **Compliance Due Date: To Be Determined**

30 TAC Chapter 106.6(b)
30 TAC Chapter 106.6(c)
5C THSC Chapter 382.085(b)

REG 86173, Technical Summary Section

The Technical Summary Section of Permit by Rule 86173 states certified emissions associated with the project include those generated from storage, processing, fugitive components and equipment and transfer operations. Displacement losses from inbound material transfers are minimized using vapor balancing.

Alleged Violation:

Investigation: 744458 Comment Date: 07/07/2009

EPAHO044000947

Failure to minimize emissions on inbound material transfers by using vapor balancing.

30 TAC 106.6(b) states all representations with regard to construction plans, operating procedures, and maximum emission rates in any certified registration under this section become conditions upon which the facility permitted by rule shall be constructed and operated. 30 TAC 106.6(c) states it shall be unlawful for any person to vary from such representation if the change will cause a change in the method of control of emissions, the character of the emissions, or will result in an increase in the discharge of the various emissions, unless the certified registration is first revised.

During the second visit on May 22, 2009, the investigator did not see a second hose for vapor balancing while unloading trucks into Reactor Vessel Number Two. Mr. Clark Hickman, Technical Services for Port Arthur Chemical and Environmental Services (PACES), stated that when they were unloading tank trucks into Reactor Vessel Number Two, PACES personnel were opening the tank truck's vents to prevent the inbound materials pump from pulling a vacuum on the tank trucks. Therefore PACES personnel were not minimizing emissions on inbound material transfers by using vapor balancing as represented in the permit application for Permit by Rule Number 86173.

Recommended Corrective Action: Submit a written plan and/or documentation necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 366966 **Compliance Due Date: To Be Determined**
30 TAC Chapter 116.110(a)
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 744458 Comment Date: 07/07/2009

Failure to obtain authorization before constructing and operating new Reactor Vessel Number Two, a new 1,000 gallon acid tank, and a new bleach tank.

30 TAC 116.110(a) states that before any actual work is begun on the facility, any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state shall either obtain a permit, satisfy the conditions for a standard permit, satisfy the conditions for a flexible permit, satisfy the conditions for facilities permitted by rule, or satisfy the criteria for a de minimis facility or source.

During the second visit on May 22, 2009, the investigator documented that the facility has constructed and is operating a new Reactor Vessel Number Two, a new 1,000 gallon acid tank, and a new bleach tank that are not authorized by Permit by Rule 86173.

Recommended Corrective Action: Submit a written plan and/or documentation necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 366967 **Compliance Due Date: To Be Determined**
30 TAC Chapter 106.6(b)
30 TAC Chapter 106.6(c)
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 744458 Comment Date: 07/07/2009

Failure to revise the certified registration before changing the character of emissions.

30 TAC 106.6(b) states all representations with regard to construction plans, operating procedures, and maximum emission rates in any certified registration under this section become conditions upon which the facility permitted by rule shall be constructed and operated. 30 TAC 106.6(c) states it shall be unlawful for any person to vary from such representation if the change will cause a change in the method of control of emissions, the character of the emissions, or will result in an increase in the discharge of the various emissions, unless the

certified registration is first revised.

The investigator's review of the barge manifests received by facsimile on May 21, 2009, documented that Port Arthur Chemical and Environmental Services (PACES) has been using spent sulfuric acid (acid that was used as a scrubbing solution in a refinery) instead of the new sulfuric acid stated in the certified Permit by Rule (PBR) application. Further review documented that PACES has been using spent caustic (caustic that was used as a scrubbing solution in a refinery) instead of the new caustic stated in their certified PBR application. During the scrubbing process at the refinery, the spent acid and the spent caustic were contaminated by the sulfur compounds that were scrubbed out of the refined hydrocarbons. The spent sulfuric acid and the spent caustic will be significantly different than the new sulfuric acid and the new caustic stated in PACES PBR application. Therefore PACES has changed the materials being used in their process, which has changed their emissions, without revising their certified registration.

In addition, during the second visit on May 22, 2009, the investigator noted that PACES had replaced the hydrogen peroxide tank with a 5,000 gallon bleach tank. On June 4, 2009, Mr. Steve Stricker stated that PACES was no longer using hydrogen peroxide in their process. Therefore PACES changed the materials being used in their process, which has changed their emissions, without revising their certified registration.

Recommended Corrective Action: Submit a written plan and/or documentation necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

ADDITIONAL ISSUES

Description	Additional Comments
Item 1	During the investigation on May 1, 2009, the investigators documented a moderate strength, highly offensive chemical odor at the complainant's location. Inside the complainant's office the same chemical smell was stronger. The investigator felt somewhat queasy after smelling the chemical odor while he was at the complainant's location. The investigator determined that most of the odor was emanating from Port Arthur Chemical and Environmental Services (PACES). The complainant stated that before the investigator arrived, the chemical odor was very strong and highly offensive. The complainant stated the horrible odors coming from PACES have made her dizzy, nauseated, and gave her terrible headaches.

RONALD L. WALKER
County Judge

Jefferson County Courthouse
P.O. Box 4025
Beaumont, Texas 77704

Beaumont (409) 835-8466
Pt. Arthur (409) 727-2191 Ext. 8466
Facsimile (409) 839-2311

July 13, 2009

Mr. Matt Bowman
President
Port Arthur Chemical & Environmental Services
P O Box 218
Port Arthur, Texas 77641-0218

Dear Mr. Bowman:

I received notification from the Texas Commission on Environmental Quality recently that your plant was subject to a pending enforcement action. I am writing to remind you that the TCEQ's Supplemental Environmental Project program enables a regulated entity to satisfy significant portions of administrative penalties by contributing to a local SEP.

Jefferson County is currently the sponsor of several authorized SEPs, including our new SEP for the Cheek Sewer project which will provide first- time sewage service to the residents of Cheek and enhance the county's efforts to reduce sewage infiltration.

Information on the projects can be found on the TCEQ website at http://www.tnrcc.state.tx.us/legal/sep/seprojects.htm.

I would ask you to consider utilizing the SEP to satisfy any administrative penalty that arises from the recent notice of enforcement. If that matter has already been finalized, please keep the local SEP projects in mind in the event of future enforcement action. Given Jefferson County's low property tax rate, the program enables the county to address important local environmental issues with minimal burden to the taxpayers.

Please contact me if you have any questions.

Sincerely,

Ronald L. Walker
Jefferson County Judge

Clark Hickman

From: Philip Evans [pevans@wcmgroup.com]
Sent: Friday, June 12, 2009 1:22 PM
To: Clark Hickman
Cc: Desiree Westcott; Jack Piskura; Adrienne Perkins; Bill McNutt
Subject: PACES

Clark,

I spoke with Mr. David Letourneau of TCEQ Region 10 about the alleged violations on the TCEQ Exit Interview Form dated 6/3/09. He spent quite a long time on the phone with me discussing his concerns. A Notice of Violation letter is being prepared and will be sent to PACES reflecting these items. The following is summary of the issues he feels needs to be addressed through corrective action:

- PACES needs to obtain authorization (permit or PBR) before any more barges are unloaded into tank trucks. The emissions need to be controlled and/or the loading location moved farther away from the property boundary with Talens Marine. Based on the measurements taken during his on-site investigation, trucks were being loaded only 55 feet from the property line. There was no evidence of any vapor collection, so displaced vapors were assumed to be emitted from the trucks at that location. The materials that are being transferred from barges need to be identified (including composition) and their emissions appropriately authorized by permit or PBR.
- Feed stock being unloaded from tank trucks into the Mix Reactor Vessel are not being vapor balanced as represented in the PBR registration. The trucks are open to the atmosphere during unloading according to what he was told by operations personnel. He feels this may be another potential source of the odors for which they have received multiple complaints. PACES should implement vapor balancing or other vapor controls to minimize odors from this source.
- PACES did not obtain authorization (permit or PBR) before constructing and operating the second Mix Reactor Vessel as well as bleach storage and an additional new sulfuric acid tank. Authorization needs to be obtained for this equipment and the associated emissions. In addition, he observed other equipment on-site that looked like it was being prepared for operation without a permit or PBR authorization. He did not include these as violations in the Exit Interview Form because they were not complete and not in service, but warned that authorization needs to be acquired before PACES proceeds much further.
- Documents reviewed during the investigation showed PACES was storing and using spent sulfuric acid and possibly spent caustic in the NaSH process instead of fresh sulfuric acid and sodium hydroxide solutions as represented in the PBR. He is concerned that there are chemicals in these spent solutions that are not accounted for and not authorized in the PBR registration. The composition of these solutions needs to be identified and their emissions authorized by permit or PBR and vapor controls applied if needed to minimize odors. In addition, bleach is being stored and used in the process instead of the hydrogen peroxide solution represented in the PBR registration. The composition of the bleach needs to be identified and the emissions from its storage and handling need to be authorized by permit or PBR as well.
- The flare observation record maintained at the site did not include the time of day of the observation as required by regulation. This was the subject of a previous violation notice sent to PACES in March.

In addition, Mr. Letourneau expressed a general concern about the persistent sulfide odor at the site and strongly recommended that PACES take actions to eliminate or significantly reduce it and that these actions be written into the facility's standard operating procedures. He said he is aware of at least 9 odor complaints received by TCEQ Region 10.

In order to prepare the corrective actions that involve obtaining the appropriate air authorizations, I will need the following information:

- MSDS or profiles showing the composition of the materials being received by barge, the method of transfer (i.e. pump, nitrogen pressure, etc), and anticipated annual volumes (gallons) for each material. Also how will the displaced truck loading vapors be controlled?
- How will displaced vapors from filling the Mix Reactor Vessels be controlled?
- MSDS or profiles for the acid, caustic, and bleach solutions used in the NaSH process.
- Dimensions and capacity of the new sulfuric acid tank and the bleach tank.

Thanks,

Phil

This email (and any files transmitted) is confidential and is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. ALL WORK PRODUCT IS PROVIDED STRICTLY IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF WCM CONTRACT DOCUMENTS. This communication represents the originator's personal views and opinions, which do not necessarily reflect those of The WCM Group, Inc. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, forwarding, printing, or copying of this email is strictly prohibited. If you have received this email in error, please notify us immediately by telephone (281) 446-7070 or email wcmgroup@wcmgroup.com

Port Arthur Chemical and Environmental Services, LLC
2420 South Gulfway
Port Arthur, Texas 77640
713-676-1460 Main
713-676-1676 Fax

June 24, 2009

Mr. David Letourneau
Texas Commission on Environmental Quality
Region 10
Air Section
3870 Eastex Fwy
Beaumont, TX 77703-1830

RE: June 8, 2009 Exit Interview Form – Alleged Violations
Port Arthur Chemical and Environmental Services, Inc. (Jefferson County)
RN105156111

Mr. Letourneau:

Port Arthur Chemical and Environmental Services, Inc. (PACES) is providing the following information in response to the alleged violations referenced in the Exit Interview Form dated June 8, 2009. Each alleged violation is addressed below in the order it appeared in the Form.

1. Alleged violation: 30 TAC 106.6(b) - Failure to comply with representations submitted with the Permit by Rule Applications.

   The exit interview description is not specific about the basis for this alleged violation, but from discussions during and after the onsite investigation we understand the primary concern addressed by this item is the property line and receptor distances represented in the Permit by Rule (PBR) registration. The measurements taken by TCEQ investigators included the distance from the barge dock to the nearest property line (approximately 47 feet) and the distance from the end of a section of hose on the ground at the time of site visit to the nearest property line (approximately 55 feet). Investigators also measured from the process acid tank to the nearest property line, a distance of approximately 79 feet with the nearest off-property receptor estimated at approximately 88 feet.

   PBR Registration No. 86173 issued by TCEQ authorizes emission sources under individual permits-by-rule (PBRs) based on the type of equipment and related emissions. The PBRs addressed in the registration include 30 TAC 106.261, 106.262, 106.472, 106.475, and 106.492. Only PBRs 106.261 and 106.262 contain distance limitations applicable to certain

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equipment within the process. The required minimum distance for these PBRs is 100 feet to the nearest off-property receptor measured either from the facility (i.e. tank, vessel, etc.) that is the source of the emission in the case of 106.261, or from the final emission point (i.e. flare stack) associated with the facility in the case of 106.262. The facilities and emission points authorized by PBR 106.261 and 106.262 in the TCEQ approved registration are located well over the 100 feet minimum distance requirement. The equipment authorized by PBR 106.261 (T1 Mix Reactor Vessel) is located near the rear of the process area and vents to the vapor collection system and exhausts through the flare stack. The equipment authorized by PBR 106.262 also vents to the flare stack. The flare stack is located over 200 feet from the nearest off-property receptor. Other equipment and emission points authorized under PBR 106.472 such as the process acid tank may be located closer to the nearest property line and off-property receptor, but are not required to meet a minimum distance limit.

2. Alleged violation: 30 TAC 106.472 - Failure to obtain authorization to load or unload barges.

   Attached is a PBR 106.472 from site file that covers barge unloading at PACES. The movements are inbound transfers of aqueous caustic solutions from barge to stationary tank (RV1) or to a tanker truck. Vapors from the truck trailer or RV1 are vented to the existing scrubber and flare control system.

3. Alleged violation: 30 TAC 106.6(b) - Failure to minimize emissions on inbound material transfers by using vapor balancing.

   Based on discussions during and after the investigation, we understand the issue of concern is the manner in which feed material was unloaded from tanker trucks into the process reactor vessel. When material was pumped into RV1 from a trailer the vapors from RV1 were vented to the existing scrubber and flare control system.

4. Alleged violation: 30 TAC 116.110(a) - Failure to obtain authorization before constructing and operating new Reactor Vessel Number Two, a new 1,000 gallon acid tank, and a new bleach tank.

   PACES did not operate Reactor Vessel Number Two in service for NASH Production. PACES is in the process of forwarding documentation authorizing operation of the small sulfuric acid solution tank under PBR 106.472. Authorization documentation for the 8,800 gallon bleach solution tank under PBR 106.472 is attached. These tanks are also being included in the pending NSR permit.

5. Alleged violation: 30 TAC 106.6(c) - Failure to revise the certified registration before changing the character of emissions.

   Based on discussions during and after the investigation, we understand the issue of concern here is the composition of the sulfuric acid and caustic solutions used in the process and the

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change from using a hydrogen peroxide solution in the process to a bleach solution. As described in the PBR registration, the sulfuric acid and caustic solution tanks are authorized under PBR 106.472(4) – "aqueous caustic solutions, except ammonia solutions" and 106.472(5) – "inorganic acids except oleum, hydrofluoric, and hydrochloric acids". To the extent that these aqueous solutions may have higher caustic or acid concentrations than represented or contain other small amounts of constituents, these characteristics do not affect the caustic or acid nature of the solutions. PACES is preparing documentation to better clarify and authorize the handling of these materials. The use of aqueous bleach (sodium hypochlorite solution) as a reactant in the NaSH process in lieu of hydrogen peroxide does not have a consequential effect on the controlled emissions from the process. However, the bleach storage tank does represent a source of potential emissions and therefore has been authorized under 30 TAC 106.472(4) – "aqueous caustic solutions, except ammonia solutions" (see attached). The tank stores an aqueous solution of up to 15% sodium hypochlorite and 0-2% sodium hydroxide with a pH > 10. PACES is also working with the TCEQ Air Permits Division to include these representations in the pending NSR permit.

6. Alleged violation: 30 TAC 111.111(a)(4)(A)(ii) - Failure to properly maintain a flare observation log.

   We understand that the daily flare observation record must include a reference to the time of day of the observation as required by the rule. Please be aware that PACES has included time of day. Attached is a copy of a recent record showing the time reference.

PACES respectfully requests that you consider the actions that have been undertaken and call to discuss any questions you may have about the information provided above as we proceed forward.

Sincerely,

Clark G. Hickman
281-488-0848

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOCUMENTATION OF PERMIT-BY-RULE §106.472 AUTHORIZATION AQUEOUS CAUSTIC SOLUTION TRANSFER OPERATIONS AND EQUIPMENT (SULFIDIC CAUSTIC)

Port Arthur Chemical & Environmental Services, LLC
Port Arthur, Texas

Introduction

Port Arthur Chemical & Environmental Services, LLC (PACES) operates a sodium hydrosulfide production process under Permits-By-Rule (PBR) Registration No. 86173. This package documents the authorization to transfer sulfidic caustic from barges to stationary tank vessels or to tank trucks. The authorization is claimed under PBR 106.472 which authorizes equipment for transfer of aqueous caustic solutions to tank vessels or tank trucks. The claimed PBR authorization does not require registration with the state. However, this package must be retained on site to document the authorization for the life of the project.

Completed TCEQ forms demonstrating compliance with the conditions of the claimed PBR can be found in Appendix A. Emission calculations are located in Appendix B.

APPENDIX A
TCEQ FORMS FOR PERMIT-BY-RULE

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), "Requirements for Permitting by Rule." Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists and guidance documents are available from the TCEQ, Air Permits Division Web site at: **www.tceq.state.tx.us/permitting/air/nav/air_pbr.html**.

1. 30 TAC § 106.4(a)(1) & (4): Emission limits

List emissions in tpy for **each** facility (add additional pages or table if needed):

SO_2 = 0.00	PM_{10} = 0.00	VOC = <0.01	NO_x = 0.00	CO = 0.00	Other _____	= <0.01
SO_2 = _____	PM_{10} = _____	VOC = _____	NO_x = _____	CO = _____	Other _____	= _____
SO_2 = _____	PM_{10} = _____	VOC = _____	NO_x = _____	CO = _____	Other _____	= _____
Total 0.00	0.00	<0.01	0.00	0.00		<0.01

- Are the SO_2, PM_{10}, VOC, or other air contaminant emissions claimed for **each** facility in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

*If the answer to both is "Yes," continue to the question below. If the answer to either question is "No," a **PBR cannot be claimed**.*

Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.) ☐ YES ☑ NO

If "Yes," skip to Section 2. If "No," continue to the questions below.

If the site has had no public notice, please answer the following:

- Are the SO_2, PM_{10}, VOC, or other emissions claimed for **all** facilities in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

If the answer to both questions is "Yes," continue to Section 2.
*If the answer to either question is "No," **a PBR cannot be claimed**. A permit will be required under Chapter 116.*

2. 30 TAC § 106.4(a)(2): Nonattainment check

Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county? ☑ YES ☐ NO

If "Yes," please indicate which county by checking the appropriate box to the right.

(Marginal) - Hardin, Jefferson, and Orange counties *(BPA)* ☑ BPA
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties *(HGA)* ☐ HGA
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties *(DFW)* ☐ DFW

If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.

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Does this project trigger a nonattainment review? To determine the answer, review the information below: • Is the project's potential to emit (PTE) for emissions of VOC or NO_x increasing by 100 tpy or more? *PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rule, or made federally enforceable by a certification.* • Is the site an existing major nonattainment site and are the emissions of VOC or NO_x increasing by 40 tpy or more? If needed, attach contemporaneous netting calculations per nonattainment guidance. Additional information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table8.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above, the project is a major source or a major modification and* ***a PBR may not be used.*** *A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.*	☐YES ☑NO ☐YES ☑NO
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules? To determine the answer, review the information below: • Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source? • Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source? • Are emissions increasing above significance levels at an existing major site? PSD information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table9.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above,* ***a PBR may not be used.*** *A PSD Permit review must be completed to authorize the project. If "No," continue to Section 4.*	☐YES ☑NO ☐YES ☑NO ☐YES ☑NO
4. 30 TAC § 106.4(a)(6): Federal Requirements	
• Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)? If "Yes," which Subparts are applicable?: _____ *If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.*	☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs? *If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.* ***List permit number(s):*** _____ *If "No," continue to Section 6.*	☐YES ☑NO

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6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade

- Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? ☐YES ☑NO

If "Yes," answer the question below. If "No," continue to Section 7.

- Will the proposed facility or group of facilities obtain required allowances for NO_x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)? ☐YES ☐NO

7. Highly Reactive Volatile Organic Compounds (HRVOC) check

- Is the facility located in Harris County? *If "Yes," answer the next question. If "No," skip to the box below.* ☐YES ☑NO
- Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," skip to the box below.* ☐YES ☐NO
- Will one or more of the following HRVOC be emitted as a part of this project? ☐YES ☐NO

If "Yes," complete the information below:	lb/hr	tpy
▸ 1,3-butadiene		
▸ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])		
▸ alpha-butylene (ethylethylene)		
▸ beta-butylene (dimethylethylene, including both cis- and trans-isomers)		
▸ ethylene		
▸ propylene		

- Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? ☐YES ☑NO

If "Yes," answer the next question. If "No," the checklist is complete.

- Will the project be constructed after June 1, 2006? ☐YES ☐NO

If "Yes," answer the next question. If "No," the checklist is complete.

- Will one or more of the following HRVOC be emitted as a part of this project? ☐YES ☐NO

If "Yes," complete the information below:	lb/hr	tpy
▸ ethylene		
▸ propylene		

PRINT

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Texas Commission on Environmental Quality

Exemption §106.472 Checklist
(Previously Standard Exemption 51)

Organic Liquid Loading and Unloading

The following checklist is designed to help you confirm that you meet §106.472, previously Standard Exemption 51 (STDX 51), requirements. **Any "no" answers indicate that the claim of registration may not meet all requirements for the use of Exemption §106.472, previously Standard Exemption 51.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

YES	NO	NA	DESCRIPTION
✓	—	—	Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§106, Subchapter A checklist is available)?
✓	—	—	Are all the facilities claimed for exemption specifically named in the general section of §106.472, previously STDX 51? (This exemption has been interpreted to allow mixing or blending but not chemical reaction in tankage.)
✓	—	—	Is the equipment designed to prevent visible emissions?
✓	—	—	Are all the chemicals to be loaded, unloaded, or stored described in §106.472, previously STDX 51(a) - (i)? Attach a list of the chemicals and identify the appropriate item of §106.472, previously STDX 51 that applies. Include additional supporting data. For example, a §106.472, previously STDX 51(i), claim should identify initial boiling points of all compounds to be covered.
—	—	✓	Will aqueous ammonia solutions, hydrochloric acid, or acetic acid be vented through a water scrubber?
—	—	✓	Are facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees F or greater listed in 40 CFR 261, Appendix VIII, located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located? List these compounds and show their handling location on an attached scaled plot plan.

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APPENDIX B
EMISSION CALCULATIONS

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
EMISSION CALCULATIONS SUMMARY

Aqueous Sulfidic Caustic						
T1 (RV-1) Loading	lb/hr	TPY	vapor wt frac	lb/hr	TPY	
Sodium Sulfide(salt)	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Hydroxide	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Carbonate	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Hydrosulfide (salt)	0.1369	0.0093	0.0000	0.0000	0.0000	
Miscellaneous Organics	0.1369	0.0093	0.0009	1.25E-04	8.51E-06	
Water	0.1369	0.0093	0.9991	0.1367	0.0093	
				0.1369	**0.0093**	TOTAL

Aqueous Sulfidic Caustic						
Truck Loading	lb/hr	TPY	vapor wt frac	lb/hr	TPY	
Sodium Sulfide(salt)	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Hydroxide	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Carbonate	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Hydrosulfide (salt)	0.1280	0.0313	0.0000	0.0000	0.0000	
Miscellaneous Organics	0.1280	0.0313	0.0009	1.17E-04	2.87E-05	
Water	0.1280	0.0313	0.9991	0.1278	0.0313	
				0.1280	**0.0313**	TOTAL

Total VOC	2.43E-04	lb/hr
	3.72E-05	tpy

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PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK / VESSEL EMISSION CALCULATIONS

	Tank/Vessel ID:	**T1 (RV-1) Aqueous Sulfidic Caustic**
	Material:	
Annual Throughput, gal/yr	Q =	7,056,000
Max Hourly Transfer Rate, gal/hr	FR =	28,000
Emissions:		
Maximum Hourly Emissions, lb/hr	**Lmax =**	**0.13685**
Total Annual Emissions, TPY	**Lt =**	**0.00929**
Annual Average Hourly Emis, lb/hr	Lavg =	0.002
Standing loss, lb/yr	Ls =	0.187
Working loss, lb/yr	Lw =	18.388
Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.01
Vapor Pressure @ Tla, psia	Pva =	0.30
Vapor Pressure @ Tln, psia	Pvn =	0.26
Vapor Pressure @ Tlx, psia	Pvx =	0.36
Max. Vapor Pressure @ mTlx, psia	Pvmax =	0.57
Tank Properties:		
Vapor control device		flare
Vapor control efficiency, %	e =	98
Capacity volume, gal	Cv =	47,966
Shell Diameter, ft	D =	10.8
Shell Height/Length, ft	Hs =	70.0
Tank Orientation (vertical or horizontal)		horiz
Roof type (cone or dome)		N/A
Tank Color (white, light gray, other)		white
Solor absorbance factor	a =	0.17
Pressure vent setting, psig	Pbp =	0.3
Vacuum vent setting, psia	Pbv =	-0.3
Effective diameter, ft	De =	31.0
Avg. Liquid Height, ft	Hl =	5.4
Max. Liquid Height, ft	Hlx =	10.8
Roof Outage, ft	Hro =	0.00
Vapor Space Outage, ft	Hvo =	5.40
Vapor space volume, ft^3	Vv =	4084.47
Operating Conditions (Houston, Tx):		
Atmospheric pressure, psia	Pa =	14.7
Annual Avg. Daily solar insulation factor, Btu/ft^2 day	I =	1351
Annual Avg. Daily max. ambient temp, R	Tax =	539.1
Annual Avg. Daily min. ambient temp, R	Tan =	517.4
Annual Avg. Daily vapor temp. range, R	^Tv =	22.1
Annual Daily avg. liquid surface temp, R	Tla =	530.1
Annual Avg. Daily min. liquid surface temp., R	Tln =	524.6
Annual Avg. Daily max. liquid surface temp., R	Tlx =	535.6
Highest Month Daily solar insulation factor, Btu/ft^2 day	mI =	1898
Highest Month Daily max. ambient temp, R	mTax =	553.6
Highest Month Daily min. ambient temp, R	mTan =	532.5
Highest Month Daily vapor temp. range, R	m^Tv =	24.2
Highest Month Daily max. liquid surface temp., R	mTlx =	551.7
Gas Constant, psia-ft^3/lb mole-R	R =	10.73
Vapor Density, lb/ft^3	Wv =	0.001
Daily vapor pressure range, psia	^Pv =	0.103
Vapor space expansion factor	Ke =	0.007
Vented vapor saturation factor	Ks =	0.920
Working Loss Product Factor	Kp =	1.00
Turnovers	N =	147.10
Turnover factor	Kn =	1.00
Operating Days, days/yr	Days =	365

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK TRUCK LOADING LOSS EMISSIONS

	Material:	Aqueous Sulfidic Caustic
Annual Throughput, gal/yr	Th =	7,056,000
Max Hourly Fill Rate, gal/hr	FR =	8,000
Emissions:		
Max Hrly Controlled Emissions, lb/hr	**Ilc =**	**0.0352**
Annual Controlled Emissions, TPY	**LLc =**	**0.0086**
Max Hrly Uncontrolled Emissions, lb/hr	**Ilu =**	**0.0927**
Annual Uncontrolled Emissions, TPY	**LLu =**	**0.0227**

Controlled Filling loss, lb/hr

Ilc = [(12.46 x ((S x VPx x MW) / Tx) / 1000) x FR x (c/100) x (1-e/100))]

Controlled Loading loss, TPY

LLc = [(12.46 x ((S x VPa x MW) / Ta) / 1000) x Th x (c/100) x (1-e/100))] / 2000

Uncontrolled Filling loss, lb/hr

Ilc = [(12.46 x ((S x VPx x MW) / Tx) / 1000) x FR x (c/100))]

Uncontrolled Loading loss, TPY

LLc = [(12.46 x ((S x VPa x MW) / Ta) / 1000) x Th x (c/100))] / 2000

Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.01
Vapor Pressure @ Tlx, psia	Pvx =	0.57
Vapor Pressure @ Tla, psia	Pva =	0.30
Vapor control device		flare
Capture efficiency, %	c =	95
Vapor control efficiency, %	e =	98
Max Liquid Temp., R	Tlx =	551.67
Averag Liquid Temp., R	Tla =	530.08
Saturation Factor	S =	1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOCUMENTATION OF PERMIT-BY-RULE §106.472 AUTHORIZATION AQUEOUS CAUSTIC SOLUTION STORAGE TANK (SODIUM HYPOCHLORITE)

Port Arthur Chemical & Environmental Services, LLC
Port Arthur, Texas

Introduction

Port Arthur Chemical & Environmental Services, LLC (PACES) operates a sodium hydrosulfide production process under Permits-By-Rule (PBR) Registration No. 86173. This package documents the authorization to construct and operate a bleach (sodium hypochlorite solution) storage tank in support of that process. The authorization is claimed under PBR 106.472 which allows the storage and loading of aqueous caustic solutions. The claimed PBR authorization does not require registration with the state. However, this package must be retained on site to document the authorization for the life of the project.

Completed TCEQ forms demonstrating compliance with the conditions of the claimed PBR can be found in Appendix A. Emission calculations are located in Appendix B.

The PACES facility is located Jefferson County, which is part of the Beaumont-Port Arthur Ozone Non-attainment area. Total emissions from this project are less than 0.01 tons per year (tpy) of Inorganic Compounds (as sodium hypochlorite).

APPENDIX A
TCEQ FORMS FOR PERMIT-BY-RULE

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), "Requirements for Permitting by Rule." Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists and guidance documents are available from the TCEQ, Air Permits Division Web site at: **www.tceq.state.tx.us/permitting/air/nav/air_pbr.html**.

1. 30 TAC § 106.4(a)(1) & (4): Emission limits

List emissions in tpy for **each** facility (add additional pages or table if needed):

SO_2 = 0.00	PM_{10} = 0.00	VOC = 0.00	NO_x = 0.00	CO = 0.00	Other Sodium Hypochlorite	= 0.01
SO_2 =	PM_{10} =	VOC =	NO_x =	CO =	Other	=
SO_2 =	PM_{10} =	VOC =	NO_x =	CO =	Other	=
Total 0.00	0.00	0.00	0.00	0.00		0.01

- Are the SO_2, PM_{10}, VOC, or other air contaminant emissions claimed for **each** facility in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

*If the answer to both is "Yes," continue to the question below. If the answer to either question is "No," a **PBR cannot be claimed**.*

Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.) ☐ YES ☑ NO

If "Yes," skip to Section 2. If "No," continue to the questions below.

If the site has had no public notice, please answer the following:
- Are the SO_2, PM_{10}, VOC, or other emissions claimed for **all** facilities in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

If the answer to both questions is "Yes," continue to Section 2.
*If the answer to either question is "No," **a PBR cannot be claimed**. A permit will be required under Chapter 116.*

2. 30 TAC § 106.4(a)(2): Nonattainment check

Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county? ☑ YES ☐ NO

If "Yes," please indicate which county by checking the appropriate box to the right.

(Marginal) - Hardin, Jefferson, and Orange counties *(BPA)* ☑ BPA
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties *(HGA)* ☐ HGA
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties *(DFW)* ☐ DFW

If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.

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Does this project trigger a nonattainment review? To determine the answer, review the information below: • Is the project's potential to emit (PTE) for emissions of VOC or NO_x increasing by 100 tpy or more? *PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rule, or made federally enforceable by a certification.* • Is the site an existing major nonattainment site and are the emissions of VOC or NO_x increasing by 40 tpy or more? If needed, attach contemporaneous netting calculations per nonattainment guidance. Additional information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table8.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above, the project is a major source or a major modification and* ***a PBR may not be used.*** *A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.*	☐YES ☑NO ☐YES ☑NO
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules? To determine the answer, review the information below: • Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source? • Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source? • Are emissions increasing above significance levels at an existing major site? PSD information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table9.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above,* ***a PBR may not be used.*** *A PSD Permit review must be completed to authorize the project. If "No," continue to Section 4.*	☐YES ☑NO ☐YES ☑NO ☐YES ☑NO
4. 30 TAC § 106.4(a)(6): Federal Requirements	
• Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)? If "Yes," which Subparts are applicable?: _____ *If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.*	☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs? *If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.* ***List permit number(s):*** _____ *If "No," continue to Section 6.*	☐YES ☑NO

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6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade	
• Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? *If "Yes," answer the question below. If "No," continue to Section 7.*	☐YES ☑NO
• Will the proposed facility or group of facilities obtain required allowances for NO_x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)?	☐YES ☐NO

7. Highly Reactive Volatile Organic Compounds (HRVOC) check			
• Is the facility located in Harris County? *If "Yes," answer the next question. If "No," skip to the box below.*			☐YES ☑NO
• Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," skip to the box below.*			☐YES ☐NO
• Will one or more of the following HRVOC be emitted as a part of this project?			☐YES ☐NO
If "Yes," complete the information below:	lb/hr	tpy	
▸ 1,3-butadiene			
▸ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])			
▸ alpha-butylene (ethylethylene)			
▸ beta-butylene (dimethylethylene, including both cis- and trans-isomers)			
▸ ethylene			
▸ propylene			
• Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? *If "Yes," answer the next question. If "No," the checklist is complete.*			☐YES ☑NO
• Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," the checklist is complete.*			☐YES ☐NO
• Will one or more of the following HRVOC be emitted as a part of this project?			☐YES ☐NO
If "Yes," complete the information below:	lb/hr	tpy	
▸ ethylene			
▸ propylene			

PRINT

EPAHO044000972

Texas Commission on Environmental Quality

Exemption §106.472 Checklist
(Previously Standard Exemption 51)

Organic Liquid Loading and Unloading

The following checklist is designed to help you confirm that you meet §106.472, previously Standard Exemption 51 (STDX 51), requirements. **Any "no" answers indicate that the claim of registration may not meet all requirements for the use of Exemption §106.472, previously Standard Exemption 51.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

YES	NO	NA	DESCRIPTION
✓	—	—	Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§106, Subchapter A checklist is available)?
✓	—	—	Are all the facilities claimed for exemption specifically named in the general section of §106.472, previously STDX 51? (This exemption has been interpreted to allow mixing or blending but not chemical reaction in tankage.)
✓	—	—	Is the equipment designed to prevent visible emissions?
✓	—	—	Are all the chemicals to be loaded, unloaded, or stored described in §106.472, previously STDX 51(a) - (i)? Attach a list of the chemicals and identify the appropriate item of §106.472, previously STDX 51 that applies. Include additional supporting data. For example, a §106.472, previously STDX 51(i), claim should identify initial boiling points of all compounds to be covered.
—	—	✓	Will aqueous ammonia solutions, hydrochloric acid, or acetic acid be vented through a water scrubber?
—	—	✓	Are facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees F or greater listed in 40 CFR 261, Appendix VIII, located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located? List these compounds and show their handling location on an attached scaled plot plan.

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APPENDIX B
EMISSION CALCULATIONS

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL
TANK EMISSION CALCULATIONS

	Tank ID:	**T2A**
	chemical	**15%**
	Material:	**Sodium Hypochlorite**
Annual Throughput, gal/yr	Q =	2,773,333
Max Hourly Transfer Rate, gal/hr	FR =	6,000
Emissions:		
Maximum Hourly Emissions, lb/hr	**Lmax =**	**1.88250**
Total Annual Emissions, TPY	**Lt =**	**0.23824**
Annual Average Hourly Emis, lb/hr	Lavg =	0.054
Standing loss, lb/yr	Ls =	11.842
Working loss, lb/yr	Lw =	464.642
Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.14
Vapor Pressure @ Tla, psia	Pva =	0.39
Vapor Pressure @ Tln, psia	Pvn =	0.33
Vapor Pressure @ Tlx, psia	Pvx =	0.46
Max. Vapor Pressure @ mTlx, psia	Pvmax =	0.73
Tank Properties:		
Vapor control device		none
Vapor control efficiency, %	e =	0
Capacity volume, gal	Cv =	8,812
Shell Diameter, ft	D =	10.0
Shell Height/Length, ft	Hs =	15.0
Tank Orientation (vertical or horizontal)		vert
Roof type (cone or dome)		cone
Tank Color (white, light gray, other)		white
Solor absorbance factor	a =	0.17
Pressure vent setting, psig	Pbp =	0
Vacuum vent setting, psia	Pbv =	0
Effective diameter, ft	De =	10.0
Avg. Liquid Height, ft	Hl =	7.5
Max. Liquid Height, ft	Hlx =	15.0
Roof Outage, ft	Hro =	0.10
Vapor Space Outage, ft	Hvo =	7.60
Vapor space volume, ft^3	Vv =	597.23
Operating Conditions (Houston, Tx):		
Atmospheric pressure, psia	Pa =	14.7
Annual Avg. Daily solar insulation factor, Btu/ft^2 day	I =	1351
Annual Avg. Daily max. ambient temp, R	Tax =	539.1
Annual Avg. Daily min. ambient temp, R	Tan =	517.4
Annual Avg. Daily vapor temp. range, R	^Tv =	22.1
Annual Daily avg. liquid surface temp, R	Tla =	530.1
Annual Avg. Daily min. liquid surface temp., R	Tln =	524.6
Annual Avg. Daily max. liquid surface temp., R	Tlx =	535.6
Highest Month Daily solar insulation factor, Btu/ft^2 da	ml =	1898
Highest Month Daily max. ambient temp, R	mTax =	553.6
Highest Month Daily min. ambient temp, R	mTan =	532.5
Highest Month Daily vapor temp. range, R	m^Tv =	24.2
Highest Month Daily max. liquid surface temp., R	mTlx =	551.7
Gas Constant, psia-ft^3/lb mole-R	R =	10.73
Vapor Density, lb/ft^3	Wv =	0.001
Daily vapor pressure range, psia	^Pv =	0.131
Vapor space expansion factor	Ke =	0.051
Vented vapor saturation factor	Ks =	0.865
Working Loss Product Factor	Kp =	1.00
Turnovers	N =	314.72
Turnover factor	Kn =	1.00
Operating Days, days/yr	Days =	365

EPAHO044000975

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK EMISSION CALCULATIONS

Sodium Hypochlorite Solution Storage speciation for component percentage					
	lb/hr	TPY	vapor wt @ Max Hourly	lb/hr	TPY
T2A	1.8825	0.2382	0.0105	0.0198	0.0025

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Daily Flare Observation Record

June 2009

FLARE REPORT

Daily Log for: Jun-09

DATE	OPERATOR/SHIFT	FLAME COLOR	SMOKE?	COMMENTS	
6/1/2009					
6/2/2009	Did Not Run				
6/3/2009					
6/4/2009	Did not Run				
6/5/2009	Jay Matlock	Clear	NO		8:30A
6/6/2009	Did NOT Run				
6/7/2009	Did not Run				
6/8/2009	Kelly Gall	Clear	NO	Clear Clear Flame	7:15A
6/9/2009	Kelly Gall	Clear Blue	NO	Clear Clear Flame	7:30A
6/10/2009	Kelly Gall	Clear	NO		7:30P
6/11/2009	Michael Rudd	Clear	NO	clear ~~to~~ ~~black~~ Clear	7:30A
6/12/2009	Did not Run				
6/13/2009	Did not Run				
6/14/2009	Did not Run				
6/15/2009	Michael Rudd	clear	none	Clear to blue	7:30A
6/16/2009	Michael Rudd	Clear	None		7:30A
6/17/2009	Michael Rudd	Clear	none	Clear to blue	7:30P
6/18/2009	DNR				
6/19/2009	DNR				
6/20/2009	DNR				
6/21/2009	DNR				
6/22/2009	DNR				
6/23/2009					
6/24/2009					
6/25/2009					
6/26/2009					
6/27/2009					
6/28/2009					
6/29/2009					
6/30/2009					

EPAHO044000978

Clark Hickman

From: Philip Evans [pevans@wcmgroup.com]
Sent: Friday, June 12, 2009 1:22 PM
To: Clark Hickman
Cc: Desiree Westcott; Jack Piskura; Adrienne Perkins; Bill McNutt
Subject: PACES

Clark,

I spoke with Mr. David Letourneau of TCEQ Region 10 about the alleged violations on the TCEQ Exit Interview Form dated 6/3/09. He spent quite a long time on the phone with me discussing his concerns. A Notice of Violation letter is being prepared and will be sent to PACES reflecting these items. The following is summary of the issues he feels needs to be addressed through corrective action:

- PACES needs to obtain authorization (permit or PBR) before any more barges are unloaded into tank trucks. The emissions need to be controlled and/or the loading location moved farther away from the property boundary with Talens Marine. Based on the measurements taken during his on-site investigation, trucks were being loaded only 55 feet from the property line. There was no evidence of any vapor collection, so displaced vapors were assumed to be emitted from the trucks at that location. The materials that are being transferred from barges need to be identified (including composition) and their emissions appropriately authorized by permit or PBR.
- Feed stock being unloaded from tank trucks into the Mix Reactor Vessel are not being vapor balanced as represented in the PBR registration. The trucks are open to the atmosphere during unloading according to what he was told by operations personnel. He feels this may be another potential source of the odors for which they have received multiple complaints. PACES should implement vapor balancing or other vapor controls to minimize odors from this source.
- PACES did not obtain authorization (permit or PBR) before constructing and operating the second Mix Reactor Vessel as well as bleach storage and an additional new sulfuric acid tank. Authorization needs to be obtained for this equipment and the associated emissions. In addition, he observed other equipment on-site that looked like it was being prepared for operation without a permit or PBR authorization. He did not include these as violations in the Exit Interview Form because they were not complete and not in service, but warned that authorization needs to be acquired before PACES proceeds much further.
- Documents reviewed during the investigation showed PACES was storing and using spent sulfuric acid and possibly spent caustic in the NaSH process instead of fresh sulfuric acid and sodium hydroxide solutions as represented in the PBR. He is concerned that there are chemicals in these spent solutions that are not accounted for and not authorized in the PBR registration. The composition of these solutions needs to be identified and their emissions authorized by permit or PBR and vapor controls applied if needed to minimize odors. In addition, bleach is being stored and used in the process instead of the hydrogen peroxide solution represented in the PBR registration. The composition of the bleach needs to be identified and the emissions from its storage and handling need to be authorized by permit or PBR as well.
- The flare observation record maintained at the site did not include the time of day of the observation as required by regulation. This was the subject of a previous violation notice sent to PACES in March.

In addition, Mr. Letourneau expressed a general concern about the persistent sulfide odor at the site and strongly recommended that PACES take actions to eliminate or significantly reduce it and that these actions be written into the facility's standard operating procedures. He said he is aware of at least 9 odor complaints received by TCEQ Region 10.

In order to prepare the corrective actions that involve obtaining the appropriate air authorizations, I will need the following information:

- MSDS or profiles showing the composition of the materials being received by barge, the method of transfer (i.e. pump, nitrogen pressure, etc), and anticipated annual volumes (gallons) for each material. Also how will the displaced truck loading vapors be controlled?
- How will displaced vapors from filling the Mix Reactor Vessels be controlled?
- MSDS or profiles for the acid, caustic, and bleach solutions used in the NaSH process.
- Dimensions and capacity of the new sulfuric acid tank and the bleach tank.

Thanks,

Phil

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Port Arthur Chemical and Environmental Services, LLC
2420 South Gulfway
Port Arthur, Texas 77640
713-676-1460 Main
713-676-1676 Fax

June 24, 2009

Mr. David Letourneau
Texas Commission on Environmental Quality
Region 10
Air Section
3870 Eastex Fwy
Beaumont, TX 77703-1830

RE: June 8, 2009 Exit Interview Form – Alleged Violations
Port Arthur Chemical and Environmental Services, Inc. (Jefferson County)
RN105156111

Mr. Letourneau:

Port Arthur Chemical and Environmental Services, Inc. (PACES) is providing the following information in response to the alleged violations referenced in the Exit Interview Form dated June 8, 2009. Each alleged violation is addressed below in the order it appeared in the Form.

1. Alleged violation: 30 TAC 106.6(b) - Failure to comply with representations submitted with the Permit by Rule Applications.

   The exit interview description is not specific about the basis for this alleged violation, but from discussions during and after the onsite investigation we understand the primary concern addressed by this item is the property line and receptor distances represented in the Permit by Rule (PBR) registration. The measurements taken by TCEQ investigators included the distance from the barge dock to the nearest property line (approximately 47 feet) and the distance from the end of a section of hose on the ground at the time of site visit to the nearest property line (approximately 55 feet). Investigators also measured from the process acid tank to the nearest property line, a distance of approximately 79 feet with the nearest off-property receptor estimated at approximately 88 feet.

   PBR Registration No. 86173 issued by TCEQ authorizes emission sources under individual permits-by-rule (PBRs) based on the type of equipment and related emissions. The PBRs addressed in the registration include 30 TAC 106.261, 106.262, 106.472, 106.475, and 106.492. Only PBRs 106.261 and 106.262 contain distance limitations applicable to certain

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equipment within the process. The required minimum distance for these PBRs is 100 feet to the nearest off-property receptor measured either from the facility (i.e. tank, vessel, etc.) that is the source of the emission in the case of 106.261, or from the final emission point (i.e. flare stack) associated with the facility in the case of 106.262. The facilities and emission points authorized by PBR 106.261 and 106.262 in the TCEQ approved registration are located well over the 100 feet minimum distance requirement. The equipment authorized by PBR 106.261 (T1 Mix Reactor Vessel) is located near the rear of the process area and vents to the vapor collection system and exhausts through the flare stack. The equipment authorized by PBR 106.262 also vents to the flare stack. The flare stack is located over 200 feet from the nearest off-property receptor. Other equipment and emission points authorized under PBR 106.472 such as the process acid tank may be located closer to the nearest property line and off-property receptor, but are not required to meet a minimum distance limit.

2. Alleged violation: 30 TAC 106.472 - Failure to obtain authorization to load or unload barges.

   Attached is a PBR 106.472 from site file that covers barge unloading at PACES. The movements are inbound transfers of aqueous caustic solutions from barge to stationary tank (RV1) or to a tanker truck. Vapors from the truck trailer or RV1 are vented to the existing scrubber and flare control system.

3. Alleged violation: 30 TAC 106.6(b) - Failure to minimize emissions on inbound material transfers by using vapor balancing.

   Based on discussions during and after the investigation, we understand the issue of concern is the manner in which feed material was unloaded from tanker trucks into the process reactor vessel. When material was pumped into RV1 from a trailer the vapors from RV1 were vented to the existing scrubber and flare control system.

4. Alleged violation: 30 TAC 116.110(a) - Failure to obtain authorization before constructing and operating new Reactor Vessel Number Two, a new 1,000 gallon acid tank, and a new bleach tank.

   PACES did not operate Reactor Vessel Number Two in service for NASH Production. PACES is in the process of forwarding documentation authorizing operation of the small sulfuric acid solution tank under PBR 106.472. Authorization documentation for the 8,800 gallon bleach solution tank under PBR 106.472 is attached. These tanks are also being included in the pending NSR permit.

5. Alleged violation: 30 TAC 106.6(c) - Failure to revise the certified registration before changing the character of emissions.

   Based on discussions during and after the investigation, we understand the issue of concern here is the composition of the sulfuric acid and caustic solutions used in the process and the

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change from using a hydrogen peroxide solution in the process to a bleach solution. As described in the PBR registration, the sulfuric acid and caustic solution tanks are authorized under PBR 106.472(4) – "aqueous caustic solutions, except ammonia solutions" and 106.472(5) – "inorganic acids except oleum, hydrofluoric, and hydrochloric acids". To the extent that these aqueous solutions may have higher caustic or acid concentrations than represented or contain other small amounts of constituents, these characteristics do not affect the caustic or acid nature of the solutions. PACES is preparing documentation to better clarify and authorize the handling of these materials. The use of aqueous bleach (sodium hypochlorite solution) as a reactant in the NaSH process in lieu of hydrogen peroxide does not have a consequential effect on the controlled emissions from the process. However, the bleach storage tank does represent a source of potential emissions and therefore has been authorized under 30 TAC 106.472(4) – "aqueous caustic solutions, except ammonia solutions" (see attached). The tank stores an aqueous solution of up to 15% sodium hypochlorite and 0-2% sodium hydroxide with a pH > 10. PACES is also working with the TCEQ Air Permits Division to include these representations in the pending NSR permit.

6. Alleged violation: 30 TAC 111.111(a)(4)(A)(ii) - Failure to properly maintain a flare observation log.

   We understand that the daily flare observation record must include a reference to the time of day of the observation as required by the rule. Please be aware that PACES has included time of day. Attached is a copy of a recent record showing the time reference.

PACES respectfully requests that you consider the actions that have been undertaken and call to discuss any questions you may have about the information provided above as we proceed forward.

Sincerely,

Clark G. Hickman
281-488-0848

EPAHO044000983

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOCUMENTATION OF PERMIT-BY-RULE §106.472 AUTHORIZATION AQUEOUS CAUSTIC SOLUTION TRANSFER OPERATIONS AND EQUIPMENT (SULFIDIC CAUSTIC)

Port Arthur Chemical & Environmental Services, LLC
Port Arthur, Texas

Introduction

Port Arthur Chemical & Environmental Services, LLC (PACES) operates a sodium hydrosulfide production process under Permits-By-Rule (PBR) Registration No. 86173. This package documents the authorization to transfer sulfidic caustic from barges to stationary tank vessels or to tank trucks. The authorization is claimed under PBR 106.472 which authorizes equipment for transfer of aqueous caustic solutions to tank vessels or tank trucks. The claimed PBR authorization does not require registration with the state. However, this package must be retained on site to document the authorization for the life of the project.

Completed TCEQ forms demonstrating compliance with the conditions of the claimed PBR can be found in Appendix A. Emission calculations are located in Appendix B.

APPENDIX A
TCEQ FORMS FOR PERMIT-BY-RULE

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), "Requirements for Permitting by Rule." Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists and guidance documents are available from the TCEQ, Air Permits Division Web site at: **www.tceq.state.tx.us/permitting/air/nav/air_pbr.html**.

1. 30 TAC § 106.4(a)(1) & (4): Emission limits

List emissions in tpy for **each** facility (add additional pages or table if needed):

SO_2 = 0.00	PM_{10} = 0.00	VOC = <0.01	NO_x = 0.00	CO = 0.00	Other _____	= <0.01
SO_2 = _____	PM_{10} = _____	VOC = _____	NO_x = _____	CO = _____	Other _____	= _____
SO_2 = _____	PM_{10} = _____	VOC = _____	NO_x = _____	CO = _____	Other _____	= _____
Total 0.00	0.00	<0.01	0.00	0.00		<0.01

- Are the SO_2, PM_{10}, VOC, or other air contaminant emissions claimed for **each** facility in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

*If the answer to both is "Yes," continue to the question below. If the answer to either question is "No," a **PBR cannot be claimed**.*

Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.) ☐ YES ☑ NO

If "Yes," skip to Section 2. If "No," continue to the questions below.

If the site has had no public notice, please answer the following:
- Are the SO_2, PM_{10}, VOC, or other emissions claimed for **all** facilities in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

If the answer to both questions is "Yes," continue to Section 2.
*If the answer to either question is "No," **a PBR cannot be claimed**. A permit will be required under Chapter 116.*

2. 30 TAC § 106.4(a)(2): Nonattainment check

Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county? ☑ YES ☐ NO

If "Yes," please indicate which county by checking the appropriate box to the right.

(Marginal) - Hardin, Jefferson, and Orange counties *(BPA)* ☑ BPA
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties *(HGA)* ☐ HGA
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties *(DFW)* ☐ DFW

If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.

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Does this project trigger a nonattainment review? To determine the answer, review the information below: • Is the project's potential to emit (PTE) for emissions of VOC or NO_x increasing by 100 tpy or more? *PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rule, or made federally enforceable by a certification.* • Is the site an existing major nonattainment site and are the emissions of VOC or NO_x increasing by 40 tpy or more? If needed, attach contemporaneous netting calculations per nonattainment guidance. Additional information can be found at: www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table8.html and www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html *If "Yes," to any of the above, the project is a major source or a major modification and* ***a PBR may not be used.*** *A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.*	☐YES ☑NO ☐YES ☑NO
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules? To determine the answer, review the information below: • Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source? • Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source? • Are emissions increasing above significance levels at an existing major site? PSD information can be found at: www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table9.html and www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html *If "Yes," to any of the above,* ***a PBR may not be used.*** *A PSD Permit review must be completed to authorize the project. If "No," continue to Section 4.*	☐YES ☑NO ☐YES ☑NO ☐YES ☑NO
4. 30 TAC § 106.4(a)(6): Federal Requirements	
• Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)? If "Yes," which Subparts are applicable?: _____ *If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.*	☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs? *If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.* ***List permit number(s):*** _____ *If "No," continue to Section 6.*	☐YES ☑NO

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6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade	
• Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? *If "Yes," answer the question below. If "No," continue to Section 7.*	☐YES ☑NO
• Will the proposed facility or group of facilities obtain required allowances for NO_x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)?	☐YES ☐NO

7. Highly Reactive Volatile Organic Compounds (HRVOC) check			
• Is the facility located in Harris County? *If "Yes," answer the next question. If "No," skip to the box below.*			☐YES ☑NO
• Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," skip to the box below.*			☐YES ☐NO
• Will one or more of the following HRVOC be emitted as a part of this project?			☐YES ☐NO
If "Yes," complete the information below:	lb/hr	tpy	
▸ 1,3-butadiene			
▸ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])			
▸ alpha-butylene (ethylethylene)			
▸ beta-butylene (dimethylethylene, including both cis- and trans-isomers)			
▸ ethylene			
▸ propylene			
• Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? *If "Yes," answer the next question. If "No," the checklist is complete.*			☐YES ☑NO
• Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," the checklist is complete.*			☐YES ☐NO
• Will one or more of the following HRVOC be emitted as a part of this project?			☐YES ☐NO
If "Yes," complete the information below:	lb/hr	tpy	
▸ ethylene			
▸ propylene			

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Texas Commission on Environmental Quality

Exemption §106.472 Checklist
(Previously Standard Exemption 51)

Organic Liquid Loading and Unloading

The following checklist is designed to help you confirm that you meet §106.472, previously Standard Exemption 51 (STDX 51), requirements. **Any "no" answers indicate that the claim of registration may not meet all requirements for the use of Exemption §106.472, previously Standard Exemption 51.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

YES	NO	NA	DESCRIPTION
✓	—	—	Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§106, Subchapter A checklist is available)?
✓	—	—	Are all the facilities claimed for exemption specifically named in the general section of §106.472, previously STDX 51? (This exemption has been interpreted to allow mixing or blending but not chemical reaction in tankage.)
✓	—	—	Is the equipment designed to prevent visible emissions?
✓	—	—	Are all the chemicals to be loaded, unloaded, or stored described in §106.472, previously STDX 51(a) - (i)? Attach a list of the chemicals and identify the appropriate item of §106.472, previously STDX 51 that applies. Include additional supporting data. For example, a §106.472, previously STDX 51(i), claim should identify initial boiling points of all compounds to be covered.
—	—	✓	Will aqueous ammonia solutions, hydrochloric acid, or acetic acid be vented through a water scrubber?
—	—	✓	Are facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees F or greater listed in 40 CFR 261, Appendix VIII, located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located? List these compounds and show their handling location on an attached scaled plot plan.

EPAHO044000990

APPENDIX B
EMISSION CALCULATIONS

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
EMISSION CALCULATIONS SUMMARY

Aqueous Sulfidic Caustic						
T1 (RV-1) Loading	lb/hr	TPY	vapor wt frac	lb/hr	TPY	
Sodium Sulfide(salt)	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Hydroxide	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Carbonate	0.1369	0.0093	0.0000	0.0000	0.0000	
Sodium Hydrosulfide (salt)	0.1369	0.0093	0.0000	0.0000	0.0000	
Miscellaneous Organics	0.1369	0.0093	0.0009	1.25E-04	8.51E-06	
Water	0.1369	0.0093	0.9991	0.1367	0.0093	
				0.1369	**0.0093**	TOTAL

Aqueous Sulfidic Caustic						
Truck Loading	lb/hr	TPY	vapor wt frac	lb/hr	TPY	
Sodium Sulfide(salt)	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Hydroxide	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Carbonate	0.1280	0.0313	0.0000	0.0000	0.0000	
Sodium Hydrosulfide (salt)	0.1280	0.0313	0.0000	0.0000	0.0000	
Miscellaneous Organics	0.1280	0.0313	0.0009	1.17E-04	2.87E-05	
Water	0.1280	0.0313	0.9991	0.1278	0.0313	
				0.1280	**0.0313**	TOTAL

Total VOC	2.43E-04	lb/hr
	3.72E-05	tpy

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PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK / VESSEL EMISSION CALCULATIONS

	Tank/Vessel ID:	**T1 (RV-1)**
	Material:	**Aqueous Sulfidic Caustic**
Annual Throughput, gal/yr	Q =	7,056,000
Max Hourly Transfer Rate, gal/hr	FR =	28,000
Emissions:		
Maximum Hourly Emissions, lb/hr	**Lmax =**	**0.13685**
Total Annual Emissions, TPY	**Lt =**	**0.00929**
Annual Average Hourly Emis, lb/hr	Lavg =	0.002
Standing loss, lb/yr	Ls =	0.187
Working loss, lb/yr	Lw =	18.388
Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.01
Vapor Pressure @ Tla, psia	Pva =	0.30
Vapor Pressure @ Tln, psia	Pvn =	0.26
Vapor Pressure @ Tlx, psia	Pvx =	0.36
Max. Vapor Pressure @ mTlx, psia	Pvmax =	0.57
Tank Properties:		
Vapor control device		flare
Vapor control efficiency, %	e =	98
Capacity volume, gal	Cv =	47,966
Shell Diameter, ft	D =	10.8
Shell Height/Length, ft	Hs =	70.0
Tank Orientation (vertical or horizontal)		horiz
Roof type (cone or dome)		N/A
Tank Color (white, light gray, other)		white
Solor absorbance factor	a =	0.17
Pressure vent setting, psig	Pbp =	0.3
Vacuum vent setting, psia	Pbv =	-0.3
Effective diameter, ft	De =	31.0
Avg. Liquid Height, ft	Hl =	5.4
Max. Liquid Height, ft	Hlx =	10.8
Roof Outage, ft	Hro =	0.00
Vapor Space Outage, ft	Hvo =	5.40
Vapor space volume, ft^3	Vv =	4084.47
Operating Conditions (Houston, Tx):		
Atmospheric pressure, psia	Pa =	14.7
Annual Avg. Daily solar insulation factor, Btu/ft^2 day	I =	1351
Annual Avg. Daily max. ambient temp, R	Tax =	539.1
Annual Avg. Daily min. ambient temp, R	Tan =	517.4
Annual Avg. Daily vapor temp. range, R	^Tv =	22.1
Annual Daily avg. liquid surface temp, R	Tla =	530.1
Annual Avg. Daily min. liquid surface temp., R	Tln =	524.6
Annual Avg. Daily max. liquid surface temp., R	Tlx =	535.6
Highest Month Daily solar insulation factor, Btu/ft^2 da	mI =	1898
Highest Month Daily max. ambient temp, R	mTax =	553.6
Highest Month Daily min. ambient temp, R	mTan =	532.5
Highest Month Daily vapor temp. range, R	m^Tv =	24.2
Highest Month Daily max. liquid surface temp., R	mTlx =	551.7
Gas Constant, psia-ft^3/lb mole-R	R =	10.73
Vapor Density, lb/ft^3	Wv =	0.001
Daily vapor pressure range, psia	^Pv =	0.103
Vapor space expansion factor	Ke =	0.007
Vented vapor saturation factor	Ks =	0.920
Working Loss Product Factor	Kp =	1.00
Turnovers	N =	147.10
Turnover factor	Kn =	1.00
Operating Days, days/yr	Days =	365

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK TRUCK LOADING LOSS EMISSIONS

		Material:	**Aqueous Sulfidic Caustic**
Annual Throughput, gal/yr	Th =		7,056,000
Max Hourly Fill Rate, gal/hr	FR =		8,000
Emissions:			
Max Hrly Controlled Emissions, lb/hr	**Ilc =**		**0.0352**
Annual Controlled Emissions, TPY	**LLc =**		**0.0086**
Max Hrly Uncontrolled Emissions, lb/hr	**Ilu =**		**0.0927**
Annual Uncontrolled Emissions, TPY	**LLu =**		**0.0227**

Controlled Filling loss, lb/hr

Ilc = [(12.46 x ((S x VPx x MW) / Tx) / 1000) x FR x (c/100) x (1-e/100))]

Controlled Loading loss, TPY

LLc = [(12.46 x ((S x VPa x MW) / Ta) / 1000) x Th x (c/100) x (1-e/100))] / 2000

Uncontrolled Filling loss, lb/hr

Ilc = [(12.46 x ((S x VPx x MW) / Tx) / 1000) x FR x (c/100))]

Uncontrolled Loading loss, TPY

LLc = [(12.46 x ((S x VPa x MW) / Ta) / 1000) x Th x (c/100))] / 2000

Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.01
Vapor Pressure @ Tlx, psia	Pvx =	0.57
Vapor Pressure @ Tla, psia	Pva =	0.30
Vapor control device		flare
Capture efficiency, %	c =	95
Vapor control efficiency, %	e =	98
Max Liquid Temp., R	Tlx =	551.67
Averag Liquid Temp., R	Tla =	530.08
Saturation Factor	S =	1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOCUMENTATION OF PERMIT-BY-RULE §106.472 AUTHORIZATION AQUEOUS CAUSTIC SOLUTION STORAGE TANK (SODIUM HYPOCHLORITE)

Port Arthur Chemical & Environmental Services, LLC
Port Arthur, Texas

Introduction

Port Arthur Chemical & Environmental Services, LLC (PACES) operates a sodium hydrosulfide production process under Permits-By-Rule (PBR) Registration No. 86173. This package documents the authorization to construct and operate a bleach (sodium hypochlorite solution) storage tank in support of that process. The authorization is claimed under PBR 106.472 which allows the storage and loading of aqueous caustic solutions. The claimed PBR authorization does not require registration with the state. However, this package must be retained on site to document the authorization for the life of the project.

Completed TCEQ forms demonstrating compliance with the conditions of the claimed PBR can be found in Appendix A. Emission calculations are located in Appendix B.

The PACES facility is located Jefferson County, which is part of the Beaumont-Port Arthur Ozone Non-attainment area. Total emissions from this project are less than 0.01 tons per year (tpy) of Inorganic Compounds (as sodium hypochlorite).

APPENDIX A
TCEQ FORMS FOR PERMIT-BY-RULE

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), "Requirements for Permitting by Rule." Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists and guidance documents are available from the TCEQ, Air Permits Division Web site at: **www.tceq.state.tx.us/permitting/air/nav/air_pbr.html**.

1. 30 TAC § 106.4(a)(1) & (4): Emission limits

List emissions in tpy for **each** facility (add additional pages or table if needed):

SO_2 = 0.00	PM_{10} = 0.00	VOC = 0.00	NO_x = 0.00	CO = 0.00	Other Sodium Hypochlorite =	0.01
SO_2 =	PM_{10} =	VOC =	NO_x =	CO =	Other =	
SO_2 =	PM_{10} =	VOC =	NO_x =	CO =	Other =	
Total 0.00	0.00	0.00	0.00	0.00		0.01

- Are the SO_2, PM_{10}, VOC, or other air contaminant emissions claimed for **each** facility in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

If the answer to both is "Yes," continue to the question below. If the answer to either question is "No," a ***PBR cannot be claimed.***

Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.) ☐ YES ☑ NO

If "Yes," skip to Section 2. If "No," continue to the questions below.

If the site has had no public notice, please answer the following:
- Are the SO_2, PM_{10}, VOC, or other emissions claimed for **all** facilities in this PBR submittal less than 25 tpy? ☑ YES ☐ NO
- Are the NO_x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy? ☑ YES ☐ NO

If the answer to both questions is "Yes," continue to Section 2.
If the answer to either question is "No," a ***PBR cannot be claimed.*** *A permit will be required under Chapter 116.*

2. 30 TAC § 106.4(a)(2): Nonattainment check

Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county? ☑ YES ☐ NO

If "Yes," please indicate which county by checking the appropriate box to the right.

(Marginal) - Hardin, Jefferson, and Orange counties *(BPA)* ☑ BPA
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties *(HGA)* ☐ HGA
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties *(DFW)* ☐ DFW

If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.

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Does this project trigger a nonattainment review? To determine the answer, review the information below: • Is the project's potential to emit (PTE) for emissions of VOC or NO_x increasing by 100 tpy or more? *PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rule, or made federally enforceable by a certification.* • Is the site an existing major nonattainment site and are the emissions of VOC or NO_x increasing by 40 tpy or more? If needed, attach contemporaneous netting calculations per nonattainment guidance. Additional information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table8.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above, the project is a major source or a major modification and* ***a PBR may not be used.*** *A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.*	☐YES ☑NO ☐YES ☑NO
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules? To determine the answer, review the information below: • Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source? • Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source? • Are emissions increasing above significance levels at an existing major site? PSD information can be found at: **www.tceq.state.tx.us/permitting/air/forms/newsourcereview/tables/nsr_table9.html** and **www.tceq.state.tx.us/permitting/air/nav/air_docs_newsource.html** *If "Yes," to any of the above,* ***a PBR may not be used.*** *A PSD Permit review must be completed to authorize the project. If "No," continue to Section 4.*	☐YES ☑NO ☐YES ☑NO ☐YES ☑NO
4. 30 TAC § 106.4(a)(6): Federal Requirements	
• Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards? If "Yes," which Subparts are applicable?: _____ • Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)? If "Yes," which Subparts are applicable?: _____ *If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.*	☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A ☐YES ☐NO ☑N/A
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs? *If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.* ***List permit number(s):*** _____ *If "No," continue to Section 6.*	☐YES ☑NO

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6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade

- Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? ☐YES ☑NO

If "Yes," answer the question below. If "No," continue to Section 7.

- Will the proposed facility or group of facilities obtain required allowances for NO_x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)? ☐YES ☐NO

7. Highly Reactive Volatile Organic Compounds (HRVOC) check

- Is the facility located in Harris County? *If "Yes," answer the next question. If "No," skip to the box below.* ☐YES ☑NO
- Will the project be constructed after June 1, 2006? *If "Yes," answer the next question. If "No," skip to the box below.* ☐YES ☐NO
- Will one or more of the following HRVOC be emitted as a part of this project? ☐YES ☐NO

If "Yes," complete the information below:	lb/hr	tpy
▸ 1,3-butadiene		
▸ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])		
▸ alpha-butylene (ethylethylene)		
▸ beta-butylene (dimethylethylene, including both cis- and trans-isomers)		
▸ ethylene		
▸ propylene		

- Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County? ☐YES ☑NO

If "Yes," answer the next question. If "No," the checklist is complete.

- Will the project be constructed after June 1, 2006? ☐YES ☐NO

If "Yes," answer the next question. If "No," the checklist is complete.

- Will one or more of the following HRVOC be emitted as a part of this project? ☐YES ☐NO

If "Yes," complete the information below:	lb/hr	tpy
▸ ethylene		
▸ propylene		

PRINT

EPAHO044001000

Texas Commission on Environmental Quality

Exemption §106.472 Checklist
(Previously Standard Exemption 51)

Organic Liquid Loading and Unloading

The following checklist is designed to help you confirm that you meet §106.472, previously Standard Exemption 51 (STDX 51), requirements. **Any "no" answers indicate that the claim of registration may not meet all requirements for the use of Exemption §106.472, previously Standard Exemption 51.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

YES	NO	NA	DESCRIPTION
✓	—	—	Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§106, Subchapter A checklist is available)?
✓	—	—	Are all the facilities claimed for exemption specifically named in the general section of §106.472, previously STDX 51? (This exemption has been interpreted to allow mixing or blending but not chemical reaction in tankage.)
✓	—	—	Is the equipment designed to prevent visible emissions?
✓	—	—	Are all the chemicals to be loaded, unloaded, or stored described in §106.472, previously STDX 51(a) - (i)? Attach a list of the chemicals and identify the appropriate item of §106.472, previously STDX 51 that applies. Include additional supporting data. For example, a §106.472, previously STDX 51(i), claim should identify initial boiling points of all compounds to be covered.
—	—	✓	Will aqueous ammonia solutions, hydrochloric acid, or acetic acid be vented through a water scrubber?
—	—	✓	Are facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees F or greater listed in 40 CFR 261, Appendix VIII, located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located? List these compounds and show their handling location on an attached scaled plot plan.

APPENDIX B
EMISSION CALCULATIONS

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL
TANK EMISSION CALCULATIONS

	Tank ID:	**T2A**
	chemical	**15%**
	Material:	**Sodium Hypochlorite**
Annual Throughput, gal/yr	Q =	2,773,333
Max Hourly Transfer Rate, gal/hr	FR =	6,000
Emissions:		
Maximum Hourly Emissions, lb/hr	**Lmax =**	**1.88250**
Total Annual Emissions, TPY	**Lt =**	**0.23824**
Annual Average Hourly Emis, lb/hr	Lavg =	0.054
Standing loss, lb/yr	Ls =	11.842
Working loss, lb/yr	Lw =	464.642
Material Properties:		
Molecular Weight, lb/lb-mole	Mv =	18.14
Vapor Pressure @ Tla, psia	Pva =	0.39
Vapor Pressure @ Tln, psia	Pvn =	0.33
Vapor Pressure @ Tlx, psia	Pvx =	0.46
Max. Vapor Pressure @ mTlx, psia	Pvmax =	0.73
Tank Properties:		
Vapor control device		none
Vapor control efficiency, %	e =	0
Capacity volume, gal	Cv =	8,812
Shell Diameter, ft	D =	10.0
Shell Height/Length, ft	Hs =	15.0
Tank Orientation (vertical or horizontal)		vert
Roof type (cone or dome)		cone
Tank Color (white, light gray, other)		white
Solor absorbance factor	a =	0.17
Pressure vent setting, psig	Pbp =	0
Vacuum vent setting, psia	Pbv =	0
Effective diameter, ft	De =	10.0
Avg. Liquid Height, ft	Hl =	7.5
Max. Liquid Height, ft	Hlx =	15.0
Roof Outage, ft	Hro =	0.10
Vapor Space Outage, ft	Hvo =	7.60
Vapor space volume, ft^3	Vv =	597.23
Operating Conditions (Houston, Tx):		
Atmospheric pressure, psia	Pa =	14.7
Annual Avg. Daily solar insulation factor, Btu/ft^2 day	I =	1351
Annual Avg. Daily max. ambient temp, R	Tax =	539.1
Annual Avg. Daily min. ambient temp, R	Tan =	517.4
Annual Avg. Daily vapor temp. range, R	^Tv =	22.1
Annual Daily avg. liquid surface temp, R	Tla =	530.1
Annual Avg. Daily min. liquid surface temp., R	Tln =	524.6
Annual Avg. Daily max. liquid surface temp., R	Tlx =	535.6
Highest Month Daily solar insulation factor, Btu/ft^2 da	mI =	1898
Highest Month Daily max. ambient temp, R	mTax =	553.6
Highest Month Daily min. ambient temp, R	mTan =	532.5
Highest Month Daily vapor temp. range, R	m^Tv =	24.2
Highest Month Daily max. liquid surface temp., R	mTlx =	551.7
Gas Constant, psia-ft^3/lb mole-R	R =	10.73
Vapor Density, lb/ft^3	Wv =	0.001
Daily vapor pressure range, psia	^Pv =	0.131
Vapor space expansion factor	Ke =	0.051
Vented vapor saturation factor	Ks =	0.865
Working Loss Product Factor	Kp =	1.00
Turnovers	N =	314.72
Turnover factor	Kn =	1.00
Operating Days, days/yr	Days =	365

PORT ARTHUR CHEMICAL AND ENVIRONMENTAL SERVICES, LLC
TANK EMISSION CALCULATIONS

Sodium Hypochlorite Solution Storage speciation for component percentage					
	lb/hr	TPY	vapor wt @ Max Hourly	lb/hr	TPY
T2A	1.8825	0.2382	0.0105	0.0198	0.0025

EPAHO044001004

Daily Flare Observation Record

June 2009

FLARE REPORT

Daily Log for: Jun-09

DATE	OPERATOR/SHIFT	FLAME COLOR	SMOKE?	COMMENTS	
6/1/2009	Did Not Run				
6/2/2009					
6/3/2009	Did not Run				
6/4/2009					
6/5/2009	Jay Matlock	Clear	NO		8:30A
6/6/2009	Did not Run				
6/7/2009	Did not Run				
6/8/2009	Kirby Gall	Clear	NO	Clear Clear/Flame	7:15A
6/9/2009	Kirby Gall	Clear Blue	NO	Clear Clear/Flame	7:30A
6/10/2009	Kirby Gall	Clear	NO		7:30A
6/11/2009	Michael Kidd	Clear	NO	clear to ~~blue~~ Clear	7:30A
6/12/2009	Did not Run				
6/13/2009	Did not Run				
6/14/2009	Did not Run				
6/15/2009	Michael Kidd	clear	none	Clear to blue	7:30A
6/16/2009	Michael Kidd	Clear	None		7:30A
6/17/2009	Michael Kidd	Clear	none	Clear to blue	7:30A
6/18/2009	DNR				
6/19/2009	DNR				
6/20/2009	DNR				
6/21/2009	DNR				
6/22/2009	DNR				
6/23/2009					
6/24/2009					
6/25/2009					
6/26/2009					
6/27/2009					
6/28/2009					
6/29/2009					
6/30/2009					

EPAHO04001006

Matt Bowman

From: Clark Hickman
Sent: Saturday, June 13, 2009 12:16 AM
To: Matt Bowman
Cc: Steve Stricker
Subject: FW: PACES

From: Philip Evans [mailto:pevans@wcmgroup.com]
Sent: Friday, June 12, 2009 1:22 PM
To: Clark Hickman
Cc: Desiree Westcott; Jack Piskura; Adrienne Perkins; Bill McNutt
Subject: PACES

Clark,

I spoke with Mr. David Letourneau of TCEQ Region 10 about the alleged violations on the TCEQ Exit Interview Form dated 6/3/09. He spent quite a long time on the phone with me discussing his concerns. A Notice of Violation letter is being prepared and will be sent to PACES reflecting these items. The following is summary of the issues he feels needs to be addressed through corrective action:

- PACES needs to obtain authorization (permit or PBR) before any more barges are unloaded into tank trucks. The emissions need to be controlled and/or the loading location moved farther away from the property boundary with Talens Marine. Based on the measurements taken during his on-site investigation, trucks were being loaded only 55 feet from the property line. There was no evidence of any vapor collection, so displaced vapors were assumed to be emitted from the trucks at that location. The materials that are being transferred from barges need to be identified (including composition) and their emissions appropriately authorized by permit or PBR.
- Feed stock being unloaded from tank trucks into the Mix Reactor Vessel are not being vapor balanced as represented in the PBR registration. The trucks are open to the atmosphere during unloading according to what he was told by operations personnel. He feels this may be another potential source of the odors for which they have received multiple complaints. PACES should implement vapor balancing or other vapor controls to minimize odors from this source.
- PACES did not obtain authorization (permit or PBR) before constructing and operating the second Mix Reactor Vessel as well as bleach storage and an additional new sulfuric acid tank. Authorization needs to be obtained for this equipment and the associated emissions. In addition, he observed other equipment on-site that looked like it was being prepared for operation without a permit or PBR authorization. He did not include these as violations in the Exit Interview Form because they were not complete and not in service, but warned that authorization needs to be acquired before PACES proceeds much further.
- Documents reviewed during the investigation showed PACES was storing and using spent sulfuric acid and possibly spent caustic in the NaSH process instead of fresh sulfuric acid and sodium hydroxide solutions as represented in the PBR. He is concerned that there are chemicals in these spent solutions that are not accounted for and not authorized in the PBR registration. The composition of these solutions needs to be identified and their emissions authorized by permit or PBR and vapor controls applied if needed to minimize odors. In addition, bleach is being stored and used in the

EPAHO044001007

process instead of the hydrogen peroxide solution represented in the PBR registration. The composition of the bleach needs to be identified and the emissions from its storage and handling need to be authorized by permit or PBR as well.

- The flare observation record maintained at the site did not include the time of day of the observation as required by regulation. This was the subject of a previous violation notice sent to PACES in March.

In addition, Mr. Letourneau expressed a general concern about the persistent sulfide odor at the site and strongly recommended that PACES take actions to eliminate or significantly reduce it and that these actions be written into the facility's standard operating procedures. He said he is aware of at least 9 odor complaints received by TCEQ Region 10.

In order to prepare the corrective actions that involve obtaining the appropriate air authorizations, I will need the following information:

- MSDS or profiles showing the composition of the materials being received by barge, the method of transfer (i.e. pump, nitrogen pressure, etc), and anticipated annual volumes (gallons) for each material. Also how will the displaced truck loading vapors be controlled?
- How will displaced vapors from filling the Mix Reactor Vessels be controlled?
- MSDS or profiles for the acid, caustic, and bleach solutions used in the NaSH process.
- Dimensions and capacity of the new sulfuric acid tank and the bleach tank.

Thanks,
Phil

This email (and any files transmitted) is confidential and is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. ALL WORK PRODUCT IS PROVIDED STRICTLY IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF WCM CONTRACT DOCUMENTS. This communication represents the originator's personal views and opinions, which do not necessarily reflect those of The WCM Group, Inc. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, forwarding, printing, or copying of this email is strictly prohibited. If you have received this email in error, please notify us immediately by telephone (281) 446-7070 or email wcmgroup@wcmgroup.com

EPAHO04001008

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 4, 2009

CERTIFIED MAIL – 7001 0320 0004 8873 0214
RETURN RECEIPT REQUESTED

Mr. Keld Anderson
Plant Manager
Port Arthur Chemical & Environmental Services
2420 South Gulfway Drive
Port Arthur, Texas 77640

Re: Notice of Violation for the Complaint Investigation at:
Port Arthur Chemical & Environmental Services, 2420 South Gulfway Drive, Port Arthur (Jefferson County), Texas
Investigation No.: 720930
TCEQ ID No.: RN105156111

COPY

Dear Mr. Anderson:

On December 8, 2008, Mr. John Cotton of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for air quality. Enclosed is a summary which lists the investigation findings. In addition, certain outstanding alleged violations were identified for which compliance documentation is required. Please submit to this office by April 6, 2009, a written description of corrective action taken and the required documentation demonstrating that compliance has been achieved for each of the outstanding alleged violations.

In the listing of alleged violations, we have cited applicable requirements, including TCEQ rules. If you would like to obtain a copy of the applicable TCEQ rules, you may contact any of the sources listed in the enclosed brochure entitled *Obtaining TCEQ Rules*.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violation(s) documented in this notice. Should you choose to do so, you must notify the Beaumont Region Office within 10 days from the date of this letter. At that time, a violation review meeting will be

EPAHO044001009

scheduled. However, please be advised that, if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the attached Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

If you or members of your staff have any questions, please feel free to contact Mr. Cotton in the Beaumont Region Office at (409) 898-3838.

Sincerely,

Heather Ross

Heather Ross
Manager, Air Section
Beaumont Region Office

HR/pbv

Enclosures: Summary of Investigation Findings
Obtaining TCEQ Rules

PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES — Investigation # 720930
2420 GULFWAY DR — Investigation Date: 12/08/2008
PORT ARTHUR, JEFFERSON COUNTY, TX 77640

Additional ID(s): 86587
86958

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 352859 Compliance Due Date: 04/06/2009
30 TAC Chapter 101.4
5C THSC Chapter 382.085(b)

Alleged Violation:
Investigation: 720930 Comment Date: 12/18/2008

Failure to prevent nuisance conditions.

Title 30 Texas Administrative Code (TAC) 101.4 states that no person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.

On December 8, 2008, the investigator documented offensive odors that were moderate in intensity while at business property adjacent to and downwind from operations being conducted by Port Arthur Chemical and Environmental Services, INC (CES). The emissions from CES interfered with the normal use and enjoyment of the property as well as causing adverse effects to human health. The regulated entity failed to prevent nuisance conditions while cleaning equipment after an upset.

Recommended Corrective Action: Take actions necessary to prevent recurrence of the same or similar violation.

JUN/11/2009/THU 03:59 PM TCEQ R10 FAX No. 409 899 8778 P. 001

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 4, 2009

CERTIFIED MAIL – 7001 0320 0004 8873 0207
RETURN RECEIPT REQUESTED

Mr. Matt Bowman
President
Port Arthur Chemical & Environmental Services
2420 Gulfway Drive
Port Arthur, Texas 77640

Re: Notice of Violation for the Complaint Investigation at:
Port Arthur Chemical & Environmental Services, 2420 Gulfway Drive, Port Arthur (Jefferson County), Texas
Investigation No.: 707677
TCEQ ID No.: RN105156111

Dear Bowman:

On November 4, 2008, Mr. Chris Megas of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for air quality. Enclosed is a summary which lists the investigation findings. In addition, certain outstanding alleged violations were identified for which compliance documentation is required. Please submit to this office by April 6, 2009, a written description of corrective action taken and the required documentation demonstrating that compliance has been achieved for each of the outstanding alleged violations.

In the listing of alleged violations, we have cited applicable requirements, including TCEQ rules. If you would like to obtain a copy of the applicable TCEQ rules, you may contact any of the sources listed in the enclosed brochure entitled *Obtaining TCEQ Rules*.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violation(s) documented in this notice. Should you choose to do so, you must notify the Beaumont Region Office within 10 days from the date of this letter. At that time, a violation review meeting will be

COPY

EPAHO044001012

scheduled. However, please be advised that, if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the attached Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

If you or members of your staff have any questions, please feel free to contact Mr. Megas in the Beaumont Region Office at (409) 898-3838.

Sincerely,

KBSaucedo

for Heather Ross
Manager, Air Section
Beaumont Region Office

HR/pbv

Enclosures: Summary of Investigation Findings
Obtaining TCEQ Rules

Summary of Investigation Findings

PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES — Investigation # 707677
2420 GULFWAY DR — Investigation Date: 11/04/2008
PORT ARTHUR, JEFFERSON COUNTY, TX 77640

Additional ID(s): 86173

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 352943 Compliance Due Date: 04/06/2009
30 TAC Chapter 111.111(a)(4)(A)(ii)
5C THSC Chapter 382.085(b)

Alleged Violation:
Investigation: 707677 Comment Date: 12/19/2008

Failure to properly maintain a flare observation log.

Title 30 Texas Administrative Code (TAC) 111.111(a)(4)(A)(ii) states that beginning September 1, 1993, compliance for process gas flares shall be determined by a daily notation in the flare operation log that the flare was observed, including the time of day and whether or not the flare was smoking, with the flare operator recording at least 98% of the required observations.

For the 31 days the facility's flare was in operation during the period of September 22, 2008, to November 30, 2008, the investigator documented the regulated entity had failed to document the time of the flare observations.

Recommended Corrective Action: Submit a written plan necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Track No: 352946 Compliance Due Date: 04/06/2009
30 TAC Chapter 111.111(a)(4)(A)
5C THSC Chapter 382.085(b)

Alleged Violation:
Investigation: 707677 Comment Date: 12/19/2008

Failure to properly operate the facility flare, Emission Point Number (EPN) FL1.

30 TAC Chapter 111.111(a)(4)(A) states that visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period.

On November 4, 2008, from 14:29:38 to 14:51:20 hours, the investigator documented that the facility flare (EPN: FL1) smoked for a continuous period of twenty-one (21) minutes and forty-two (42) seconds.

Recommended Corrective Action: Submit a written plan necessary to address the outstanding alleged violation to prevent recurrence of same or similar incidents.

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 4, 2009

CERTIFIED MAIL – 7001 0320 0004 8873 0221
RETURN RECEIPT REQUESTED

Mr. Keld Andersen
Plant Manager
Port Arthur Chemical & Environmental Services
2420 South Gulfway Drive
Port Arthur, Texas 77640

Re: Notice of Violation for the Complaint Investigation at:
Port Arthur Chemical & Environmental Services, 2420 South Gulfway Drive, Port Arthur (Jefferson County), Texas
Investigation No.: 721809
TCEQ ID No.: RN105156111

Dear Mr. Andersen:

COPY

On December 12, 2008, Ms. Jessica Gary of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for air quality. Enclosed is a summary which lists the investigation findings. In addition, certain outstanding alleged violations were identified for which compliance documentation is required. Please submit to this office by April 6, 2009, a written description of corrective action taken and the required documentation demonstrating that compliance has been achieved for each of the outstanding alleged violations.

In the listing of alleged violations, we have cited applicable requirements, including TCEQ rules. If you would like to obtain a copy of the applicable TCEQ rules, you may contact any of the sources listed in the enclosed brochure entitled *Obtaining TCEQ Rules.*

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violation(s) documented in this notice. Should you choose to do so, you must notify the Beaumont Region Office within 10 days from the date of this letter. At that time, a violation review meeting will be

JUN/11/2009/THU 04:00 PM TCEQ R10 FAX No. 409 899 8778 P. 008

scheduled. However, please be advised that, if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the attached Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

If you or members of your staff have any questions, please feel free to contact Ms. Gary in the Beaumont Region Office at (409) 898-3838.

Sincerely,

Heather Ross
Manager, Air Section
Beaumont Region Office

HR/pbv

Enclosures: Summary of Investigation Findings
Obtaining TCEQ Rules

JUN/11/2009/THU 04:00 PM TCEQ R10 FAX No. 409 899 8778 P. 009

Summary of Investigation Findings

PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES — Investigation # 721809
2420 GULFWAY DR — Investigation Date: 12/12/2008
PORT ARTHUR, JEFFERSON COUNTY, TX 77640

Additional ID(s): 86587
86173

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 352839 . Compliance Due Date: 04/06/2009
30 TAC Chapter 101.4
5C THSC Chapter 382.085(b)

Alleged Violation:
Investigation: 721809 Comment Date: 12/19/2008

Failure to prevent nuisance conditions.

30 Texas Administrative Code (TAC) 101.4 states that no person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.

On December 12, 2008, the investigator documented very strong, highly offensive odors at the complainant's location. The investigator determined that the odors were emanating from Port Arthur Chemical and Environmental Services. The odor interfered with the normal use and enjoyment of property located north of the operations and caused ill health affects.

Recommended Corrective Action: Take the actions neccessary to prevent recurrance of the same or similar violations.

JUN/11/2009/THU 04:00 PM TCEQ REGION FAX NO. 409 839 8778 P. 010

Commission Agreement with Raviz

EPAHO04001018

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AGREEMENT FOR SERVICE

THIS AGREEMENT FOR SERVICE (this "Agreement") dated this 1st day of November, 2008

BETWEEN:

CES Environmental Services of 4904 Griggs Road, Houston, Texas, 77021
("CES") and/or Port Arthur Chemical & Environmental Services, LLC (PACES) OF THE FIRST PART

- AND -

Ramiz Tafilaj and/or Besim Tafilaj of 15202 Marlebone Court, Houston, Texas, 77069
("BRT") OF THE SECOND PART

BACKGROUND:

1. The CES and/or PACES is of the opinion that BRT has the necessary qualifications, experience and abilities to provide services to the CES and/or PACES.

2. The BRT is agreeable to providing such services to the CES and/or PACES, on the terms and conditions as set out in this Agreement.

IN CONSIDERATION OF the matters described above and of the mutual benefits and obligations set forth in this Agreement, the receipt and sufficiency of which consideration is hereby acknowledged, the parties to this Agreement agree as follows:

SERVICES PROVIDED

1. CES hereby agrees to engage BRT to provide CES and/or PACES with services consisting of the generation and location of business opportunities, new clients, customers and such other services as CES and/or PACES and BRT may agree upon from time to time (the "Services"), and BRT hereby agrees to provide such Services to CES and/or PACES. Assignment of such services will be done by attachments to be signed by both parties.

TERM OF AGREEMENT

2. The term of this Agreement will begin January 1, 2007 and will continue indefinitely until terminated as provided in this Agreement.

3. In the event that either party wishes to terminate this Agreement, that party will be required to provide a 90 days notice.

4. The obligations of BRT under this Agreement will terminate upon the earlier of BRT ceasing to be engaged by CES and/or PACES or the termination of this Agreement by CES and/or PACES or BRT.

PERFORMANCE

5. The parties agree to do everything necessary to ensure that the terms of this Agreement take effect.

COMPENSATION

6. For the services rendered by BRT as required by this Agreement, CES and/or PACES will pay to BRT compensation on the following basis: CES and/or PACES will pay BRT a commission of $ 0.10 per gallon for all transactions, if transaction is measurable by gallons. If the transaction is not measurable by gallons, the parties will agree to new compensations terms for that particular transaction or service. From time to time, BRT and CES and/or PACES may agree to temporarily change commission rate to accommodate pricing on a particular deal. This change must be done in writing, and accepted by both parties. After such a transaction with new commission rate is completed the original commission rate will continue to take affect.
7. Upon the completion of the particular transaction or service, and CES and/or PACES has issued an invoice for that particular transaction or service, BRT will be paid immediately with no delays. For such payment BRT will submit an invoice to CES and/or PACES.

CONFIDENTIALITY

8. BRT and CES agree that they will not disclose, divulge, reveal, report or use, for any purpose, any confidential information with respect to the business of BRT and CES and/or PACES, which BRT or CES and/or PACES has obtained, except as may be necessary or desirable to further the business interests of both BRT and CES and/or PACES jointly.

OWNERSHIP OF MATERIALS

9. All materials developed, produced, or in the process of being so under this agreement, will be the property of CES and/or PACES. The use of the mentioned materials by CES and/or PACES will not be restricted in any manner.

   BRT may retain use of the said materials and will not be responsible for damages resulting from their use for work other than services contracted for in this agreement.

RETURN OF PROPERTY

10. Upon the expiry or termination of this Agreement, BRT will return to CES and/or PACES any property, documentation, records, or confidential information which is the property of CES and/or PACES.

ASSIGNMENT

11. BRT or CES and/or PACES and/or PACES will not voluntarily or by operation of law assign or otherwise transfer its obligations under this Agreement without the prior written consent of BRT or CES and/or PACES and/or PACES.

CAPACITY/INDEPENDENT CONTRACTOR

12. It is expressly agreed that BRT is acting as an independent contractor and not as an employee in providing the Services under this Agreement. BRT and the CES and/or PACES acknowledge that this Agreement does not create a partnership or joint venture between them, and is exclusively a contract for service unless BRT and CES and/or PACES will agree to a joint venture of mutual interest.

MODIFICATION OF AGREEMENT

13. Any amendment or modification of this Agreement or additional obligation assumed by either party in connection with this Agreement will only be binding if evidenced in writing signed by each party or an authorized representative of each party.

NOTICE

14. All notices, requests, demands or other communications required or permitted by the terms of this Agreement will be given in writing and delivered to the parties of this Agreement as follows:

    1. CES Environmental Services
       4904 Griggs Road, Houston, Texas, 77021
       713-676-1676
       mbowman@cesenvironmental.com
    2. Ramiz Tafilaj and/or Besim Tafilaj
       15202 Marlebone Court, Houston, Texas, 77069
       281-300-5322
       ramiz@tafilajgroup.com

    or to such other address as to which any Party may from time to time notify the other.

COSTS AND LEGAL EXPENSES

15. In the event that legal action is brought to enforce or interpret any term of this Agreement, the prevailing party will be entitled to recover, in addition to any other damages or award, all reasonable legal costs and fees associated with the action.

ENTIRE AGREEMENT

16. It is agreed that there is no representation, warranty, collateral agreement or condition affecting this Agreement except as expressly provided in this Agreement.

LIMITATION OF LIABILITY

17. It is understood and agreed that BRT will have no liability to CES and/or PACES or any other party for any loss or damage (whether direct, indirect, or consequential) which may arise from the provision of the Services.

18. CURRENCY

19. Except as otherwise provided in this Agreement, all monetary amounts referred to in this Agreement are in United States dollars.

TITLES/HEADINGS

20. Headings are inserted for the convenience of the parties only and are not to be considered when interpreting this Agreement.

GENDER

21. Words in the singular mean and include the plural and vice versa. Words in the masculine mean and include the feminine and vice versa.

GOVERNING LAW

22. It is the intention of the parties to this Agreement that this Agreement and the performance under this Agreement, and all suits and special proceedings under this Agreement, be construed in accordance with and governed, to the exclusion of the law of any other forum, by the laws of the State of Texas, without regard to the jurisdiction in which any action or special proceeding may be instituted.

SEVERABILITY

23. In the event that any of the provisions of this Agreement are held to be invalid or unenforceable in whole or in part, all other provisions will nevertheless continue to be valid and enforceable with the invalid or unenforceable parts severed from the remainder of this Agreement.

WAIVER

24. The waiver by either party of a breach, default, delay or omission of any of the provisions of this Agreement by the other party will not be construed as a waiver of any subsequent breach of the same or other provisions.

CES ENVIRONMENTAL SERVICES, INC. and/or PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES, LLC

By Matt Bowman
Name Matt Bowman
Title President
Date 7-30-09

RAMIZ TAFILAJ and/or BESIM TAFILAJ

By
Name Besim Tafilaj
Title Contractor
Date 7/30/2009

ASSIGNMENT OF SERVICES

Attachment II

CES Environmental Services ("CES") or Port Arthur Chemical & Environmental Services, LLC (PACES) has agreed to engage Besim Tafilaj and/or Ramiz Tafilaj on facilitating agreements and services (Contract for long term sulfidic caustic solution removal, transportation & handling services contract no: CT/RG08/L240/08) between CES Environmental Services and RasGas Qatar. The compensation for this particular assignment will be $0.05 per gross gallon of solution shipped from RasGas to a CES or PACES designated facility through the duration of the contract. All terms and conditions of this assignment are governed by the assigned contract between CES and Besim Tafilaj and/or Ramiz Tafilaj. If any expenses need to be reimbursed to Besim Tafilaj and/or Ramiz Tafilaj by CES or PACES, these expenses should be pre-approved by CES or PACES.

CES ENVIRONMENTAL SERVICES, INC. and/or PORT ARTHUR CHEMICAL & ENVIRONMENTAL SERVICES, LLC

By _____

Name Matt Bowman

Title President

Date 7-30-09

RAMIZ TAFILAJ and/or BESIM TAFILAJ

By _____

Name Besim Tafilaj

Title Contractor

Date 7/30/2009

Sale of R.T.O.

8/4/09
WG
K.3 (5)

Matt Bowman

From: Matt Bowman
Sent: Thursday, July 16, 2009 3:30 PM
To: 'interstate.darren@aol.com'
Cc: Greg Bowman; Clark Hickman; Steve Stricker; Ramiz Tafilaj; 'chad.lacy@clhadacy.com'
Subject: Our discussion today concerning the RtO

Darren,

As discussed today, we are interested in re-selling this unit. We would like to get as much as $125,000 for the unit but we are negotiable. If you can find a buyer for the unit, we could sell it to you and you could deduct the $4K we owe you from the sale price. Thanks for your patience and understanding.

Matt Bowman
713-826-1329

Most Recent.

EPAHO04001028

Matt Bowman

From: Matt Bowman
Sent: Thursday, July 16, 2009 3:28 PM
To: Ramiz Tafilaj; 'chad.lacy@clhadacy.com'
Subject: FW: thermal oxidizer

From: Matt Bowman
Sent: Thursday, July 16, 2009 3:27 PM
To: 'boyd@konokogs.com'
Cc: Greg Bowman; Clark Hickman; Steve Stricker
Subject: thermal oxidizer

Boyd,

My name is Matt Bowman with CES Environmental in Houston, TX. I believe most of your interaction was with Marlin Moser. We purchased a 20,000 cfm oxidizer from your company last year and we are now interested in selling the unit since we no longer need it. Although we have almost $200,000 in this unit, we are willing to take $125,000 for the unit. Please contact me if you are interested in discussing the re-sale of this unit.
Thanks,
Matt Bowman
713-826-1329

EPAHO044001029

Matt Bowman

From: Melisa D. Garza
Sent: Tuesday, July 14, 2009 6:53 PM
To: Matt Bowman
Subject: Thermal Oxidizer Contact Information
Attachments: image001.gif

Matt,

We bought the Thermal Oxidizer from:

Kono Kogs, Inc.

Boyd Konowalski

2503 Beaumont Street

Green Bay, WI 54301

Phone: 920-432-2699

Fax: 920-432-2517

Email: boyd@konokogs.com

The controls for the computer were set up by (who were sent by Kono Kogs, Inc.):

West Industries

John West

1-804-314-3155

Email: john@westindustrial.biz

EPAHO044001030

The Thermal Oxidizer was taken apart, reassemble (along with John West) (who were sent by Kono Kogs, Inc.):

Interstat Industrial Sheet Metal, LLC.

Darren Haines

Phone: 414-489-2222

Cell: 262-442-6033

Fax: 414-489-2224

(b) (6)

(b) (6)

Note: We have 3 Owner's Manuals with Electrical and Mechanical Drawings.

Thanks,

Melisa D. Garza
CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
713-676-1460 Ext. 126 (Office)
832-646-8111 (Mobile)
713-676-1676 (Fax)

EPAHO044001031

OSHA ISSUES:
Houston (Bruce Howard)

[redacted]

Q4/02
WBS
K-3
(4)

Texas Mutual®
Insurance Company

July 20, 2009

Mr. Matt Bowman
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021

Sent via e-mail: mbowman@cesenvironmental.com

RE: Claim No.: 99K/575653/EL
Policy No.: TSF - 0001086044
Insured: CES Environmental Services, Inc.
Re: OSHA Investigation relating to death of Bruce Howard
D/L: 7/7/09

Dear Mr. Bowman:

I am writing on behalf of the Texas Mutual Insurance Company ("Texas Mutual") to you in your capacity as a representative of CES Environmental Services, Inc. ("CES") in connection with the above-referenced matter that includes the pending OSHA investigation relating to the death of Bruce Howard on July 7, 2009.

Texas Mutual issued Texas Workers' Compensation and Employers' Liability Insurance policy number TSF-0001086044 (the "Policy") to CES. As you probably know, the Policy contains both Part One, Workers' Compensation Insurance, and Part Two, Employers' Liability Insurance. Both Part One and Part Two have similarly worded provisions titled "We Will Defend". Under Part One of the Policy, it states, in pertinent part:

> "We have the right and duty to defend, at our expense, any claim, proceeding or suit against you for benefits payable by this insurance. We have the right to investigate and settle these claims, proceedings and suits."

Under Part Two of the Policy, it states, in pertinent part:

> "We have the right and duty to defend, at our expense, any claim, proceeding or suit against you for damages payable by this insurance. We have the right to investigate and settle these claims, proceedings and suits."

In connection with the above-referenced fatal accident, Texas Mutual is willing to investigate the incident resulting in Mr. Howard's death and has retained the law firm of Sheehy, Ware & Pappas, P.C. to assist in that investigation and to protect CES' interests in anticipation of litigation against CES by Mr. Howard's family members. Texas Mutual has authorized Sheehy, Ware & Pappas, P.C. to assist CES in connection with the ongoing OSHA investigation, to the extent that investigation is reasonably related to the circumstances of Mr. Howard's fatal accident and to CES' potential liability in connection with that accident.

EPAHO044001034

NEW ORLEANS OFFICE
ONE CANAL PLACE, 17TH FLOOR
365 CANAL ST, STE 1700
NEW ORLEANS, LOUISIANA 70130
TEL (504) 599-8666
FAX (504) 599-8699

GLAGO LAW FIRM

ATTORNEYS AT LAW

HOUSTON OFFICE
5020 MONTROSE BOULEVARD
9TH FLOOR
HOUSTON, TEXAS 77006
TEL (713) 292-2758
FAX (713) 292-2755

Sent Via Certified Mail & Facsimile to (713) 676-1676
July 17, 2009

Matthew Bowman & Greg Bowman
CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021

RE: ***Nely Delgado, individually and on behalf of her deceased husband, Bruce Howard v. CES Environmental Services, Inc.***

Dear Mssrs. Bowman:

Please be advised that my firm, along with Matt Leeper and Steve St. Martin, have been retained to jointly represent (b) (6) regarding the wrongful death and survival action of her husband, Bruce Howard, at the CES Environmental Services chemical plant on Tuesday, July 7, 2009. Accordingly, please direct all future phone calls and correspondence to my attention and not my client's.

It is our intention to be fully cooperative in the aftermath of Mr. Howard's death and hope that the same treatment will come from you. We would like to try to work together in finding out exactly what happened to cause Mr. Howard's death. Any information that you can provide in this regard would be greatly appreciated.

I would ask that you or your counsel please contact me upon receipt of this letter so that we can discuss the foregoing. I can be reached at (504) 599-8666 or via email at mglago@glagolawfirm.com.

Cordially,

Mark P. Glago

MPG/sas
cc: Matt Leeper
Steve St. Martin

EPAHO044001035

CES Environmental Services, Inc. Employee Fatality

Statement:

CES Environmental Services, Inc. deeply regrets the loss of one of our employees Tuesday afternoon (July 7, 2009). The individual was engaged in tank cleaning activities when he was exposed to an energy release from inside the tank. The individual sustained severe injuries and was pronounced dead at the hospital after attempts to revive him were unsuccessful.

We notified emergency services immediately and the Houston Fire Department and Rescue Services arrived promptly and initiated emergency medical treatment on our employee.

The cause of the incident is still under investigation. There were no other injuries. Apparently the energy release was confined to a very small area - there was no fire and very little physical evidence of the event. We cannot release the name of the individual involved because we have not been able to contact their family.

We extend our prayers and support to the employee's family and to our other employees and Neighbors in the community.

Q. What is the employees name, age, sex, etc?
A. I do not have that information. Release of that information should come from Harris County Medical Examiner or the family.

Q. What was the employee doing when the fatality occurred?
A. The employee was conducting a routine cleaning procedure which involved rinsing out an empty trailer.

Q. What was the employee cleaning?
A. A tank trailer.

Q. When did the fatality occur?
A. The fatality occurred late at approximately 4:20 p.m. on Tuesday, July 7th, 2009.

Q. What does CES Environmental Services do?
A. The company recovers provides recycling, environmental remediation, and tank cleaning services.

Q. Is this a dangerous process?
A. The activities we engage in can be potentially dangerous. The company follows all environmental and safety requirements. We have performed tank truck cleaning services literally thousands of times in the 10 year history of the company and we've never had an incident or serious injury like this. All proper OSHA required procedures were being followed (trailer grounded, non-sparking tools, intrinsically safe drop light, etc.).

Q. Have you had any prior fatalities or injuries?
A. Yes. CES sustained one previous fatality during a tank cleaning service in 2005.

Q. What about injuries at a related company called Port Arthur Chemical and Environmental Services, LLC?

A. PACES has experienced two fatalities. The first fatality was in December 2008. The autopsy indicated the death was work related. We are in the process of challenging the findings from this autopsy report. The second death occurred in April 2009. Although the autopsy has not been released, all information we have indicates the death was from natural causes.

THE FOLEY LAW FIRM

C/O ATTORNEY TAFT FOLEY

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Mr. Greg Bowman, VP	Taft Foley, II, Attorney
COMPANY: CES Environmental Services	DATE: 7/9/2009
FAX NUMBER: 713-748-8664	TOTAL NO. OF PAGES INCLUDING COVER: 2
PHONE NUMBER: 713-676-1460	SENDER'S PHONE NUMBER: (832) 778-8182
RE: The Estate of Bruce Howard	CLAIM NUMBER:

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

The information contained in this facsimile message is client privileged and confidential information intended for the use of the individual or entity named above. If the reader of this message is not the recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this fax in error, please immediately notify us by telephone and return the original message to us at the above address via the U.S. Postal Service. When applicable, this satisfies the notice requirements of Rule 21a of the Texas Rules of Civil Procedure.

1502 STATE STREET
HOUSTON, TEXAS 77007
FACSIMILE (832) 778-8353

THE FOLEY LAW FIRM
ATTORNEYS AND COUNSELORS AT LAW
1502 STATE STREET
HOUSTON, TX 77007
832-778-8182 TELEPHONE
832-778-8353 FACSIMILE

TAFT L. FOLEY II, ESQ. JERALYNN FOLEY, ESQ.

July 9, 2009

LETTER OF REPRESENTATION

(Via facsimile @ 713-748-8664)
Mr. Greg Bowman, Vice President
CES Environmental Services
4904 Griggs Rd.
Houston, Texas 77021-3208

Our Client: (b) (6)
Date of Loss: July 8, 2009

Dear Mr. Bowman:

Please be advised that we represent (b) (6), in connection with his wrongful death sustained from an explosion while in the course of employment with CES Environmental Services.

By virtue of a Power of Attorney, this firm has been assigned an undivided interest in and to this claim, of which I request that you please make immediate note and take immediate action.

On July 8, 2009, (b) (6) was in the course of his daily employment duties at CES when an explosion occurred on CES premises causing the untimely demise of (b) (6).

As a direct result and proximate cause of the negligence of CES, (b) (6) has lost his life. This incident has caused and will continue to cause (b) (6) family a tremendous amount of pain, discomfort and economic distress.

The negligent acts, albeit misfeasance/nonfeasance of CES was the cause of (b) (6) demise and resulting damages.

(b) (6) hereby makes demand upon you for (b) (6) death and damages sustained as a result thereof. Please contact me as soon as possible so that we may engage in dialogue or further correspondence regarding these matters.

Best regards,
THE FOLEY LAW FIRM, P.C.

Taft L. Foley,
Attorney at Law

TLF:eh

UNITED STATES OF AMERICA

DEPARTMENT OF LABOR

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

SUBPOENA DUCES TECUM

To: Matt Bowman, President
And/or custodian of records for
CES Environmental Services, Inc.

Pursuant to Section 8 (b) of the Occupational Safety and Health Act (29 U.S.C.§657 (b)) you are hereby required to appear before **MARK R. BRIGGS, Area Director** or his designee of the **OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, UNITED STATES DEPARTMENT OF LABOR,** at **17625 El Camino Real, Ste. 400,** in the City of **Houston, Texas** on the 24**th** day of July, 2009, **at 10:00 o'clock a.m.** of that day, to produce documents, records, and/or things regarding the working conditions at: **CES Environmental Services, Inc. 4904 Griggs Road, Houston, Texas 77021.**

You are herby required to bring with you and produce at said time and place the following items: as specifically described in Attachment #1, items Hou 1 through Hou 23, which is made a part of this subpoena.

FAIL NOT AT YOUR PERIL

IN TESTIMONY *WHEREOF* *I have hereunto affixed my Signature and the seal of the* **UNITED STATES DEPARTMENT OF LABOR** *at Houston, Texas this 10th day of July, 2009.*

MARK R. BRIGGS, Area Director
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
UNITED STATES DEPARTMENT OF LABOR

ATTACHMENT A

As used below, the terms "document" and "record" shall each mean any written, printed, typed, photographic or other graphic matter or material of any kind or nature and all mechanical or electronic sound or video recordings or transcripts thereof, in the possession, custody and/or control of the Respondent or known by the Respondent to exist, and shall also mean all copies of documents by whatever means made, including, but not limited to, papers, letters, correspondence, accident/incident reports, photographs, video recordings, audio recordings, digital recordings, drawings, sketches, maps, diagrams, interoffice communications, emails or other electronically-sent messages, memoranda, notes, notations, notebooks, reports, records, accounting books or records, schedules, tables, charts, transcripts, publications, scrapbooks, diaries, and any drafts, revisions or amendments of the above.

Item	Description	Date received
Hou 1	Any and all, waste pre-acceptance/approval letters, all profiles, sales agreements, incoming tank truck water testing data log sheets, original bills of lading, inbound load reports, wash tickets, and any other documents regarding trailers 1206 and 1276 with loads from Enviro Solutions – Baytown, between 06/1/09 and 07/07/2009 including emails discussing the same issues.	
Hou 2	Any and all reports, inspections, correspondences or other documents to or from the Houston Fire Marshal since January 2008.	
Hou 3	Any and all emails, minutes of meetings, notes taken during walk around inspections regarding electrical repairs required to comply with the national electrical code and/or codes used by the City of Houston for their fire code in all areas of the facility since January 1, 2008.	
Hou 4	Any and all communications including emails dealing with proposals, bid documents, action plans and construction documents, from Levias Electrical, Cope Engineering and or any other engineering or electrical third party. This includes cover letters with approvals from CES Environmental Services, Inc., if any.	
Hou 5	Any and all Code Evaluation Reports and all attachments and any and all cover letters from the Houston Fire Department dated January 2005 or later. This request includes any and all reports and/or correspondences submitted to the Houston Fire Department from CES. or on behalf of CES.	
Hou 6	Any and all process records, process operator notes, sample analysis, disposal records and any other documents regarding the processing of "oily water" or "high alcohol wastewater w/oily water" from trailers 1206 and 1276 from Enviro Solutions – Baytown, between 06/1/09 – 07/07/09.	
Hou 7	Any records regarding handling or drumming of the heel from trailers 1206 and 1276 from Enviro Solutions – Baytown, between 06/1/09 and 07/07/09.	

Hou 8	A list of customers, including company name, address, point(s) of contact(s), and phone number, who have conducted business with CES Environmental Services, Inc. since December 2008.	
Hou 9	A list of customers, including company name, address, a point of contact, and phone number, who have contracted to do business with CES Environmental Services, Inc. in the future through 01/2010.	
Hou 10	Any and documents that reflect shipments of wastes, chemicals and/or wastewater received at and/or shipped from CES Environmental Services, Inc. since December 2008.	
Hou 11	Any and all documents that reflect shipments for wastes, chemicals or wastewater CES Environmental Services, Inc. is scheduled to receive in the next 6 months.	
Hou 12	Any and all documents that reflect the names, job titles, addresses, phone numbers and dates of employment for all present employees, including but not limited to drivers, of CES Environmental Services, Inc.	
Hou 13	All safety and health programs, instructions, written work rules and procedures in effect at the CES Environmental Services facility on 07/07/09.	
Hou 14	All confined space entry permits for entries occurring at the facility or at customer facilities since December 2008. If at a customer facility, please include the company name, address, a point of contact, and phone number.	
Hou 15	Lower Explosive limit, Oxygen, and Carbon Monoxide readings taken by any entity at or in trailers 1206 and 1276 between 06/18/09 and 07/07/09.	
Hou 16	Documents that reflect the purchase of explosive-proof drop lights in use on 07/07/09 in the wash bays 3, 4 and 5.	
Hou 17	Documents that reflect the purchase of fall protection retractable lanyards in use in wash bay 5 on 07/07/09.	
Hou 18	Any and all information from the manufacturers of fall protection retractable lanyards referenced in Hou 17.	
Hou 19	Any and all documents reflecting communications, including letters, notes, and/or emails regarding tanks 1206 and 1276 between tank wash and sales manager.	
Hou 20	Any and all documents used to train tank cleaners at CES Environmental.	
Hou 21	Documents that reflect the purchase of LumaPro 40 foot tru-tap Cord reels in use in wash bay 5.	
Hou 22	Any and all information from the manufacturers of LumaPro 40 foot tru-tap Cord reels in use in wash bay 5.	
Hou 23	Any and all sampling results for the contents of trailers 1206 and 1276.	

TCEQ ISSUES: HOUSTON

EPAHO04001043

9/4/09
WBS
K-3
(3)

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
713-676-1460 Main
713-676-1676 Fax

June 26, 2009

Ms. LaDonna Castanuela
Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, TX 78711-3087

RE: Executive Director's Preliminary Report and Petition
CES Environmental Services, Inc.
RN100693282
TCEQ Docket No. 2009-0141-AIR-E

Dear Ms. Castanuela,

This letter is in response to the letter, dated June 11, 2009, from Ms. Anna Treadwell, Attorney, Office of Legal Services, Litigation Division, transmitting a copy of the "Executive Director's Preliminary Report and Petition Recommending that the Texas Commission on Environmental Quality Enter an Enforcement Order Assessing an Administrative Penalty Against and Requiring Certain Actions of CES Environmental Services, Inc." ("Petition"). Please accept for filing on behalf of CES Environmental Services, Inc. ("CES") this letter as an answer to the Petition and a request for a hearing.

CES was provided a Proposed Agreed Order, dated February 23, 2009. In response CES provided the Executive Director's staff information regarding the factual, legal and regulatory basis of the Proposed Agreed Order. As shown in the chart below, the Petition carries forward the same provisions included in the Proposed Agreed Order with no consideration of the information previously submitted to the staff by CES. The attached document provides a summary of the information previously submitted to the Executive Director. CES submits that this information challenges the factual and regulatory basis of the Petition and supports the substantial modification of the proposed enforcement order contained in the Petition.

Proposed Agreed Order (2/23/2009)	**Preliminary Report and Petition (6/11/2009)**
I. Findings of Fact, 3.	Facts Supporting Violations, 5.a.
I. Findings of Fact, 4.	Facts Supporting Violations, 5.b.
I. Findings of Fact, 5.	Facts Supporting Violations, 5.c.
I. Findings of Fact, 6.	Facts Supporting Violations, 5.d.
I. Findings of Fact, 7.	Facts Supporting Violations, 5.e.
I. Findings of Fact, 9.	Facts Supporting Violations, 6.a.
I. Findings of Fact, 10.	Facts Supporting Violations, 6.b.
III. Ordering Provisions, 2.a.i.	Corrective Action Ordering Provisions, 14.a.i.
III. Ordering Provisions, 2.a.ii.	Corrective Action Ordering Provisions, 14.a.ii.
III. Ordering Provisions, 2.a.ii.	Corrective Action Ordering Provisions, 14.a.iii.
III. Ordering Provisions, 2.c.i.	Corrective Action Ordering Provisions, 14.c.i.
III. Ordering Provisions, 2.c.ii.	Corrective Action Ordering Provisions, 14.c.ii.
III. Ordering Provisions, 2.c.iii.	Corrective Action Ordering Provisions, 14.c.iii.

CES requests the opportunity to meet with the Executive Director in an effort to resolve the issues raised in the Petition and to reach a mutually acceptable agreement regarding any proposed enforcement order.

Please let me know if you have any questions. I may be reached by telephoning [713-419-6076] or e-mailing [gbowman@cesenvironmental.com].

Sincerely,

Greg Bowman, V.P.

cc: Ms. Anna M. Treadwell, Staff Attorney, Texas Commission on Environmental Quality, P.O. Box 13087, MC 175, Austin, TX. 78711-3087

EPAHO044001046

COMMENTS ON PROPOSED AGREED ORDER
DOCKET No. 2009-0141-MLM-E

The following is a summary of the comments and information provided to the TCEQ Region 12 office regarding the referenced proposed agreed order dated February 23, 2009. These comments were provided in e-mail correspondence dated April 15, 2009 and April 21, 2009. Copies of the referenced correspondence were also recently forwarded to Ms. Anna Treadwell, TCEQ Staff Attorney on June 23, 2009.

PROPOSED AGREED ORDER DISCUSSION ITEMS FROM APRIL 15, 2009 CORRESPONDENCE TO N. HAMEED, TCEQ REGION 12

Section I - Findings of Fact:
Item 3 – CES requests clarification of the wording in the second sentence of this finding. The draft order states the following:

"During an investigation on November 5, 2008 through December 9, 2008, staff documented that the Respondent failed to maintain monitoring records for operations at the Plant under Methylene Chloride Permit-By-Rule ("PBR") 83191. Specifically, monitoring records for carbon adsorber units, maintenance/monitoring records for the methylene chloride scrubber and demonstration of compliance with certified limits for processing methylene chloride represented in PBR 83191 were not being maintained."

All information requested by the investigator regarding the methylene chloride process was provided to the TCEQ investigator except for records of the carbon unit exhaust monitoring results and records of the scrubber maintenance. CES requests clarification of what is meant by "demonstration of compliance with certified limits for processing methylene chloride represented in PBR 83191" since it is also referenced as a requirement in Section III - Ordering Provision 2(a)(i) of the draft order.

Item 4 – This finding of Fact states that the Respondent did not provide sufficient vapor pressure records to demonstrate compliance with the Oil Recovery Processing PBR 83798 in the calculated emissions data provided for the period January 1, 2007 through November 14, 2008. CES furnished records to TCEQ. CES has furnished a sample analysis for the largest volume oil stock handled at the site. The analytical results show the oil sample was too thick to measure vapor pressure using ASTM method D-5191 (documentation provided as attachment to April 15, 2009 e-mail to N. Hameed, TCEQ Region 12). CES believes this result is indicative that the vapor pressure values used in the 2007 and 2008 emission calculations were valid if not conservative. CES believes this finding should be removed from the draft Order and the penalty computation adjusted accordingly. This change will affect item 3 in the Conclusions of Law. Please be aware that beginning in November 2008, CES implemented voluntary emission controls on the oil process tanks by connecting them to a thermal oxidizer. A carbon adsorption system functions as backup vapor control during thermal oxidizer down time. Actual emissions from the process are therefore far less than the uncontrolled losses represented in PBR 83191.

Item 5 – This finding of fact states that the Respondent failed to meet testing requirements for three (3) boilers. CES tested two of the three boilers. CES is providing the attached documentation to demonstrate that one of the referenced boilers (Williams & Davis unit) has a firing capacity less than 2.0 MMBtu/hr and is therefore exempt from testing under 30 TAC 117.2003(a)(1). According to 30 TAC 117.2003(a)(1) boilers with a maximum rated capacity of 2.0 MMBtu/hr or less are exempt from the requirements of 30 TAC Chapter 117, Subchapter D, Division 1 and therefore do not require testing. The wording of this item should be revised from "three" to "two" boilers. This change will also affect the wording of item 4 in the Conclusions of Law and in Ordering Provision 2(c)(i). In addition, the penalty computation will need to be adjusted as it appears to be based on three boilers instead of two. Documentation demonstrating the firing capacity of the Williams & Davis boiler provided as attachment to the April 15, 2009 e-mail to N. Hameed, TCEQ Region12.

Item 6 - This finding of fact states that the Respondent failed to maintain written or electronic records of annual fuel usage for three (3) boilers. Again, the documentation (provides as attachment to April 15, 2009 e-mail to N. Hameed, TCEQ Region 12) demonstrates that one of the referenced boilers has a firing capacity less than 2.0 MMBtu/hr and is therefore exempt from recordkeeping requirements under 30 TAC 117.2003(a)(1). According to 30 TAC 117.2003(a)(1) boilers with a maximum rated capacity of 2.0 MMBtu/hr or less are exempt from the requirements of 30 TAC Chapter 117, Subchapter D, Division 1 and therefore do not require fuel use records. There should be no penalty assessed for this boiler.

With regard to the remaining two boilers, 30 TAC 117.2045(a)(1) requires that written or electronic records of annual fuel usage be maintained. Based on discussions with TCEQ in Austin, since the boilers are not subject to 30 TAC 101, Subchapter H, Division 3 (Mass Emission Cap and Trade) they are not subject to the fuel monitoring requirements of 30 TAC 117.2035(a)(1). As such the annual fuel use can be estimated from billing records. CES has fuel use records from the site since the effective start of compliance date of the rule (March 31, 2005). These records are being compiled in a summary table and will be forwarded to you as a follow up attachment. Since these records are available, CES believes this finding should be removed from the order. This change will affect item 5 in the Conclusions of Law. In addition, the penalty computation will need to be adjusted to reflect deletion of this finding. Please be aware that since the investigation, CES has installed and begun operating totalizing fuel flow meters on the two boilers to continue monitoring gas fuel usage.

Item 7 – This finding of fact states that the Respondent failed to obtain timely authorizations for the Methylene Chloride operations. The penalty computation associated with this item appears to be based on 530 days. The number of days in the period between start of operation (referenced in the Order as June 29, 2007) and the initial registration date (October 19, 2007) is 112 days. The process was changed from a two stage distillation process to a one stage distillation process in December 2007. The period from the start of the revised process on December 10, 2007 (see process records provided during investigation) to the revised registration date on November 17, 2008 is 341 days. The total number of days should be 453. CES requests the penalty computation for this finding be adjusted accordingly.

Item 9 – This finding states that 239 lbs of uncontrolled MEK vapor was released during the thermal oxidizer overpressure event that occurred on December 6, 2008. CES

wishes to clarify for the record that the 239 lb value was a worst-case estimate provided to the TCEQ investigator to show that the reportable quantity threshold of 5,000 lbs for MEK could not have been exceeded. The estimate was based on the conservative assumption that the volume of the vapor collection header to the thermal oxidizer was filled with saturated MEK vapor and did not account for air dilution from inlet vents in the system. Additionally, some of the vapor would have been combusted in the event.

Item 10 – This finding of fact states that the Respondent failed to submit a PI-7 form to TCEQ for authorization of MEK in the oil recovery process. The emissions from the handling of MEK are authorized under PBR 106.261. This PBR does not require registration with TCEQ until March 31st of the following calendar year. Since the process commenced in 2008, the registration is due no later than March 31 2009. The actual date of submission of the registration was March 26, 2009 (see TCEQ Registration 87815). CES believes this finding is in error and should be removed from the Order along with the corresponding Conclusions of Law item 9. As a result, the penalty computation needs to be revised accordingly.

Item 12 – Paragraph (a) of this finding states that the PBR authorizing the Methylene Chloride process (registration No. 86772) was obtained on December 9, 2008. This is not accurate. The Methylene Chloride process was initially registered with TCEQ in October 2007 and issued Registration No. 83191 by TCEQ as referenced in the Findings of Fact item 3. A second PBR registration authorizing a change in the processing method was registered on November 17, 2008 and approved by TCEQ on December 9, 2008 (registration 86772).

Section III - Ordering Provisions:
Ordering Provision 2(a)(i) – This provision requires the Respondent to begin maintaining records of carbon bed monitoring, scrubber monitoring/maintenance and demonstration of compliance with certified limits for processing methylene chloride represented in PBR 83191 immediately upon the effective date of the Order. CES requests TCEQ revise this provision to clarify what is meant by "demonstration of compliance with certified limits for processing methylene chloride". The site has already implemented the specified record keeping for carbon bed monitoring and scrubber maintenance for the current process. Records are maintained for those periods that the Methylene Chloride process operated. Please be aware that the Methylene Chloride distillation process is currently idle.

Ordering Provisions 2(a)(ii) – This provision requires the Respondent to begin maintaining sufficient vapor pressure records and utilizing actual vapor pressures of the various treated oil stocks to calculate the actual emissions to demonstrate compliance with the Oil Recovery Process PBR 83798. As discussed above regarding the Findings of Fact item 4, CES has sampled its largest volume oil stock to test for vapor pressure and the result shows the sample was too thick to measure vapor pressure using ASTM Method D-5191. Since the oil tanks are vented to the thermal oxidizer or the backup carbon adsorption unit as part of the voluntary emission controls implemented in November 2008, CES questions the need to monitor vapor pressure and requests that this provision be removed.

Ordering Provision 2(a)(iii) – This provision requires the Respondent to begin maintaining written or electronic records of fuel usage for the boilers immediately upon the effective date of the Order. Please be aware that totalizing fuel flow meters were

installed on the two boilers subject to the requirement to maintain annual fuel usage records. The meters have been operating since January 28, 2009.

Ordering Provision 2(c)(i) - This provision requires the Respondent to conduct stack testing on the boilers within 30 days of the effective date of the Order. Please be aware that stack testing was performed on January 28, 2009 and January 29, 2009 for the two affected boilers subject to the testing requirement and results were submitted to TCEQ.

Operating Provision 2(c)(ii) – This provision requires that the Respondent implement measures within 30 days of the effective date of the Order to prevent recurrence of the emission event that occurred on December 6, 2008. Please be aware that modifications to the thermal oxidizer and vapor collection system require prior approval from the City of Houston Fire Marshal before implementation. To the extent that approvals by other involved entities may affect the schedule in the draft Order, CES proposes this provision be revised as follows:

"2(c)(ii) – Implement measures designed to prevent recurrence of emissions events due to the same causes as the event which occurred on December 6, 2008. To the extent that prior approval from other regulatory entities is required, the referenced measures will be implemented within 30 days of approval from those entities; and"

Ordering Provision 2(c)(iii) - This provision requires the Respondent to submit an administratively complete permit application to consolidate authorization for all sources of emissions at the plant site. CES requests that this provision be removed from the draft Order. Operations at the site are already authorized under existing Permits or Permit-By-Rules (PBR). The findings summarized in the Order primarily address matters of record maintenance and timely registration. TCEQ has not contested the technical bases upon which the permits and PBRs have been issued.

Ordering Provisions 2(d) and (f) – these provisions are directly related to the requirement to submit a complete permit application in provision 2(c)(iii) addressed above. CES requests that these provisions also be removed from the draft Order. Furthermore with respect to provision 2(f), CES recognizes that the schedule for processing an application and issuing a permit is under the control of the TCEQ Air Permits Division. CES should not be held liable under the Order for delays in permit issuance that are beyond its ability to control.

PROPOSED AGREED ORDER DISCUSSION ITEMS FROM APRIL 21, 2009 CORRESPONDENCE TO N. HAMEED, TCEQ REGION 12

Section I - Findings of Fact:
Item 4 – This finding of Fact states that the Respondent did not provide sufficient vapor pressure records to demonstrate compliance with the Oil Recovery Processing PBR 83798 in the calculated emissions data provided for the period January 1, 2007 through November 14, 2008. CES has a sample analysis for the largest volume oil stock handled at the site. The analytical results are attached (provided as attachment to April 21, 2009 e-mail to N. Hameed, TCEQ Region 12). CES believes this finding should be removed from the draft Order and the penalty computation adjusted accordingly. This change will affect item 3 in the Conclusions of Law. Please be aware that beginning in November 2008, CES implemented voluntary emission controls on the oil process tanks

by connecting them to a thermal oxidizer. A carbon adsorption system functions as backup vapor control during thermal oxidizer down time. Actual emissions from the process are therefore far less than the uncontrolled losses represented in PBR 83191.

Item 6 – Attached are fuel records and a summary spreadsheet providing boiler fuel usage between August 2006 and January 2009. (Records provided as attachment to April 21, 2009 e-mail to N. Hameed, TCEQ Region 12).

With regard to the remaining two boilers, 30 TAC 117.2045(a)(1) requires that written or electronic records of annual fuel usage be maintained. Based on discussions with Vincent Meiller of the TCEQ in Austin, since the boilers are not subject to 30 TAC 101, Subchapter H, Division 3 (Mass Emission Cap and Trade) they are not subject to the fuel monitoring requirements of 30 TAC 117.2035(a)(1). As such the annual fuel use can be estimated from billing records. Copies of the billing records and an estimation of the fuel usage by the two boilers are attached (provided as attachment to April 21, 2009 e-mail to N. Hameed, TCEQ Region 12). Since these records are available, CES believes this finding should be removed from the order. This change will affect item 5 in the Conclusions of Law. In addition, the penalty computation will need to be adjusted to reflect deletion of this finding. Please be aware that since the investigation, CES has installed and begun operating totalizing fuel flow meters on the two boilers to continue monitoring gas fuel usage.

Item 7 – Attached are copies of the submission letters for the Methylene Chloride Permits-By-Rule. Copies of the TCEQ technical reviews for these submissions are also included. (Records provided as attachment to April 21, 2009 e-mail to N. Hameed, TCEQ Region 12).

This finding of fact states that the Respondent failed to obtain timely authorizations for the Methylene Chloride operations. The penalty computation associated with this item appears to be based on 530 days. The number of days in the period between start of operation (referenced in the Order as June 29, 2007) and the initial registration date (October 19, 2007) is 112 days. Furthermore, 30 TAC 106.262 states that Permits-By-Rule under that section must be registered within 10 days of startup. This further reduces the number of days by which the registration was late to 102. The process was then changed from a two stage distillation process to a one stage distillation process in December 2007. The period from the start of the revised process on December 10, 2007 (see process records provided during investigation) to the revised registration date on November 17, 2008 is 343 days. This would again be reduced by 10 days from the date of modification to 331 days. The total number of days should be 435. CES requests the penalty computation for this finding be adjusted accordingly.

Item 12 – Paragraph (a) of this finding states that the PBR authorizing the Methylene Chloride process (Registration No. 86772) was obtained on December 9, 2008. This is not accurate. The Methylene Chloride process was initially registered with TCEQ in October 2007 and issued Registration No. 83191 by TCEQ as referenced in the Findings of Fact item 3. A second PBR registration authorizing a change in the processing method was registered on November 17, 2008 and approved by TCEQ on December 9, 2008 (Registration No. 86772). As with Item 7, copies of the submission letters and the TCEQ technical reviews are attached (provided as attachment to April 21, 2009 e-mail to N. Hameed, TCEQ Region 12).

AT

ENVIRONMENTAL PROFESSIONALS

The WCM Group, Inc.

October 19, 2007

Mr. David Howell
Permits Administrative Review (PAR) Section (MC 166)
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
12100 Park 35 Circle, Building F, First Floor, Room 1206
Austin, TX 78753

LONE STAR
AIRBILL NUMBER
37620349

Reference: CES Environmental Services, Inc.
Houston, Harris County, Texas
Registration of Permit By Rule §106.261 and §106.262
CN 600618946; RN 100693282

Dear Mr. Howell:

On behalf of CES Environmental Services, Inc. (CES), please find enclosed documentation authorizing the operation of a process to recover Methylene Chloride from tank trailers containing Methylene Chloride and water. The process qualifies for authorization under Permits-By-Rule (PBR) §106.261 and §106.262.

If you have questions regarding this registration, or require further information, please do not hesitate to contact Mr. Mat Bowman of CES at (713) 676-1460, or me directly at (281) 446-7070.

Sincerely,

Philip B. Evans

Philip B. Evans
Director, Technical Services

PBE/nb
26552:5330005.lts

Enclosure

cc: M. Bowman
L. Vasse
B. Allen

P.O. Box 3247, Humble, TX 77347-3247 Tel (281) 446-7070 Fax (281) 446-3348 110 Bender Ave., Humble, TX 77338

Go To: Title V Federal Operating Permits

04/20/2009 ----------AirPermits IMS - PROJECT RECORD ----------

Company Name: **CES ENVIRONMENTAL SERVICES INC**
Central Registry Id : **CN600618946**

Region: **HOUSTON** Account: **HG1270B** Central Registry Id: **RN100693282**
County Name: **HARRIS** City: **HOUSTON**
Location : **4904 GRIGGS RD**

PROJECT INFORMATION

Project Administrative Name: **RECOVER METHYLENE CHLORIDE FROM TANK TRAILERS**
Project Technical Name: **METHYLENE CHLORIDE RECOVERY FROM TANK TRAILERS**

Project Number: **133605** Permit Number: **83191** Stdx/Pbr Number: **106.261**
Project Received Date: **10/23/2007** Renewal Date: Issued Date: **11/09/2007**

Project Type: **INITIAL** Permit Type: **PERMIT BY RULE**
Project Status: **COMPLETE**

Assigned Staff:
PEERREVIEW: AKINTAN , NANCY **REVIEWR1_2: BEATTY , JENNIFER**
REVIEW ENG: WILMOTH , JONATHAN
Staff Group:
AP INITIAL REVIEW **RR TEAM**

FEE

Reference	Fee Receipt Number	Amount	Fee Receipt Date	Fee Payment Type
1354		**100.00**		

TRACKING ELEMENTS

TE Name	Start Date	Complete Date
PEER / MANAGER REVIEW PERIOD	**11/07/2007**	**11/08/2007**
PHONE CONFERENCE (DATE)	**10/31/2007**	
PHONE CONFERENCE (DATE)	**10/31/2007**	
DEFICIENCY CYCLE	**10/30/2007**	**10/31/2007**
ENGINEER INITIAL REVIEW COMPLETED (DATE)	**10/30/2007**	
PHONE CONFERENCE (DATE)	**10/30/2007**	
PROJECT RECEIVED BY ENGINEER (DATE)	**10/26/2007**	
APIRT TRANSFERRED PROJECT TO TECHNICAL STAFF (DATE)	**10/24/2007**	
APIRT RECEIVED PROJECT (DATE)	**10/23/2007**	
CENTRAL REGISTRY UPDATED	**10/23/2007**	

PROJECT RULES:

Rule Desc	On Application	Approve
106.261	N	Y
106.262	N	Y

Last Modified 12/4/08
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CORE LABORATORIES

Core Lab
RESERVOIR OPTIMIZATION
8210 Mosley Road
Houston, Texas 77075
Phone: 713-943-9776
Fax: 713-943-3846

No. 26009

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: CES Environmental Serv.	PROJECT NAME/NUMBER: Hydrocarbon Processing
SEND REPORT TO: Clark Hickman	BILLING INFORMATION
ADDRESS: 4904 Griggs Rd Houston, TX 77021	BILL TO: CES Env. Serv. Inc
	ADDRESS: 4904 Griggs Rd Houston, TX 77021
PHONE: 281-488-0848	PHONE: 713-676-1460
FAX: 713-676-1676	FAX: 713-676-1676 PO NO.:

NUMBER OF CONTAINERS

ANALYSIS METHOD REQUEST

(1) ASTM 2887 Simulated Distribution with Carbon Number
(2) Standard Test Method for Water and Sediment in Oil D-4007, D1796 or equivalent

LAB JOB NO.

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	(1)	(2)	REMARKS / PRECAUTIONS
	CES Oil Sample	4/8/09					X	X	

SAMPLER: SHIPMENT METHOD: AIRBILL NO.:

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Clark Hickman		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: [signature]	4/9/09	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Michael Niemtschk	TIME 1:05pm	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

ORIGINAL

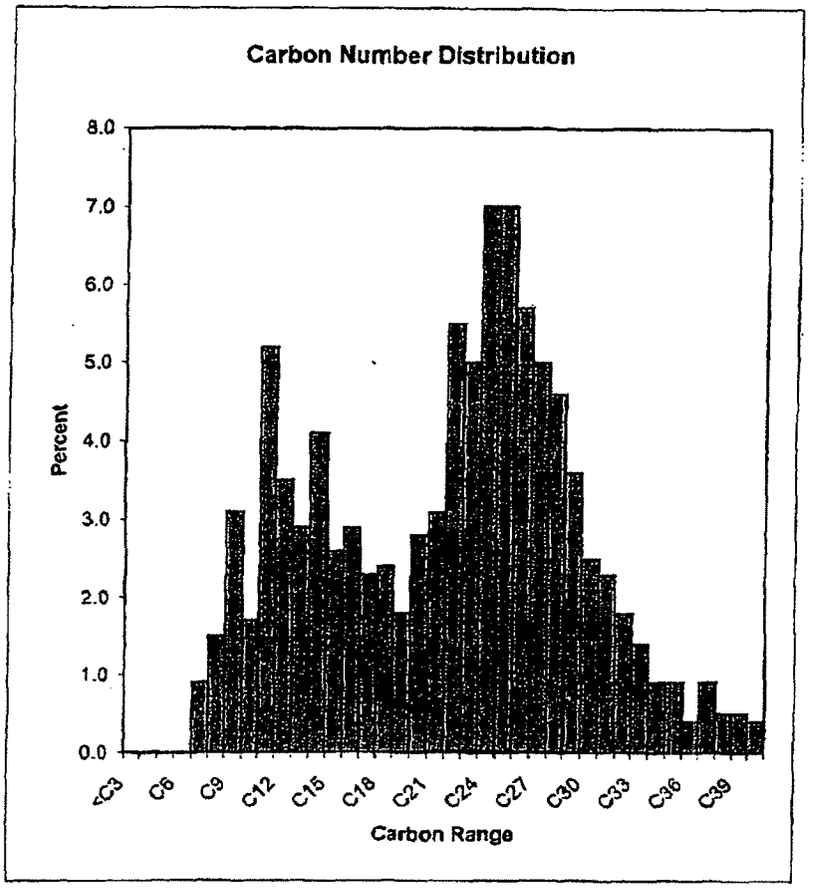
Core Lab
RESERVOIR OPTIMIZATION

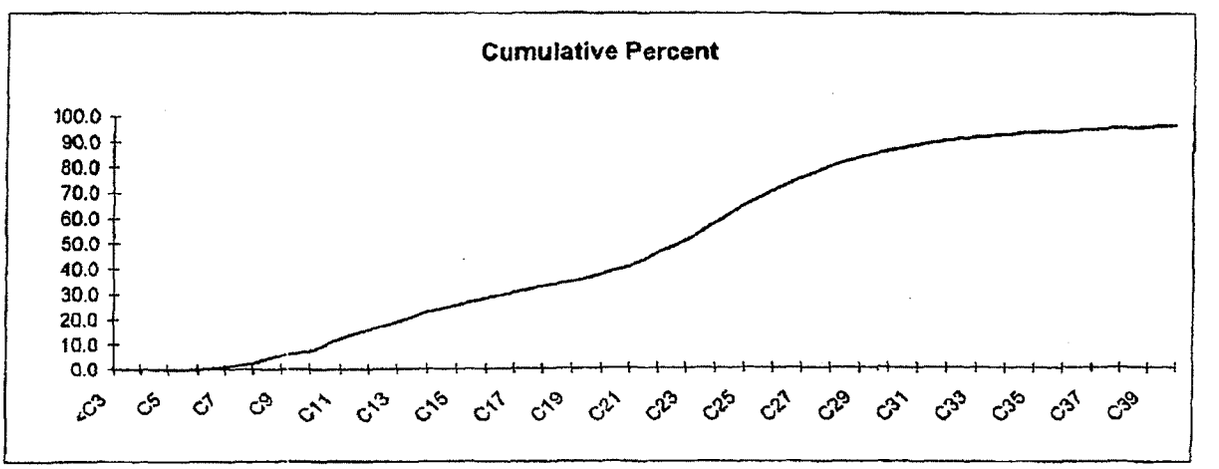
PETROLEUM SERVICES

ASTM D2887- Simulated Distillation

Laboratory ID: 191161-1

Carbon No.	Incremental Percent	Cumulative Percent
<C3	0.0	0.0
C4	0.0	0.0
C5	0.0	0.0
C6	0.0	0.0
C7	0.9	0.9
C8	1.5	2.4
C9	3.1	5.5
C10	1.7	7.2
C11	5.2	12.4
C12	3.5	15.9
C13	2.9	18.8
C14	4.1	22.9
C15	2.6	25.5
C16	2.9	28.4
C17	2.3	30.7
C18	2.4	33.1
C19	1.8	34.9
C20	2.8	37.7
C21	3.1	40.8
C22	5.5	46.3
C23	5.0	51.3
C24	7.0	58.3
C25	7.0	65.3
C26	5.7	71.0
C27	5.0	76.0
C28	4.6	80.6
C29	3.6	84.2
C30	2.5	86.7
C31	2.3	89.0
C32	1.8	90.8
C33	1.4	92.2
C34	0.9	93.1
C35	0.9	94.0
C36	0.4	94.4
C37	0.9	95.3
C38	0.5	95.8
C39	0.5	96.3
C40	0.4	96.7
C40+	3.3	100.0





The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

8210 Mosley Rd.
Houston, TX 77075
713 943-9776 Telephone
713 943-3846 Facsimile

CORE LABORATORIES

CLARK HICKMAN
CES ENVIRONMENTAL SERVICES
4904 GRIGGS RD
HOUSTON, TX 77021

Date Reported: 4/14/2009
Date Received: 4/9/2009

Analytical Report

Test	Result	Units	Method	Date	Analyst
Sample Number: 191161-001	**Sample ID:** CES Oil Sample				**Sample Rcvd:**
Sample Date: 9/8/2009	**Description:**				4/9/2009
Simulated Distillation-Distillates					
IBP	182	Deg F	ASTM D-2887	4/13/2009	JT
5 % off	289	Deg F			
10 % off	369	Deg F			
15 % off	408	Deg F			
20 % off	461	Deg F			
25 % off	511	Deg F			
30 % off	567	Deg F			
35 % off	627	Deg F			
40 % off	669	Deg F			
45 % off	691	Deg F			
50 % off	711	Deg F			
55 % off	727	Deg F			
60 % off	742	Deg F			
65 % off	756	Deg F			
70 % off	771	Deg F			
75 % off	787	Deg F			
80 % off	805	Deg F			
85 % off	830	Deg F			
90 % off	863	Deg F			
95 % off	930	Deg F			
FBP	1062	Deg F			
Water by Distillation	30.9	WT %	ASTM D-95	4/13/2009	PG

Approved By:

M. Jean Waits
Supervising Chemist

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal, or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

Vapor Pressure Calclation
based on Core Lab data

Carbon Number	Organic Weight Percent	Weight Percent (%)	Pure Component VP (psia)	MW	Moles	Mole Fraction	Partial Pressure (psia)
C7	0.9	0.6	1.624	100	0.0060	0.0030	0.004944
C8	1.5	1.0	0.543	114	0.0088	0.0045	0.002417
C9	3.1	2.0	0.18	128	0.0156	0.0079	0.001427
C10	1.7	1.1	0.073	140	0.0079	0.0040	0.000291
C11	5.2	3.4	0.024	154	0.0221	0.0112	0.000269
C12	3.5	2.3	0.008	168	0.0137	0.0069	5.56E-05
C13	2.9	1.9	0.003	182	0.0104	0.0053	1.59E-05
C14	4.1	2.7	0.001	196	0.0138	0.0070	6.99E-06
C15	2.6	1.7	2.56E-04	210	0.0081	0.0041	1.05E-06
C16	2.9	1.9	8.13E-05	224	0.0085	0.0043	3.5E-07
C17	2.3	1.5	2.55E-05	238	0.0063	0.0032	8.15E-08
C18	2.4	1.6	7.76E-06	252	0.0063	0.0032	2.5E-08
C19	1.8	1.2	2.42E-06	266	0.0045	0.0023	5.54E-09
C20	2.8	1.8	7.28E-07	280	0.0064	0.0033	2.37E-09
C21	3.1	2.0	Negligible	294	0.0068	0.0035	Negligible
C22	5.5	3.6	Negligible	308	0.0117	0.0059	Negligible
C23	5.0	3.3	Negligible	322	0.0102	0.0052	Negligible
C24	7.0	4.6	Negligible	336	0.0137	0.0069	Negligible
C25	7.0	4.6	Negligible	350	0.0131	0.0067	Negligible
C26	5.7	3.8	Negligible	364	0.0104	0.0053	Negligible
C27	5.0	3.3	Negligible	378	0.0087	0.0044	Negligible
C28	4.6	3.0	Negligible	392	0.0077	0.0039	Negligible
C29	3.6	2.4	Negligible	406	0.0059	0.0030	Negligible
C30	2.5	1.6	Negligible	420	0.0038	0.0019	Negligible
C31	2.3	1.5	Negligible	434	0.0035	0.0018	Negligible
C32	1.8	1.2	Negligible	448	0.0027	0.0014	Negligible
C33	1.4	0.9	Negligible	462	0.0019	0.0010	Negligible
C34	0.9	0.6	Negligible	476	0.0013	0.0006	Negligible
C35	0.9	0.6	Negligible	490	0.0012	0.0006	Negligible
C36	0.4	0.2	Negligible	504	0.0004	0.0002	Negligible
C37	.	0.6	Negligible	518	0.0012	0.0006	Negligible
C38	0.5	0.3	Negligible	532	0.0006	0.0003	Negligible
C39	0.5	0.3	Negligible	546	0.0005	0.0003	Negligible
C40	0.4	0.2	Negligible	560	0.0004	0.0002	Negligible
C40+	3.3	2.2	Negligible	574	0.0038	0.0019	Negligible
water		30.9		18	1.7167	0.8710	
Ash		3.6		574	0.0063	0.0032	
Total		100.0			1.9709		

Total Organic Vapor Pressure = 0.0094 psia

Molecular Weights and Vapor Pressures for carbon compounds based on C_NH_{2N}
Ash content is conservatively assumed to be 3.6%

Go To: Title V Federal Operating Permits

04/20/2009 ----------AirPermits IMS - PROJECT RECORD ----------

Company Name: **CES ENVIRONMENTAL SERVICES INC**
Central Registry Id : **CN600618946**

Region: **HOUSTON** Account: **HG1270B** Central Registry Id: **RN100693282**
County Name: **HARRIS** City: **HOUSTON**
Location : **4904 GRIGGS RD**

PROJECT INFORMATION

Project Administrative Name: **METHYLENE CHLORIDE RECYCLING PROCESS**
Project Technical Name: **METHYLENE CHLORIDE RECYCLING PROCESS**

Project Number: **142462** Permit Number: **86772** Stdx/Pbr Number: **106.261**
Project Received Date: **11/18/2008** Renewal Date: Issued Date: **12/09/2008**

Project Type: **INITIAL** Permit Type: **PERMIT BY RULE**
Project Status: **COMPLETE**

Assigned Staff:
REVIEW ENG: GOTT , JOHN PEERREVIEW: UHAL , HOWARD
REVIEWR1_2: WILBORN , JESSIE
Staff Group:
AP INITIAL REVIEW RR TEAM
RULE REG SECTION

FEE

Reference	Fee Receipt Number	Amount	Fee Receipt Date	Fee Payment Type
29534		**450.00**		**CHECK**

TRACKING ELEMENTS

TE Name	Start Date	Complete Date
PEER / MANAGER REVIEW PERIOD	**12/09/2008**	**12/09/2008**
DEFICIENCY CYCLE	**12/08/2008**	**12/08/2008**
DEFICIENCY CYCLE	**12/02/2008**	**12/03/2008**
ENGINEER INITIAL REVIEW COMPLETED (DATE)	**12/01/2008**	
PROJECT RECEIVED BY ENGINEER (DATE)	**11/25/2008**	
APIRT TRANSFERRED PROJECT TO TECHNICAL STAFF (DATE)	**11/24/2008**	
APIRT RECEIVED PROJECT (DATE)	**11/18/2008**	

PROJECT RULES:

Rule Desc	On Application	Approve
106.261	Y	Y
106.262	Y	Y

Last Modified 12/4/08
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ENVIRONMENTAL PROFESSIONALS

WCM

The WCM Group, Inc.

November 17, 2008

Mr. Don Dale Nelon
Air Permits Initial Review Team (APIRT), MC161
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Building F, Room 1206
12100 Park 35 Circle
Austin, TX 78753

LONE STAR
AIRBILL NUMBER
41915489

Reference: CES Environmental Services, Inc.
Houston, Harris County, Texas
Registration of Permit-By-Rule §106.261, §106.262
PBR Registration 83191
CN600618946; RN100693282

Dear Mr. Nelon:

On behalf of CES Environmental Services, Inc. (CES), please find enclosed documentation authorizing the revised operation of a recycling process to produce Methylene Chloride. The process qualifies for authorization under Permit-By-Rule (PBR) §106.261 and §106.262. The prior PBR Registration No. 83191 is replaced with this submittal.

If you have questions regarding this registration, or require further information, please do not hesitate to contact Mr. Matt Bowman of CES at (713) 676-1460, or me directly at (281) 446-7070.

Sincerely,

Philip B. Evans

Philip B. Evans
Director, Technical Services

PBE/nb
27264:5330019.let.doc

Enclosure

cc: M. Bowman
L. Vasse
B. Allen -City of Houston

ESTIMATED NATURAL GAS FUEL USAGE (August 2006 - January 2009)

Data Source	Year	Month	Natural Gas Fuel Usage			Estimated Fuel Use Boiler 1 80HP			Estimated Fuel Use Boiler 2 150 HP		
			Units MCF	Units CCF	Units MMBtu	Units MCF	Units CCF	Units MMBtu	Units MCF	Units CCF	Units MMBtu
Centerpoint Energy 18 Month Consumption Report	2006	Aug	1597			557			1040		
Centerpoint Energy 18 Month Consumption Report		Sep	584			204			380		
Centerpoint Energy 18 Month Consumption Report		Oct	2572			896			1676		
Centerpoint Energy 18 Month Consumption Report		Nov	1640			572			1068		
Centerpoint Energy 18 Month Consumption Report		Dec	1992			694			1298		
Centerpoint Energy 18 Month Consumption Report	2007	Jan	2419			843			1576		
Centerpoint Energy 18 Month Consumption Report		Feb	1935			674			1261		
Centerpoint Energy 18 Month Consumption Report		Mar	2096			731			1365		
Centerpoint Energy 18 Month Consumption Report		Apr	1959			683			1276		
Centerpoint Energy 18 Month Consumption Report		May	1725			601			1124		
Centerpoint Energy 18 Month Consumption Report		Jun	1796			626			1170		
Centerpoint Energy 18 Month Consumption Report		Jul	1377			480			897		
Centerpoint Energy 18 Month Consumption Report		Aug	1382			482			900		
Centerpoint Energy 18 Month Consumption Report		Sep	1400			488			912		
Centerpoint Energy 18 Month Consumption Report		Oct	1347			469			878		
Centerpoint Energy 18 Month Consumption Report		Nov	1658			578			1080		
Centerpoint Energy 18 Month Consumption Report		Dec	1711			596			1115		
Centerpoint Energy 18 Month Consumption Report	2008	Jan	1600			558			1042		
Centerpoint Energy Gas Bill		Feb	1709			596			1113		
Centerpoint Energy Gas Bill		Mar	1775			619			1156		
Centerpoint Energy Gas Bill		Apr	1692			590			1102		
Centerpoint Energy Gas Bill		May	1615			563			1052		
Centerpoint Energy Gas Bill		Jun	1396			487			909		
Centerpoint Energy Invoice for Natural Gas Delivery		Jul			2033			709			1324
Centerpoint Energy Invoice for Natural Gas Delivery		Aug			1999			697			1302
Centerpoint Energy Invoice for Natural Gas Delivery		Sep			1769			617			1152
Centerpoint Energy Invoice for Natural Gas Delivery		Oct			2342			816			1526
Centerpoint Energy Invoice for Natural Gas Delivery		Nov			2526			880			1646
Centerpoint Energy Invoice for Natural Gas Delivery		Dec			1980			690			1290
Centerpoint Energy Invoice for Natural Gas Delivery	2009	Jan			1908			665			1243

30 TAC 117.2045

(a) Recordkeeping. The owner or operator of a unit subject to §117.2010 of this title (relating to Emission Specifications) or claimed exempt under §117.2003(b) of this title (relating to Exemptions) shall maintain written or electronic records of the data specified in this subsection. Such records must be kept for a period of at least five years and must be made available upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or local air pollution control agencies having jurisdiction. The records must include:

(1) records of annual fuel usage;

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 11, 2009

Via Certified Mail, Return Receipt Requested, Article No. 7003 0500 0003 2004 4198
Via First Class Mail, Postage Pre-Paid

Mr. Matt Bowman, Registered Agent
CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021

Re: CES Environmental Services, Inc.; RN100693282;
TCEQ Docket No. 2009-0141-AIR-E

Dear Mr. Bowman:

Please find enclosed a copy of the "Executive Director's Preliminary Report and Petition Recommending that the Texas Commission on Environmental Quality Enter an Enforcement Order Assessing an Administrative Penalty Against and Requiring Certain Actions of CES Environmental Services, Inc." (the "EDPRP").

The Commission may issue a default order against CES Environmental unless, within 20 days after you receive this letter, an answer requesting a hearing in this matter is filed. If a default order is entered, you will be required to pay the assessed penalty and complete the corrective action set forth in the order. YOUR FAILURE TO ACCEPT OR PICK UP CERTIFIED MAIL WILL NOT RELIEVE YOU OF YOUR RESPONSIBILITY IN THIS MATTER. For further information concerning these enforcement procedures, you may contact the Commission's Office of the Public Interest Counsel at (512) 239-6363.

To file an answer requesting a hearing, you should send original correspondence referencing the docket number above to:

LaDonna Castañuela, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, Texas 78711-3087

and:

EPAHO044001061

Anna M. Treadwell, Staff Attorney
Texas Commission on Environmental Quality
P.O. Box 13087, MC 175
Austin, Texas 78711-3087

Please contact me at (512) 239-3400 if you have any questions or would like to schedule a meeting to discuss settlement. We look forward to cooperatively resolving this matter with you.

Sincerely,

Anna Treadwell

Anna M. Treadwell, Staff Attorney
Office of Legal Services, Litigation Division
Texas Commission on Environmental Quality

Enclosure

cc: Office of the Chief Clerk, MC 105

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 11, 2009

LaDonna Castañuela, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, Texas 78711-3087

Re: Executive Director's Preliminary Report and Petition
CES Environmental Services, Inc.
TCEQ ID NO. RN100693282;
TCEQ DOCKET NO. 2009-0141-AIR-E

Dear Ms. Castañuela:

Enclosed for filing is the original "Executive Director's Preliminary Report and Petition Recommending that the Texas Commission on Environmental Quality Enter an Enforcement Order Assessing an Administrative Penalty Against and Requiring Certain Actions of CES Environmental Services, Inc." (the "EDPRP").

Enclosed please also find one copy of the EDPRP, and one copy of the letter to the Respondent. Please file stamp these documents and return them to Anna M. Treadwell, Attorney, Litigation Division, MC 175. If you have any questions or comments, please call me at (512) 239-0974.

Sincerely,

Anna Treadwell

Anna M. Treadwell, Staff Attorney
Office of Legal Services, Litigation Division

Enclosures

cc: Kimberly Morales, Enforcement Division, TCEQ, MC R-12
Linda Vasse, Air Section Manager, TCEQ, MC R-12
Blas Coy, Public Interest Counsel, TCEQ, MC 103

printed on recycled paper using soy based ink

TCEQ DOCKET NO. 2009-0141-AIR-E

IN THE MATTER OF AN ENFORCEMENT ACTION AGAINST CES ENVIRONMENTAL SERVICES, INC.; RN100693282	**§ § § § §**	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

EXECUTIVE DIRECTOR'S PRELIMINARY REPORT AND PETITION RECOMMENDING THAT THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ENTER AN ENFORCEMENT ORDER ASSESSING AN ADMINISTRATIVE PENALTY AGAINST AND REQUIRING CERTAIN ACTIONS OF CES ENVIRONMENTAL SERVICES, INC.

INTRODUCTION

1. The Executive Director of the Texas Commission on Environmental Quality ("Commission" or "TCEQ"), by and through a representative of the Litigation Division, hereby issues this Preliminary Report and Petition pursuant to TEX. WATER CODE § 7.054, TEX. HEALTH & SAFETY CODE ch. 382, and 30 TEX. ADMIN. CODE chs. 70, 106, and 117. Discovery related to this matter is intended to be conducted under Level 3 pursuant to TEX. R. CIV. P. 190.

2. CES Environmental Services, Inc. ("CES Environmental") is subject to the enforcement authority of the Commission pursuant to TEX. WATER CODE § 7.002 because the violations alleged herein are within the Commission's general jurisdiction, pursuant to TEX. WATER CODE § 5.013, as they involve violations of the state's air quality.

3. The Executive Director has come to the conclusion that CES Environmental violated TEX. HEALTH & SAFETY CODE § 382.085(b) and 30 TEX. ADMIN. CODE §§ 106.8(c)(2)(A) and (B), 106.262(a)(2) and (3), 117.2035(e) and 117.2045(a)(1). The Executive Director recommends that the Commission enter an order assessing an administrative penalty against CES Environmental in the amount of nineteen thousand five hundred dollars ($19,500.00). Further, the Executive Director recommends that the Commission order CES Environmental to undertake such actions as are necessary to bring its operations into compliance with the Texas Health and Safety Code and TCEQ rules.

FACTS SUPPORTING VIOLATIONS

4. CES Environmental owns and operates a tank container cleaning and waste handling operation located at 4904 Griggs Road, Houston, Harris County, Texas (the "Plant").

The Plant consists of one or more sources as defined in TEX. HEALTH & SAFETY CODE § 382.003(12).

5. During an investigation conducted on November 5, 2008 through December 9, 2008, a TCEQ Houston Regional Office investigator documented that CES Environmental violated the following requirements:

   a. 30 TEX. ADMIN. CODE § 106.8(c)(2)(A) and (B) and TEX. HEALTH & SAFETY CODE § 382.085(b), by failing to maintain monitoring records for operations at the Plant under methylene chloride Permit-by-Rule ("PBR") 83191. Specifically, monitoring records for carbon adsorber unit, maintenance/monitoring records for the methylene chloride scrubber and demonstration of compliance with certified limits for processing methylene chloride represented in PBR 83191 were not being maintained.

   b. 30 TEX. ADMIN. CODE § 106.8(c)(2)(A) and (B) and TEX. HEALTH & SAFETY CODE § 382.085(b), by failing to provide sufficient vapor pressure records to demonstrate compliance with Oil Recovery Processing PBR 83798. Specifically, the actual vapor pressures of the various treated oil stocks were not used to calculate the actual emissions from the operations in the emissions data provided for January 1, 2007 through November 14, 2008; therefore, compliance with actual limitations certified in the PBR could not be demonstrated.

   c. 30 TEX. ADMIN. CODE § 117.2035(e) and TEX. HEALTH & SAFETY CODE § 382.085(b), by failing to meet testing requirements for three boilers being operated at the Plant necessary to determine applicable emission specifications for banking and trading. Specifically, the boilers should have been tested for nitrogen oxides, carbon monoxides and oxygen emissions by March 31, 2005.

   d. 30 TEX. ADMIN. CODE § 117.2045(a)(1) and TEX. HEALTH & SAFETY CODE § 382.085(b) by failing to maintain written or electronic records of annual fuel usage for three boilers. Specifically, records of annual fuel usage which should have been kept for a period of five years are not being maintained.

   e. 30 TEX. ADMIN. CODE §§ 116.110(a) and 106.262(a)(3) and TEX. HEALTH & SAFETY CODE § 382.085(b) by failing to obtain timely authorizations for methylene chloride operations at the Plant. Specifically, records show that the methylene chloride operations at the Plant began as early as June 29, 2007 without authorization.

   f. 30 TEX. ADMIN. CODE §§ 116.110(a) and 106.262(a)(3) and TEX. HEALTH & SAFETY CODE § 382.085(b) by failing to obtain timely authorizations for the oil recovery processing operations conducted at the Plant. Specifically, records show

that oil recovery operations at the Plant began as early as January 2, 2007 without authorization.

6. During an investigation conducted on December 8, 2008 through December 30, 2008, a TCEQ Houston Regional Office investigator documented that CES Environmental violated the following requirements:

   a. 30 TEX. ADMIN. CODE § 106.262(a)(2) and TEX. HEALTH & SAFETY CODE § 382.085(b) by failing to prevent unauthorized emissions. Specifically, 239 pounds of methyl ethyl ketone ("MEK") were released when CES Environmental failed to prevent an over-pressure from a MEK-rich vapor stream which caused the blower and thermal oxider to rupture and explode, resulting in an emission event which occurred on December 6, 2008 and lasted for 13 minutes.

   b. 30 TEX. ADMIN. CODE § 106.262(a)(3) and TEX. HEALTH & SAFETY CODE § 382.085(b) by failing to submit a PI-7 form to the TCEQ for authorization to use MEK in the oil recovery process. Specifically, during the investigation conducted on December 8, 2008, it was determined that the use of MEK had not been registered.

7. CES Environmental received notice of the violations in paragraph 5 on or about January 13, 2009 and received notice of the violations in paragraph 6 on or about January 21, 2009.

IMPOSITION OF PENALTY

8. Based on the facts supporting the violations, the Executive Director recommends that an administrative penalty be imposed pursuant to TEX. WATER CODE § 7.051. The Commission has the authority to assess an administrative penalty of up to $10,000 for each day of each violation under TEX. WATER CODE § 7.052.

AMOUNT OF PENALTY

9. In determining the amount of the penalty, the Commission is required by TEX. WATER CODE § 7.053 to consider:

   a. the nature, circumstances, extent, duration, and gravity of the prohibited act, with special emphasis on the impairment of existing water rights or the hazard or potential hazard created to the health or safety of the public;

   b. the impact of the violation on:
      i. air quality in the region;
      ii. a receiving stream or underground water reservoir;

iii. instream uses, water quality, aquatic and wildlife habitat, or beneficial freshwater inflows to bays and estuaries; or
iv. affected persons;

c. with respect to the alleged violator:
i. the history and extent of previous violations;
ii. the degree of culpability, including whether the violation was attributable to mechanical or electrical failures and whether the violation could have been reasonably anticipated and avoided;
iii. the demonstrated good faith, including actions taken by the alleged violator to rectify the cause of the violation and to compensate affected persons;
iv. economic benefit gained through the violation; and
v. the amount necessary to deter future violations; and

d. any other matters that justice may require.

10. Based on the facts supporting the violations, and having considered the above-described factors, the Executive Director recommends that CES Environmental be required to pay an administrative penalty in the amount of nineteen thousand five hundred dollars ($19,500.00).

11. The penalty calculation worksheet ("PCW") for the recommended administrative penalty is attached hereto and incorporated herein by reference ("Attachment A"). The PCW sets forth each alleged violation and the statutory factors the Executive Director considered in determining the recommended administrative penalty.

12. The Executive Director followed an established Penalty Policy approved by the Commission in calculating the penalty in this enforcement action. *See* Texas Commission on Environmental Quality Penalty Policy (September 1, 2002).

CORRECTIVE ACTION ORDERING PROVISIONS

13. Pursuant to TEX. WATER CODE § 7.073, if a person violates any statute or rule within the Commission's jurisdiction, the Commission may order the person to take corrective action.

14. The Executive Director recommends that CES Environmental be required to implement the following corrective measures:

a. Immediately upon the effective date of the Commission Order, CES Environmental shall:

i. Begin maintaining monitoring records for operations at the Plant under Methylene Chloride PBR 83191, including, but not limited to:

monitoring records for carbon adsorber units, maintenance/monitoring records for the methylene chloride scrubber and demonstration of compliance with certified limits for processing methylene chloride, in accordance with of 30 TEX. ADMIN. CODE § 106.8(c)(2);

ii. Begin maintaining sufficient vapor pressure records and utilizing the actual vapor pressures of the various treated oil stocks to calculate the actual emissions to demonstrate compliance with Oil Recovery Processing PBR 83798, in accordance with of 30 TEX. ADMIN. CODE § 106.8(c)(2); and

iii. Begin maintaining written or electronic records of annual fuel usage for three boilers, in accordance with 30 TEX. ADMIN. CODE § 117.2045(a)(1).

b. Within 15 days after the effective date of the Commission Order, CES Environmental shall submit written certification as specified in Ordering Provision No. 14.g. below, to demonstrate compliance with Ordering Provision No. 14.a.

c. Within 30 days after the effective date of the Commission Order, CES Environmental shall:

i. Conduct testing of the three boilers being operated at the Plant, in accordance with 30 TEX. ADMIN. CODE § 117.2035(e);

ii. Implement measures designed to prevent recurrence of emissions events due to the same causes as the event which occurred on December 6, 2008; and

iii. Submit an administratively complete permit application to consolidate authorization for all sources of emissions at the Plant, in accordance with 30 TEX. ADMIN. CODE § 116.111 to:

Air Permits Division, MC 162
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

d. Respond completely and adequately, as determined by the TCEQ, to all requests for information concerning the permit application within 30 days after the date of such requests, or by any other deadline specified in writing.

e. Within 45 days after the effective date of the Commission Order, CES Environmental shall submit written certification as specified in Ordering Provision No. 14.g. below, to demonstrate compliance with Ordering Provision No. 14.c.

f. Within 180 days after the effective date of the Commission Order, CES Environmental shall submit written certification that authorization to operate all sources of air emissions at the Plant has been obtained or that operation has ceased until such time that appropriate authorization is obtained.

g. The certification shall include written certification and detailed supporting documentation, including photographs, receipts, and/or other records, to demonstrate compliance. The certification shall be notarized by a State of Texas Notary Public and include the following certification language:

> "I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

CES Environmental shall submit the written certification and copies of documentation necessary to demonstrate compliance with these Ordering Provisions to:

Order Compliance Team
Enforcement Division, MC 149A
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Linda Vasse, Air Section Manager
Texas Commission on Environmental Quality
Houston Regional Office
5425 Polk Avenue, Suite H
Houston, Texas 77023-1486

RESPONDENT'S RIGHTS AND RESPONSIBILITIES

15. According to TEX. WATER CODE § 7.056 and the TCEQ's procedural rules, CES Environmental has a right to a hearing on the occurrence of the violations, the amount of the proposed penalty, or both. To preserve this right to a hearing, within 20 days after the day CES Environmental receives this Preliminary Report and Petition, CES Environmental must submit a written response to the Executive Director in accordance with TEX. WATER CODE § 7.056 and 30 TEX. ADMIN. CODE § 70.105(a).

PRAYER

16. **ACCORDINGLY**, the Executive Director respectfully requests that the Commission enter an order, pursuant to TEX. WATER CODE ch. 7 and TEX. HEALTH & SAFETY CODE ch. 382, assessing a penalty and granting other relief as requested above, together with any other relief the Commission finds appropriate.

Respectfully submitted,

Texas Commission on Environmental Quality

Mark R. Vickery, P.G.
Executive Director

Stephanie Bergeron Perdue, Deputy Director
Office of Legal Services

Kathleen C. Decker, Division Director
Litigation Division

by Anna Treadwell

Anna M. Treadwell
State Bar of Texas No. 24053154
Litigation Division, MC 175
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-3400
(512) 239-3434 (FAX)

CERTIFICATE OF SERVICE

I hereby certify that on this 11th day of June, 2009, the original of the foregoing "Executive Director's Preliminary Report and Petition Recommending that the Texas Commission on Environmental Quality Enter an Enforcement Order Assessing an Administrative Penalty Against and Requiring Certain Actions of CES Environmental Services, Inc." ("EDPRP") was filed with the Chief Clerk, Texas Commission on Environmental Quality, Austin, Texas.

I further certify that on this day a true and correct copy of the foregoing EDPRP was mailed via Certified Mail, Return Receipt Requested, Article No. 7003 0500 0003 2004 4198, and via First Class Mail, postage prepaid, to:

Mr. Matt Bowman, Registered Agent
CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021

I further certify that on this day a true and correct copy of the foregoing EDPRP was electronically submitted to the Office of the Public Interest Counsel, Texas Commission on Environmental Quality, Austin, Texas.

Anna Treadwell

Anna M. Treadwell, Attorney
Office of Legal Services, Litigation Division
Texas Commission on Environmental Quality

Attachment A
Penalty Calculation Worksheet

Penalty Calculation Worksheet (PCW)

Policy Revision 2 (September 2002) — *PCW Revision October 30, 2008*

TCEQ

DATES						
Assigned	20-Jan-2009					
PCW	9-Jun-2009	Screening	28-Jan-2009	EPA Due		

RESPONDENT/FACILITY INFORMATION

Respondent	CES Environmental Services, Inc.		
Reg. Ent. Ref. No.	RN100693282		
Facility/Site Region	12-Houston	Major/Minor Source	Minor

CASE INFORMATION

Enf./Case ID No.	37096	No. of Violations	8
Docket No.	2009-0141-AIR-E	Order Type	Findings
Media Program(s)	Air	Government/Non-Profit	No
Multi-Media	10	Enf. Coordinator	Kimberly Morales
		EC's Team	Enforcement Team 5

Admin. Penalty $ Limit Minimum: $0 Maximum: $10,000

Penalty Calculation Section

TOTAL BASE PENALTY (Sum of violation base penalties) — *Subtotal 1*: $19,500

ADJUSTMENTS (+/-) TO SUBTOTAL 1

Subtotals 2-7 are obtained by multiplying the Total Base Penalty (Subtotal 1) by the indicated percentage.

Compliance History -10.0% Enhancement — *Subtotals 2, 3, & 7*: -$1,950

Notes: Penalty reductions due to high performer classification.

Culpability No — 0.0% Enhancement — *Subtotal 4*: $0

Notes: The Respondent does not meet the culpability criteria.

Good Faith Effort to Comply Total Adjustments — *Subtotal 5*: $0

Economic Benefit — 0.0% Enhancement* — *Subtotal 6*: $0

**Capped at the Total EB $ Amount*

Total EB Amounts	$1,081
Approx. Cost of Compliance	$12,500

SUM OF SUBTOTALS 1-7 — *Final Subtotal*: $17,550

OTHER FACTORS AS JUSTICE MAY REQUIRE 11.1% — *Adjustment*: $1,950

Reduces or enhances the Final Subtotal by the indicated percentage.

Notes: Penalty enhancement recommended to offset the reduction for high performer classification.

Final Penalty Amount: $19,500

STATUTORY LIMIT ADJUSTMENT — *Final Assessed Penalty*: $19,500

DEFERRAL 0.0% Reduction — *Adjustment*: $0

Reduces the Final Assessed Penalty by the indicted percentage. *(Enter number only; e.g. 20 for 20% reduction.)*

Notes: No deferral is recommended for Findings Orders.

PAYABLE PENALTY: $19,500

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc.

Policy Revision 2 (September 2002)

Case ID No. 37096

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Compliance History Worksheet

>> Compliance History *Site* Enhancement (Subtotal 2)

Component	Number of...	Enter Number Here	Adjust.
NOVs	Written NOVs with same or similar violations as those in the current enforcement action (*number of NOVs meeting criteria*)	0	0%
	Other written NOVs	0	0%
Orders	Any agreed final enforcement orders containing a denial of liability (*number of orders meeting criteria*)	0	0%
	Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal government, or any final prohibitory emergency orders issued by the commission	0	0%
Judgments and Consent Decrees	Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government (*number of judgements or consent decrees meeting criteria*)	0	0%
	Any adjudicated final court judgments and default judgments, or non-adjudicated final court judgments or consent decrees without a denial of liability, of this state or the federal government	0	0%
Convictions	Any criminal convictions of this state or the federal government (*number of counts*)	0	0%
Emissions	Chronic excessive emissions events (*number of events*)	0	0%
Audits	Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (*number of audits for which notices were submitted*)	0	0%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (*number of audits for which violations were disclosed*)	0	0%

		Please Enter Yes or No	
Other	Environmental management systems in place for one year or more	No	0%
	Voluntary on-site compliance assessments conducted by the executive director under a special assistance program	No	0%
	Participation in a voluntary pollution reduction program	No	0%
	Early compliance with, or offer of a product that meets future state or federal government environmental requirements	No	0%

Adjustment Percentage (Subtotal 2) 0%

>> Repeat Violator (Subtotal 3)

No

Adjustment Percentage (Subtotal 3) 0%

>> Compliance History Person Classification (Subtotal 7)

High Performer

Adjustment Percentage (Subtotal 7) -10%

>> Compliance History Summary

Compliance History Notes

Penalty reductions due to high performer classification.

Total Adjustment Percentage (Subtotals 2, 3, & 7) -10%

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Policy Revision 2 (September 2002)

PCW Revision October 30, 2008

Respondent CES Environmental Services, Inc.

Case ID No. 37096

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 1

Rule Cite(s) 30 Tex. Admin. Code § 106.8(c)(2)(A) and (B) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to maintain monitoring records for operations at the Plant under Methylene Chloride Permit-by-Rule ("PBR") 83191. Specifically, monitoring records for carbon adsorber units, maintenance/monitoring records for the methylene chloride scrubber and demonstration of compliance with certified limits for processing methylene chloride represented in PBR 83191 were not being maintained.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

	Harm		
Release	Major	Moderate	Minor
OR Actual			
Potential			

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

Number of Violation Events: 1 — 1 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty $1,000

One single event is recommended based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction — $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $1,000

Economic Benefit (EB) for this violation

Estimated EB Amount $89

Statutory Limit Test

Violation Final Penalty Total $1,000

This violation Final Assessed Penalty (adjusted for limits) $1,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 1

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System	$2,500	5-Nov-2008	22-Jul-2009	0.71	$89	n/a	$89
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs				0.00	$0	n/a	$0
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	Estimated cost for implementing a recordkeeping system. Date required based on the start date of the investigation. Final date based on the date the corrective actions are expected to be completed.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance: $2,500

TOTAL: $89

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc.

Policy Revision 2 (September 2002)

Case ID No. 37096

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 2

Rule Cite(s) 30 Tex. Admin. Code § 106.8(c)(2)(A) and (B) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to provide sufficient vapor pressure records to demonstrate compliance with Oil Recovery Processing PBR 83798. Specifically, the actual vapor pressures of the various treated oil stocks were not used to calculate the actual emissions from the operations in the emissions data provided for January 1, 2007 through November 14, 2008; therefore, compliance with actual limitations certified in the PBR could not be demonstrated.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

Release	Harm: Major	Moderate	Minor
Actual			
Potential			

OR

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

Number of Violation Events: 1

1 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty $1,000

One single event is recommended based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply

0.0% Reduction

$0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $1,000

Economic Benefit (EB) for this violation

Estimated EB Amount $0

Statutory Limit Test

Violation Final Penalty Total $1,000

This violation Final Assessed Penalty (adjusted for limits) $1,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 2

Percent Interest	Years of Depreciation
5.0	15

	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Item Description	No commas or $						
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs				0.00	$0	n/a	$0
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	*The economic benefit for this violation is included in that for Violation No. 1.*						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance: $0

TOTAL: $0

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc.

Policy Revision 2 (September 2002)

Case ID No. 37096

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 3

Rule Cite(s) 30 Tex. Admin. Code § 117.2035(e) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to meet testing requirements for three boilers being operated at the Plant necessary to determine applicable emission specifications for banking and trading. Specifically, the boilers should have been tested for nitrogen oxides, carbon monoxide and oxygen emissions by March 31, 2005.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

OR	Harm: Major	Moderate	Minor
Release: Actual			
Potential			x

Percent 5%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes: Human health or the environment will or could be exposed to insignificant amounts of pollutants which would not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment $9,500

$500

Violation Events

Number of Violation Events: 3 — 1399 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty $1,500

Three single events are recommended, one per boiler not tested based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $1,500

Economic Benefit (EB) for this violation **Statutory Limit Test**

Estimated EB Amount $647 **Violation Final Penalty Total** $1,500

This violation Final Assessed Penalty (adjusted for limits) $1,500

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 3

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling	$3,000	31-Mar-2005	22-Jul-2009	4.31	$647	n/a	$647
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs				0.00	$0	n/a	$0
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	Estimated cost of testing the three boilers. Date required based on the date the boilers were required to be tested. Final date based on the date the corrective actions are expected to be completed.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance $3,000 **TOTAL** $647

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc. *Policy Revision 2 (September 2002)*

Case ID No. 37096 *PCW Revision October 30, 2008*

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 4

Rule Cite(s) 30 Tex. Admin. Code § 117.2045(a)(1) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to maintain written or electronic records of annual fuel usage for three boilers. Specifically, records of annual fuel usage which should have been kept for a period of five years are not being maintained.

Base Penalty $10,000

>>Environmental, Property and Human Health Matrix

OR	Release	Harm: Major	Moderate	Minor
	Actual			
	Potential			

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

Number of Violation Events: 3 — 1 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty $3,000

Three single events are recommended, one per boiler for which records should have been maintained, based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $3,000

Economic Benefit (EB) for this violation **Statutory Limit Test**

Estimated EB Amount $0 **Violation Final Penalty Total** $3,000

This violation Final Assessed Penalty (adjusted for limits) $3,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 4

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs				0.00	$0	n/a	$0
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	The economic benefit for this violation is included in that for Violation No. 1.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							
Approx. Cost of Compliance	$0					TOTAL	$0

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc. *Policy Revision 2 (September 2002)*

Case ID No. 37096 *PCW Revision October 30, 2008*

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 5

Rule Cite(s) 30 Tex. Admin. Code §§ 106.262(a)(3) and 116.110(a) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to obtain timely authorizations for the methylene chloride operations conducted at the Plant. Specifically, records show that methylene chloride operations at the Plant began as early as June 29, 2007 without authorization.

Base Penalty $10,000

>>Environmental, Property and Human Health Matrix

OR	Release	Harm: Major	Moderate	Minor
	Actual			
	Potential			

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

Number of Violation Events: 6 — 530 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

Violation Base Penalty $6,000

Six quarterly events are recommended from documentation of operations requiring a PBR on June 29, 2007 to the compliance date of December 9, 2008, based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $6,000

Economic Benefit (EB) for this violation **Statutory Limit Test**

Estimated EB Amount $145 **Violation Final Penalty Total** $6,000

This violation Final Assessed Penalty (adjusted for limits) $6,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 5

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs	$2,000	29-Jun-2007	9-Dec-2008	1.45	$145	n/a	$145
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	Estimated cost for obtaining authorization. Date required based on the earliest documented date that operations began. Final date based on the date the authorization was obtained.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance $2,000

TOTAL $145

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc. *Policy Revision 2 (September 2002)*

Case ID No. 37096 *PCW Revision October 30, 2008*

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 6

Rule Cite(s) 30 Tex. Admin. Code §§ 106.262(a)(3) and 116.110(a) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to obtain timely authorizations for the oil recovery processing operations conducted at the Plant. Specifically, records show that oil recovery operations at the Plant began as early as January 2, 2007 without authorization.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

	Release	Harm: Major	Moderate	Minor
OR	Actual			
	Potential			

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

Number of Violation Events: 5 — 393 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

Violation Base Penalty $5,000

Five quarterly events are recommended from documentation of operations requiring a PBR on January 2, 2007 to the compliance date of January 30, 2008, based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $5,000

Economic Benefit (EB) for this violation

Estimated EB Amount $108

Statutory Limit Test

Violation Final Penalty Total $5,000

This violation Final Assessed Penalty (adjusted for limits) $5,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 6

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs	$2,000	2-Jan-2007	30-Jan-2008	1.08	$108	n/a	$108
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	Estimated cost for obtaining authorization. Date required based on the date of the earliest documented date that operations began. Final date based on the date the authorization was obtained.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance: $2,000

TOTAL: $108

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Respondent CES Environmental Services, Inc.

Policy Revision 2 (September 2002)

Case ID No. 37096

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 7

Rule Cite(s) 30 Tex. Admin. Code § 106.262(a)(2) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to prevent unauthorized emissions. Specifically, 239 pounds of methyl ethyl ketone ("MEK") were released when the Respondent failed to prevent an over-pressure from a MEK-rich vapor stream which caused the blower and thermal oxidizer to rupture and explode, resulting in an emissions event which occurred on December 6, 2008 and lasted for 13 minutes. Since the emissions event was avoidable by better operations practices, the demonstrations in 30 Tex. Admin. Code § 101.222 necessary to present an affirmative defense were not met.

Base Penalty $10,000

>>Environmental, Property and Human Health Matrix

	Release	Harm: Major	Moderate	Minor
OR	Actual			x
	Potential			

Percent 10%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes: Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment $9,000

$1,000

Violation Events

1 | 1 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

Violation Base Penalty $1,000

One quarterly event is recommended based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $1,000

Economic Benefit (EB) for this violation

Estimated EB Amount $31

Statutory Limit Test

Violation Final Penalty Total $1,000

This violation Final Assessed Penalty (adjusted for limits) $1,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 7

Percent Interest	Years of Depreciation
5.0	15

	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Item Description	No commas or $						
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs				0.00	$0	n/a	$0
Other (as needed)	$1,000	6-Dec-2008	22-Jul-2009	0.62	$31	n/a	$31
Notes for DELAYED costs	Estimated cost for implementing procedures necessary to prevent over-pressure from vapor streams. Date required based on the date of the emisions event. Final date based on the date the corrective actions are expected to be completed						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance $1,000 **TOTAL** $31

Screening Date 28-Jan-2009 **Docket No.** 2009-0141-AIR-E **PCW**

Policy Revision 2 (September 2002)

PCW Revision October 30, 2008

Respondent CES Environmental Services, Inc.

Case ID No. 37096

Reg. Ent. Reference No. RN100693282

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 8

Rule Cite(s) 30 Tex. Admin. Code § 106.262(a)(3) and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to submit a PI-7 Form to the TCEQ for authorization to use MEK in the oil recovery process. Specifically, during the investigation conducted on December 8, 2008, it was determined that use of MEK had not been registered.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

	Release	Harm: Major	Moderate	Minor
OR	Actual			
	Potential			

Percent 0%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 10%

Matrix Notes: 100% of the rule requirement was not met.

Adjustment $9,000

$1,000

Violation Events

1 Number of violation days: 52

mark only one with an x

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

Violation Base Penalty $1,000

One quarterly event is recommended from the date of investigation on December 8, 2008 to the screening date on January 28, 2009, based upon the documentation of the violation during the investigation.

Good Faith Efforts to Comply 0.0% Reduction $0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes: The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal $1,000

Economic Benefit (EB) for this violation

Estimated EB Amount $62

Statutory Limit Test

Violation Final Penalty Total $1,000

This violation Final Assessed Penalty (adjusted for limits) $1,000

Economic Benefit Worksheet

Respondent CES Environmental Services, Inc.
Case ID No. 37096
Reg. Ent. Reference No. RN100693282
Media Air
Violation No. 8

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.00	$0	$0	$0
Buildings				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Engineering/construction				0.00	$0	$0	$0
Land				0.00	$0	n/a	$0
Record Keeping System				0.00	$0	n/a	$0
Training/Sampling				0.00	$0	n/a	$0
Remediation/Disposal				0.00	$0	n/a	$0
Permit Costs	$2,000	8-Dec-2008	22-Jul-2009	0.62	$62	n/a	$62
Other (as needed)				0.00	$0	n/a	$0
Notes for DELAYED costs	Estimated cost for obtaining authorization. Date required based on the start date of the investigation. Final date based on the date the authorization is estimated to be obtained.						
Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.00	$0	$0	$0
Personnel				0.00	$0	$0	$0
Inspection/Reporting/Sampling				0.00	$0	$0	$0
Supplies/equipment				0.00	$0	$0	$0
Financial Assurance [2]				0.00	$0	$0	$0
ONE-TIME avoided costs [3]				0.00	$0	$0	$0
Other (as needed)				0.00	$0	$0	$0
Notes for AVOIDED costs							

Approx. Cost of Compliance $2,000

TOTAL $62

Calhoun Suit

EPAHO04001092

8/4/09
WSB
tc-3 (2)

ENTERED
VERIFIED

NO. 2009-00518

CALHOUN/HOLIDAY PLACE, INC.,	§	IN THE DISTRICT COURT
PLAINTIFF	§	61st JUDICIAL DISTRICT
	§	
VS.	§	HARRIS COUNTY,
MATTHEW LAWRENCE BOWMAN,	§	TEXAS
AND CES ENVIRONMENTAL SERVICES, INC.		
DEFENDANTS	§	

2009 JAN -6 AM 10:40

PLAINTIFF'S ORIGINAL PETITION

TO THE HONORABLE COURT:

Calhoun/Holiday Place, Inc., the plaintiff, complains of Matthew Lawrence Bowman and CES Environmental Services, Inc., the defendants, and for cause of action shows:

LEVEL II DISCOVERY CONTROL PLAN

For purposes of Rule 190.3, the Plaintiff represents that a Level II discovery plan under Rule 190 is appropriate.

I. PARTIES

1. Plaintiff, Calhoun/Holiday Place, Inc. is a Texas corporation doing business in Houston, Harris County, Texas. Defendant, Matthew Lawrence Bowman is an individual living and working in Harris County, Texas. Defendant, CES Environmental Services, Inc. is a Texas corporation doing business with a principal office in Harris County, Texas.

EPAHO044001094

2. Defendant, Matthew Lawrence Bowman may be served at his office located at CES Environmental Services, Inc., 4904 Griggs Road, Houston, Texas 77021-3208, telephone (713) 676-1460 or his residence at (b) (6) telephone (b) (6) (b) (6).

3. Defendant, CES Environmental Services, Inc. ("CES Environmental") may be served through its officer, director, Matthew Lawrence Bowman at CES Environmental Services, Inc., 4904 Griggs Road, Houston, Texas 77021-3208, telephone (713) 676-1460 or his residence at (b) (6) telephone (b) (6)

II. JURISDICTION

4. The Court has jurisdiction over the parties and controversy in this case because all the parties reside and do business in Harris County, Texas and the amount in controversy in this case exceeds the minimum jurisdictional amounts for the Court.

III. VENUE

5. Venue is proper in Harris County, Texas because all the parties reside and do business in Harris County, Texas. Venue is mandatory in Harris County under Tex. Civ. Prac. & Rem. Code § 15.011 because this is a suit for the recovery of damages to real property and this is the county

EPAHO044001095

where all of the property is located. A substantial part of the events or omissions giving rise to these claims occurred in Harris County. [1]

IV. BACKGROUND

6. Plaintiff is pursuing claims for nuisance, negligence, interference with property rights, fraud, and trespass stemming from the Defendants' plant operations which cleans the tankers of tanker trucks of hydrocarbon waste adjacent to the Plaintiff's subdivision. Plaintiff's damage resulted from malice or fraud on the part of the Defendants. The plaintiff is the owner and in possession of a certain interest in real property located in Harris County, Texas, referred to in this pleading as "the plaintiff's property," as more particularly described as follows: a residential development with streets and utilities platted for 120 detached single family residential lots on approximately 6.3 acre site upon certain real property known as 6001 Calhoun St., Houston, Harris County, Texas. The fair market value for each residential lot is $25,000.00. A predecessor entity of the Plaintiff purchased the real estate in 1999.

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[1] A suit to enjoin a common nuisance must be brought in the county in which the nuisance is alleged to exist against the person who is maintaining or about to maintain the nuisance [Tex. Civ. Prac. & Rem. Code § 125.002(a)]. The plaintiff, however, may sue any person who maintains, owns, uses, or is a party to the use of the place as a nuisance, and may also bring an in rem action against the place itself [Tex. Civ. Prac. & Rem. Code § 125.002(b)]

A "nuisance" is a condition that substantially interferes with the use and enjoyment of land by causing unreasonable discomfort or annoyance to persons of ordinary sensibilities attempting to use the land (*General Mills Restaurants v. Texas Wings*, 12 S.W.3d 827, 834 (Tex. App.--Dallas 2000, no pet.)).

Physical harm to persons on their property, such as by an assault on their senses or other personal injury as with the case of harm to property, physical harm to persons may result from encroachments, contamination, or a variety of hazardous activities prohibited by statutes or ordinances. An occupier of property may become liable under a private nuisance theory for substantial personal injury caused by some unreasonable activity on the property even if that activity is not prohibited by law. *Bay Petroleum Corp. v. Crumpler*, 372 S.W.2d 318, 319-320 (Tex. 1963) (release of noxious gases).

EPAHO044001096

7. The defendant, CES Environmental is the owner of real property located in Harris County, Texas, at 4904 Griggs Road, Houston, Texas and adjoining the plaintiff's property. Matthew Lawrence Bowman and CES Environmental purchased their initial waste-processing facility at 4904 Griggs Road in 1999. The Defendants falsely allege they have subsequently acquired a street easement and contiguous tracts through a 1964 encroachment agreement with the City of Houston. In 2006, Plaintiff began complaining about the Defendant placing a gate across the Wayland St. area and placing eighteen wheeler trucks and materials encroaching on the right of way blocking access for fire, police, utilities and other public purposes. The Defendant is attempting to use Younger Bros.- J.M English Truck Lines, Inc., a prior owner's 1964 permit given for a limited purpose to allow existing 1964 encroachments on the Wayland St. Property. This permit was never recorded in the real property records of Harris County, Texas. The permit does not permit the Defendant to block the roadway. The 1964 permit provided for an indemnification by the prior owner, Younger Bros.- J.M English Truck Lines, Inc. The permit does not provide for an assignment. The permit may be revoked at any time. Since the City of Houston is attempting to close the plant down as a nuisance, they will probably also revoke the permit on the Wayland St. encroachment.

8. Initially the Defendants' plant was a small operation without the numerous environmental complaints. In 2008, neighbors complained about sickening odors wafting through the southeast Houston neighborhood from the Defendants' waste-processing facility. On December 6, 2008, Defendants' equipment intended to control the pollution exploded twice sending pieces of metal pipe and debris into the neighborhood homes and yards. The Grace Lane residents have requested the city of Houston shutter the plant. City Council has approved filing suit under the nuisance statutes next

EPAHO044001097

week to close the plant. Some residents are afraid to sleep at night. Plaintiff anticipates the neighbors will pursue claims against the Defendant's industrial facilities alleging to be the sources of the emissions of benzene, hexavalent chromium, and hydrocarbons.

V. PLAINTIFF'S CAUSES OF ACTION

9. **Nuisance and Diminution in Value.** Defendants negligently interfered with Plaintiff's interest in its housing development. Plaintiff is pursuing claims for diminution in the value of their real properties, loss of use and enjoyment of their real properties, medical expenses, and a need for medical monitoring under several theories of liability, including negligence, gross negligence, trespass, and nuisance. [2]

10. Although no one was injured in the Saturday December 6th two explosions, this is the latest in a series of incidents involving the treatment facility which is permitted only for handling non-hazardous industrial waste, such as used oil. [3] Defendant intentionally and unreasonably interfered

[2] Diminution in property value is one type of damage recoverable for nuisance. *Bay Petroleum Corp. v. Crumpler,* 372 S.W.2d 318, 320 (Tex. 1963). Damages recoverable for nuisance are not measured by reduction in value of land for actual use to which it is put, but rather by reduction of its market value, considering any use to which it may be appropriated. *Meat Producers, Inc. v. McFarland,* 476 S.W.2d 406, 410 (Tex. Civ. App.--Dallas 1972, writ ref'd n.r.e.). Damages to land from nuisance are not limited to physical disturbance of soil or water since nuisance is by definition a nontrespassory invasion of another's interest in use and enjoyment of land, and such an invasion may be by pollution of air as well as by disturbance of soil. *Id.*

[3] 42 U.S.C. § 6901 et seq. Resource Conservation and Recovery Act (" RCRA") defines "solid waste" as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material...." 42 U.S.C. § 6903(27). "Hazardous waste" is defined as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may -- (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." 42 U.S.C. § 6903(5). RCRA instructs EPA to "develop and

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with Plaintiff's housing development by continuing a business plan which considers City code violations for nuisance, pollution and odor to simply be a cost of doing business. The tanker trucks

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promulgate criteria for identifying the characteristics of hazardous waste, and for listing hazardous waste...taking into account toxicity, persistence, and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness, and other hazardous characteristics." 42 U.S.C. § 6921(a). Pursuant to EPA's regulations under this directive, hazardous wastes are solid wastes that are either listed as such, 40 C.F.R. Part 261; or which exhibit one of four characteristics: ignitability, corrosivity, reactivity, or toxicity. 40 C.F.R. §§ 261.21-261.24

RCRA is used by parties in private hazardous waste actions pursuant to its citizen suit provision, which provides in relevant part:

> any person may commence a civil action on his own behalf...against any person..., and including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment...

Parties have utilized RCRA's citizen suit provision to resolve private hazardous waste contamination disputes primarily in two contexts. First, where hazardous waste emanating from an off-site source affects private property, the landowner may seek to hold the owner or operator of the off-site source responsible for remediating its property by bringing a RCRA citizen suit alleging that the off-site owner or operator's activities are creating an "imminent and substantial endangerment." *Interfaith Cmty. Org. v. Honeywell Int'l., Inc.*, 399 F.3d 248 (3rd Cir. 2005) ("Interfaith"). For example, in *Interfaith Community Org. v. Honeywell Int'l, Inc.*, citizens living near a hazardous waste site sought injunctive relief requiring the site owner to remediate the waste. The district court granted the injunction after finding ample evidence of imminent and substantial endangerment. The Third Circuit affirmed, observing that contaminant levels at the site and its surrounding environment ranged from between 30 and 8,000 times over state standards, that there were millions of holes in the existing plastic liner intended to prevent exposure pathways, and that mortality rates for various organisms living on or near the site ranged between 50 and 100 percent, a fact attributed to the site's contamination.

The common law torts of public and private nuisance, as well as trespass, are additional non-statutory devices still used by the government -- as well as private parties -- to obtain injunctive relief and damages for alleged environmental wrongs that are not otherwise available in CERCLA actions. *New York v. Shore Realty Corp.*, 759 F.2d 1032 (2nd Cir. 1985) (State obtained injunction under state's public nuisance law against property owner responsible for CERCLA cleanup costs); *Scribner v. Summers*, 84 F.3d 554 (2d Cir. 1998)(private parties established claims for private nuisance and trespass, as well as for CERCLA response costs.)

A private nuisance "threatens one person or a relatively few," with "an essential feature being an interference with the use or enjoyment of land." It is actionable by the person or persons whose rights have disturbed. A public nuisance, on the other hand, "'is an offense against the State and is subject to abatement or prosecution on application of the proper governmental agency' and 'consists of conduct or omissions which offend, interfere with or cause damage to the public in the exercise of rights common to all . . . in a manner such as to . . . endanger or injure the property, health, safety or comfort of a considerable number of persons.'"

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arrive daily at the plant in the early morning hours to allow the cleaning process and release of toxic wastes, contaminates which most likely contain hydrogen sulfide into the air while residents are at work. There is a popular private elementary and middle school known as the Beatrice Mayes Institute, adjacent to each parties' property, exposing not only the neighborhood but a private early education facility to contaminates such as hydrogen sulfide. Defendants interfered with Plaintiff's development of its subdivision by conduct that is abnormal and out of place in its surroundings. The neighborhood is close to the Medical Center, downtown, the University of Houston and Texas Southern University. Defendants' conduct resulted in a polluted, contaminated area which substantially interferes with Plaintiff's residential development.

11. The city of Houston has received more than 135 complaints about the Defendants' plant this year alone. Pursuant to instructions from City Council, the City Attorney, Arturo Michael anticipates filing suit against the Defendants for the ongoing violations of the city's nuisance ordinance to close the plant this week. It is Michael's opinion that in light of the city's numerous fines, the Defendants consider such fines to be simply a cost of doing business. Michael admits the fines are an ineffective remedy. Obviously, the Defendants' alleged pollution control equipment added in October, 2008 is ineffective and simply window dressing. See the attached articles in the Houston Chronicle, December 10, 2008 and December 31, 2008. According to the more recent article, the City of Houston pursuant to a City Council decision is filing suit this week to close the plant under the nuisance statutes.

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12. **Interference with Property Rights**. This litigation pertains to hazardous waste, pollution and air quality violations at the Defendants' waste treatment plant used to clean tanker trucks. The alleged violations include failure to properly manage hazardous waste; failure to report and prevent pollution; excessive emissions of contaminates such as sulfur dioxide, hydrogen sulfide, carbon monoxide and particular matter from some of the company's processing equipment; and violations regarding the plant's aboveground storage tank management system. [4]

13. During 2008, the Defendants caused and permitted dangerous and toxic substance, specifically oil, fuel, petroleum products, gasoline wastes cleaned out of tanker trucks, to contaminate and pollute the air on the plaintiff's property, in violation of Federal, State and City ordinances which include but are not limited to the Texas Clean Air Act, the Texas Health and Safety Code. [5] At the time, the defendants were engaged in the business of cleaning oil, fuel,

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[4] Hydrogen sulfide is the chemical compound that is colorless, toxic and flammable gas is partially responsible for the foul odor of rotten eggs and flatulence. Small amounts of hydrogen sulfide occur in crude petroleum but natural gas can contain up to 90%. By far the largest industrial route to generating hydrogen sulfide occurs in petroleum refineries, the hydrodesulfurization process liberates sulfur from petroleum by the action of hyrdrogen. Hydrogen sulfide arises from virtually anywhere elemental sulfur comes into contact with organic material, especially at high temperatures. Hydrogen sulfide is considered a broad-spectrum poison, meaning that it can poison several different systems in the body, although the nervous system is most affected. The toxicity of hydrogen sulfide is comparable with that of hydrogen cyanide. Exposure to lower concentrations can result in eye irritation, a sore throat and cough, nausea, shortness of breath, and fluid in the lungs. Long-term, low-level exposure may result in fatigue, loss of appetite, headaches, irritability, poor memory, and dizziness.

[5] Enforcement of land-use laws and ordinances is usually the responsibility of the enacting authority or a designated board or commission. The state statutes usually provide for the recovery of criminal or civil penalties as well as injunctive relief for the governmental body. However, a private party can use the violation of a statute or ordinance governing a neighbor's land use as the basis for a cause of action in certain situations. The statute or ordinance may expressly authorize suit by an individual to abate the violation as a nuisance. Even if the regulatory enactment does not expressly provide for suit by a private party, a person harmed by a neighbor's conduct may be able to show that the neighbor's failure to comply with a land-use statute or ordinance constitutes the neighbor's maintenance of a public nuisance that results in some special injury to the plaintiff, an injury over and above that sustained by the public at large. *Jamail v. Stoneledge Condo. Owners Ass'n*, 970 S.W.2d 673, 676 (Tex. App.--Austin 1998, no pet. (private enforcement of public nuisance as requiring special injury)]. Stated another way, the rule of law means that the conduct constituting the public nuisance may be shown to evidence a private nuisance

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petroleum products, gasoline wastes cleaned out of tanker trucks. The Defendants have been dumping toxic wastes through the improper disposition of byproducts cleaned out of the tanker trucks in the environment at their plant. Among the substances anticipated to be found by Plaintiff's experts and various inspection reports by the City of Houston in the petrochemical waste are contaminates which most likely include hydrogen sulfide and hydrocarbons, which can be harmful to humans and the environment. The substance was discovered by residents, who took to the streets on October 10, 2008 to complain about persistent health problems and a pervading odor near their homes.

14. Hydrogen sulphide is a nuisance in many parts of oil and gas and transportation industry. Generated by manufacturing processes, this foul-smelling substance has to be removed from waste gases and liquid effluents in which it is dissolved, before they can be released into the environment. Because hydrogen sulphide causes quite a pong even when it escapes in tiny concentrations, the task of removing it is both technically demanding and costly. The Defendants have failed to monitor the levels of contaminants such as methane, ethane, and hydrogen sulfide that form in the tanker trucks storage tanks which are being cleaned and subsequently disposed of in the plant's equipment. The

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causing particular harm to the private party.

An adjoining landowner may be able to establish a nuisance per se by proving that a municipality categorizes a particular activity as a nuisance and forbids it within the jurisdiction. However, violation of an ordinance, without additional evidence of nuisance, is insufficient to prove a claim of nuisance per se. Instead, the municipality's action is not valid unless the prohibited activity was a nuisance per se at common law. *Luensmann v. Zimmer-Zampese & Assocs., Inc.*, 103 S.W.3d 594, 597-598 (Tex. App.--San Antonio 2003, no pet.) (because drag racing facility was not nuisance per se at common law, it could not be nuisance per se based on alleged violation of disorderly conduct statute); *Otten v. Town of China Grove*, 660 S.W.2d 565, 567 (Tex. App.--San Antonio 1983, writ dism'd) (though illegal gambling allegedly occurring at horse track was nuisance per se at common law, horse racing itself was not nuisance per se, because racing was not illegal and had not been declared nuisance by Legislature)].

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plant's equipment failed to remove the contaminants such as methane, ethane, and hydrogen sulfide from the tanker truck's waste which is being released to the environment, Obviously, the Defendants refuse to properly invest in sufficient processes to abide by Federal, State and City of Houston nuisance, pollution and odor regulations and ordinances.

15. The Defendants have fenced off the city street easement between the parties' properties and used the easement as though it is their land for use of parking, storage and operations area of their plant. The street easement was previously available to Plaintiff for an exit to the proposed subdivision. The plaintiff's property was and is dependent on the street easement in the back for an exit off of the subdivision.

16. Defendants maintained their premises in a manner that creates an environmental problem of polluting the air, creates an unsanitary condition likely to attract or harbor mosquitoes, rodents, vermin, or disease-carrying pests. By so doing, the defendant is committing a continuing violation of Federal, State and City ordinances which include but are not limited to the Texas Clean Air Act, the Texas Health and Safety Code applicable to the use of the defendant's land. [6]

[6] A property owner or occupier usually is subject to a number of usage restrictions stemming from (1) statutes and ordinances , (2) restrictive covenants , (3) common law negligence principles (*Turner v. Big Lake Oil Co.*, 96 S.W. 2d 221, 227, 128 Tex. 155 (1936)), (4) the theory of nuisance(*Scharlack v. Gulf Oil Corp.*, 368 S.W.2d 705, 706 (Civ. App.--San Antonio 1963, no writ)). Activities on property are subject to the further requirement that the occupier of premises exercise care to avoid foreseeable harm to persons coming onto the property or traveling along a public way adjoining the property (*Alamo Nat'l Bank v. Kraus*, 616 S.W.2d 908, 910 (Tex. 1981) (demolition of building); *Gonzales v. Trinity Indus.*, 7 S.W.3d 303, 306 (Tex. App.--Houston [1st Dist.] 1999, pet. denied) (duty of landowners abutting public roads)).

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17. **Negligence.** The conduct of the Defendants described above constitutes negligence and is the proximate cause of the harm sustained by the plaintiff and described in further detail herein. Defendants violated Federal, State and City of Houston health, pollution, waste disposal and nuisance regulations The various agency regulations are designed to protect a class of persons to which plaintiff belongs against the type of injury from pollution, improper waste disposal, nuisance, and contamination. The regulations are of the type that impose tort liability. Defendants' violation of the regulations and the failure to abate the pollution is without legal excuse. Defendants' breach of the duty imposed by the various regulations proximately caused injury to Plaintiff, which resulted in shutting down the development of his housing project.

18. The Defendants' air pollution of the burned off petroleum wastes left in the surrounding air is a nuisance and health hazard. The conduct of the Defendants just described creates and allows the premises owned by the Defendants to constitute a nuisance that is the proximate cause of the harm sustained by the plaintiff as more particularly described below.

19. **Trespass.** The conduct of the Defendants just described constitutes a trespass onto the plaintiff's property, proximately causing the harm sustained by the plaintiff and described further below. The ongoing air pollution and nuisance is jeopardizing the Plaintiff's development of the 120 residential lots. Defendants physically, intentionally, and voluntarily entered Plaintiff's property with various pollutants, contaminants, odors and hydrogen sulfide which was released into the air. In the alternative, Defendants negligently trespassed on Plaintiff's property when their pollutants

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were released into the air. Furthermore, Defendants intruded on Plaintiff's property in a highly offensive manner with various pollutants. [7]

20. **Fraud.** The Defendants fraudulently concealed the fact that they were going to expand plant operations without properly installing sufficient pollution control equipment.

21. As a direct and proximate result of the conduct of the Defendants, the plaintiff has sustained the following losses:

a. The loss of the use, development and occupancy of the 120 residential lots platted on plaintiff's property, the fair value of which is at least $25,000.00 per lot . [8]

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[7] Claims for trespass often accompany claims for private nuisance. *Jensen v. General Electric Co. ("Jensen")*, 82 N.Y.2d 77, 603 N.Y.S.2d 420 (1993). A trespass is the intentional invasion of another's property. To be liable, the trespasser "'need not intend or expect the damaging consequences of his intrusion' rather, he need only 'intend the act which amounts to or produces the unlawful invasion.'" However, the intrusion itself "must at least be the immediate or inevitable consequence of what the trespasser willfully does, or which he does so negligently as to amount to willfulness." Thus, in cases involving the movement of contaminated groundwater, even when the polluting material has been deliberately put onto, or into, defendant's land, a defendant is not liable for in trespass, unless the plaintiff establishes that the defendant "had good reason to know or expect that subterranean and other conditions were such that there would be passage from defendant's to plaintiff's land." While plaintiffs have succeeded in meeting this burden, it may be difficult to overcome in cases of accidental spillage by a defendant. See id. (plaintiff established claim for trespass by showing that defendants disposal of barium was intentional and that defendant had good reason to know that contamination would flow to plaintiff's downhill property).

[8] A private party may seek recovery of tort damages by showing that the unexcused violation of a statute or ordinance constitutes negligence as a matter of law, provided the statute or ordinance was designed to prevent the type of harm or injury in question to a class of persons that includes the plaintiff. *El Chico Corp. v. Poole*, 732 S.W.2d 306, 312 (Tex. 1987) (statute preventing sale of alcoholic beverage to intoxicated person); *Nixon v. Mr. Property Management*, 690 S.W.2d 546, 549 (Tex. 1985) (statute requiring security provisions on vacant structures); *Osti v. Saylors*, 991 S.W.2d 322, 327-329 (Tex. App.--Houston [1st Dist.] 1999, pet. denied) (violation of city building code)]. Most land-use statutes set out the prohibited conduct and provide civil or criminal penalties in a manner similar to the statutes involved in *El Chico* and *Nixon*. These statutes do not inhibit the rights of private parties to pursue any available common-law remedy to abate a nuisance or to recover tort damages. *Atlas Chemical Industries, Inc. v. Anderson*, 524 S.W.2d 681, 683-684 (Tex. 1975) (water pollution in violation of waste disposal

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b. The accrued interest charges on the construction loans which amount to $* per diem.

22. As a direct and proximate result of the conduct of the Defendants, the plaintiff's property has sustained permanent harm that cannot be repaired or otherwise corrected, with a resulting diminution in its reasonable fair market value of at least $25,000.00 per residential lot.

VI. PIERCING CORPORATE VEIL

23. Matthew Lawrence Bowman is individually liable for their individual tortious conduct as mentioned in the above stated causes of action. The CES Environmental Services, Inc. corporate form should be disregarded because:

a. The form was used as a sham to perpetrate a fraud,

b. the form was used to protect against the discovery of a crime or to justify a wrong,

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permit); *Goode v. Bauer*, 109 S.W.3d 788, 791-792 (Tex. App.--Corpus Christi 2003, pet. denied) (any alleged failure to restrain stock in violation of local stock law was not negligence per se); instead, claimant must establish actual negligence of defendant]. As with other tort theories, the plaintiff must establish that the negligence was a proximate cause of the actual harm suffered [*Nixon v. Mr. Property Management*, 690 S.W.2d 546, 549-550 (Tex. 1985).

Plaintiff is entitled to recovery for the loss of use and occupancy of all or a specific part of the property, measured by the fair value of that use for the duration of the defendant's interference [*City of Austin v. Teague*, 570 S.W.2d 389, 394 (Tex. 1978)]. If the harm is irreparable or if the cost to repair the harm exceeds the loss of market value, that can be alleged to seek a recovery of the diminution in the property's value [*North Ridge Corp. v. Walraven*, 957 S.W.2d 116, 119 (Tex. App.--Eastland 1997, pet. denied)]. Recovery of the reasonable value of the plaintiff's property destroyed or removed by the defendant [*Jackson v. Wallis*, 514 S.W.2d 335, 337-338 (Civ. App.--Houston [1st Dist.] 1974, no writ) (value of fence at time of removal, not replacement cost was measure of damages)

Plaintiff is entitled to recovery of the reasonable and necessary expenses incurred by the plaintiff in protecting against the harm caused by the defendant's activity [City of Princeton v. Abbott, 792 S.W.2d 161, 164 (Tex. App.--Dallas 1990, den.). Plaintiff is entitled to recovery for other harm, including personal injury or economic losses, as recoverable in tort actions

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c. Matthew Lawrence Bowman caused CES Environmental Services to be used for the purpose of perpetrating a fraud, and

d. Matthew Lawrence Bowman perpetrated an actual fraud on the plaintiff primarily for their direct personal benefit. [9]

24. The corporate form was used to perpetuate the fraud of an ongoing nuisance odor from the Defendant's plant despite repeated citations from the City of Houston and the ongoing assurances by Matthew Lawrence Bowman that pollution equipment and a change in business procedure would alleviate the odor and pollution emissions.

VII. LEGAL FEES.

25. Due to the Defendants' fraudulent representations of properly handling the pollution and odor problems and concealing their plan to consider City of Houston nuisance violations as the cost of doing business, it was necessary for the Plaintiff to retain counsel to pursue their remedies. In light of the necessity of engaging the services of an attorney and incurring liability to pay a reasonable fee for those services Plaintiff requests legals fees as authorized by a tort claim, a suit of public nuisance under CPRC §125.064(a), 125.068 and under the fraud statutes.

VIII. EXEMPLARY DAMAGES

26. Plaintiff's injury resulted from Defendants' gross negligence or malice, which entitles

[9] *Castleberry v. Branscum*, 721 S.W.2d 270, 272 (Tex. 1986).

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Plaintiff to exemplary damages under CPRC § 41.003(a). Plaintiff is entitled to exemplary damages for fraud under CPRC § 41.003(a)(1). [10]

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[10] Plaintiff is entitled to a tort claim for damages if the plaintiff sustains personal injury or economic harm as a proximate result of the defendant's creation and maintenance of a public nuisance. *Nixon v. Mr. Property Mgmt.*, 690 S.W.2d 546, 549 (Tex. 1985) ; *Osti v. Saylors*, 991 S.W.2d 322, 328-329 (Tex. App.--Houston [1st Dist.] 1999, pet. denied)].

The majority of states also allow plaintiffs to recover nonmarket damages for injuries caused by pollution and other nuisances. *Nuisance as Entitling Owner or Occupant of Real Estate to Recover Damages for Personal Inconvenience, Discomfort, Annoyance, Anguish, or Sickness, Distinct from, or in Addition to, Damages for Depreciation for th Value of Property or Its Use*, 25 A.L.R. 5th 568 2(a) ("Thus, it is the rule in most jurisdictions that in addition to depreciation in the market or rental or usable value of the realty, the plaintiff may recover the damages he himself suffers from deprivation of the comfortable enjoyment of his property, and the inconvenience and discomfort suffered by himself and his family, or other affected persons."). In most jurisdictions, owners or occupants of real estate "can recover in nuisance actions for sickness or injury to [their] health as an element of damages in addition to, or separate from, damages recoverable in respect of an injury to property or its use." These special damages in nuisance cases are considered to be of particular social significance, (Restatement 2d of Torts 821D cmt. b ("Freedom from discomfort and annoyance while using land is often as important to a person as freedom from physical interruption with his use or freedom from detrimental change in the physical condition of the land itself") and thus, courts award them to plaintiffs despite their nonmarket nature. As with pain and suffering damages, courts leave the measure of special damages in nuisance actions to "the sound discretion of the jury." *Wheat v. Freeman Coal Mining Corp.*, 319 N.E.2d 290, 299 (Ill. App. 1974); *Nitram Chemicals, Inc. v. Parker*, 200 So.2d 220, 228 (Fla.App. 1967) (collecting cases).

One of the clearest expressions of the necessity and propriety of allowing juries to assess special damages in nuisance cases is found in *Gavigan v. Atlantic Refining Co.*, 40 A. 834 (Pa. 1898). a turn-of-the-century opinion by the Pennsylvania Supreme Court. The defendant in Gavigan "purchased lots and erected tanks and warehouses for the storage of carbon oil and gasoline" on lots adjoining Gavigan's home and land. Gavigan complained that the odor from the oil and gasoline "made the occupation of his house extremely uncomfortable" and "injuriously affected" his health. He also alleged that "waste oil was permitted to percolate through the earth into the ditches and sewers, saturating the soil near the house, thereby aggravating his annoyance from the proximity of the oil tanks and storage warehouse." Gavigan brought suit for damages, and the trial court submitted the nuisance claim to the jury. The jury returned a verdict for Gavigan and awarded him $ 1286 in damages.

The court said to the jury more than once that the plaintiff must have shown an actual substantial injury, either to the use of the property, or to his health or physical comfort ... [the court further instructed that] in considering injury to the reasonable use of the property, and the effect upon his health, and his actual physical discomfort, they must use their best judgment and soundest discretion in deciding what amount the plaintiff was entitled to, if anything. In a different class of cases we have held more than once that such a meager instruction on the measure of damages is inadequate, but, owing to the peculiar nature of the injury here complained of, we do not well see that the instruction could have been more specific. According to the testimony of plaintiff, often he had been made sick by the odors, and could not eat his meals; often, in the summer, he could not sleep because of the offensive smells, and would close the windows; then he could not sleep because of the heat; then he would go to his work, and suffer all day because of a sleepless night and an insufficient breakfast because of nausea; he and his family could not sit on the porch in the evening, because of the offensive odor. It would be impossible to lay down any rule to guide the jury in their estimate of damages for such injury. They are like unto the damages which the law allows for the pain and suffering from personal injury caused by negligence, - wholly within the sound discretion of the jury. With proper caution, the court thus left the matter to them, and their verdict does not indicate that they exceeded the limits of

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sound discretion.

Thus, the court recognized that Gavigan had suffered significant harm, that the damages caused by the polluter were impossible to measure with precision, and that the appropriate thing to do was leave the difficult task of measuring the damages to the sound discretion of a jury.

The rule expressed in Gavigan has been consistently adopted and followed by the courts of other states. *Nuisance as Entitling Owner or Occupant of Real Estate to Recover Damages for Personal Inconvenience, Discomfort, Annoyance, Anguish, or Sickness, Distinct from, or in Addition to, Damages for Depreciation for in Value of Property or Its Use*, 25 A.L.R. 5th 568 2(a) (1994) ("Thus, it is the rule in most jurisdictions that in addition to depreciation in the market or rental or usable value of the realty, the plaintiff may recover the damages he himself suffers from deprivation of the comfortable enjoyment of his property, and the inconvenience and discomfort suffered by himself and his family, or other affected persons.").

In *Wheat v. Freeman Coal Mining Corp.*, 319 N.E.2d 290 (Ill. App. 1974) for example, a husband and wife who lived on a forty-acre popcorn farm brought a suit for damages against a neighboring coal mine. The Wheats complained that the operations of defendant's mine "caused large amounts of coal dust and smoke" to come onto their property; "that the smoke and dust were constant, heavy and annoying, prohibiting them from doing their work at home or from opening their windows; that the dust interfered with their water supply and infested their food, clothing and furniture; and that the dust damaged the exterior of their house, causing it to blacken." The trial judge submitted plaintiffs' nuisance claim to a jury, and the jury returned a verdict for the Wheats in the amount of $ 12,000. On appeal, the defendant objected to the adequacy of the evidence supporting the award of damages, and specifically "objected to the exclusion of its evidence regarding the value of plaintiffs' premises." In affirming the verdict, the appellate court stated:

The measure of damages for nuisance is not the fair market value of plaintiffs' land, but rather the damages are measured by the discomfort and the deprivation of the healthful use and comforts of the plaintiffs' home. There is no fixed rule as to damages in such an action. The amount awarded must be left to the sound discretion of the jury in view of the facts of a particular case. Market value is not the proper measure of damages in such an action.

Similarly, in *French v. Ralph E. Moore, Inc.*, 661 P.2d 844 (Mont. 1983), the Supreme Court of Montana affirmed a jury verdict awarding substantial nonmarket damages to plaintiffs arising from gasoline contamination and pollution of their restaurant and family home. The Frenches claimed that the defendant negligently installed gasoline tanks at its service station across the road from their property and that, as a result, gasoline leaks and vapors invaded their land, restaurant and home. The Frenches were forced to close their restaurant and, in addition, suffered severe physical injuries and emotional distress. The trial court instructed the jury that they could award damages for "pain, discomfort, fears, anxiety, annoyance, inconvenience, and other mental, physical, and emotional distress." The jury awarded $ 40,000 to Mr. French and $ 150,000 to Mrs. French. In affirming the award the state supreme court stated: "A precise measuring rod for the amount of damages in a case involving physical or mental damages does not exist ... . Each case must, of necessity, depend on its own peculiar facts." n53 Numerous other cases allow for the recovery of special damages in nuisance actions and specifically allow for juries to measure such damages. n54

Where the tort itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. In such case, while the damages may not be determined by mere speculation or guess, it will be enough if the evidence show the extent of the damages as a matter of just and reasonable inference, although the result be only approximate. The wrongdoer is not entitled to complain that they cannot be measured with the exactness and precision that would be possible if the case, which he alone is responsible for making, were otherwise. *Story Parchment Co. v. Paterson Parchment Paper Co.* 282 U.S. 555 (1931).

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IX. REQUEST FOR JURY TRIAL

27. Plaintiff demands a jury trial and tenders the appropriate fee with this petition.

28. Reservation of Rights. Plaintiff specifically reserve the right to bring additional causes of action against Defendants and to amend this Petition as necessary.

X. REQUEST FOR DISCLOSURE

29. Under Texas Rule of Civil Procedure 194, Plaintiff requests that each Defendant disclose, within 50 days of the service of this request the information or material described in Rule 194.2.

XI. PRAYER FOR RELIEF

Plaintiff respectfully request that Defendants be cited to appear and answer here and that, upon trial of this case, Plaintiff have final judgment against Plaintiff, Defendants and recover:

WHEREFORE, the plaintiff requests that the defendants be cited to appear and answer and that:

1. On final trial, the plaintiff have judgment against the defendants, jointly and severally, for the

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Plaintiff is entitled to recovery of exemplary damages for fraudulent, malicious, or grossly negligent conduct [Tex. Civ. Prac. & Rem. Code § 41.003; *Holubec v. Brandenberger*, 214 S.W.3d 650, 658-659 (Tex. App.--Austin 2006, no pet. h.) (evidence was sufficient to support finding of malice and award of punitive damages for maintaining nuisance on property); *Boatman v. Litos*, 970 S.W.2d 41, 45 46 (Tex. App.--Tyler 1998, no pet.)].

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recovery of damages in an amount within the jurisdictional limits of the court, together with interest as allowed by law, attorney's fees, and all costs of court.

2. The defendants be enjoined permanently from operating the plant at 4909 Griggs Road, Houston, Harris County, Texas and all adjacent property contiguous to that tract, and ordered to clean out all the equipment which has toxic materials.

3. An award of the market-value damages for the permanent nuisance and any other compensatory damages;

4. Damages for the loss of use, interest expense on construction loans and for the enjoyment of the property;

5. Damages for the personal property damages;

6. Award Plaintiff compensatory damages and additional damages, including exemplary damages;

7. Award Plaintiff prejudgment and post-judgment interest as allowed by law; and

8. All other relief to which Plaintiff may be justly entitled.

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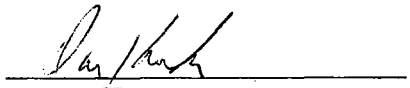
Respectfully submitted,
Dan Krocker



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(713) 683-0397
Fax (713) 683-0398
TBA #11728300
Attorney for Plaintiff

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Citizens Lawsuit

EPAHO04001113

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THE HALL LAW FIRM

530 Lovett Boulevard • Houston, Texas 77006
Telephone: (713) 942-9600 • Facsimile: (713) 942-9566

Benjamin L. Hall, III, Ph.D., J.D.
• Board Certified Personal Injury Trial Law
• Board Certified Civil Trial Law
Texas Board of Legal Specialization

FACSIMILE COVER SHEET

TO	FACSIMILE NUMBER
Keith Taunton / Matthew Parish	(713) 993-2309

DATE: June 22, 2009

FROM: Kimmie R. Bennett

REGARDING: Cause No. 2009-03493; *Charles E. Jones, Jr., et al. v. CES Environmental Services, Inc.*; In the 61st Judicial District Court, Harris County, Texas

OPERATOR: J. Terrell

MESSAGE: Please see Plaintiffs' Supplemental Responses to Defendant's Request for Disclosure

PAGES: 14 (including cover sheet)

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Received Time Jun. 22. 6:15PM

Cause No. 2009-03493

CHARLES E. JONES, JR. ET AL.	§	IN THE DISTRICT COURT OF
	§	
	§	
	§	
	§	
vs.	§	HARRIS COUNTY, TEXAS
	§	
	§	
	§	
CES ENVIRONMENTAL SERVICES, INC.	§	61ST JUDICIAL DISTRICT

PLAINTIFFS' SUPPLEMENTAL RESPONSES TO DEFENDANT'S REQUEST FOR DISCLOSURE

To: Defendant CES ENVIRONMENTAL SERVICES, INC., by and through its attorney of record, Keith R. Taunton, Tucker, Taunton, Snyder & Slade, 10370 Richmond Avenue, Suite 1400, Houston, Texas 77042, Telephone Number (713) 961-5800, Facsimile Number (713) 993-2308 and (713) 993-2309.

Pursuant to Rule 194 of the Texas Rules of Civil Procedure, Plaintiffs, Charles E. Jones, Jr. et al., hereby serve the following Responses to Defendant's Request for Disclosure.

Respectfully submitted,

THE HALL LAW FIRM

Benjamin L. Hall, III
State Bar No.08743745
Kimberly R. Bennett
State Bar No. 24011946
The Hall Law Firm
530 Lovett Boulevard
Houston, Texas 77006
(713) 942-9600 (Telephone)
(713) 942-9566 (Facsimile)

ATTORNEYS FOR PLAINTIFFS

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing instrument has been forwarded to all parties and/or attorneys of record, in accordance with the Texas Rules of Civil Procedure, on this 22nd day of June, 2009.

Benjamin L. Hall, III
Kimberly R. Bennett

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SPECIFIC RESPONSES TO REQUESTS FOR DISCLOSURES

Rule 194.2(a). The correct names of the parties to the lawsuit;

RESPONSE:
See Plaintiffs' live Petition for the correct names of the parties to the suit.

Rule 194.2(b). The name, address, and telephone number of any potential parties;

RESPONSE:
Plaintiffs are unaware of any potential parties at this time.

Rule 194.2(c). The legal theories and, in general, the factual bases of the responding party's claims or defenses;

RESPONSE:
See Plaintiffs' live pleadings and all depositions taken in this matter up and until the time of trial. Plaintiffs also refer defendant to any and all expert reports produced by Plaintiffs in this matter. Discovery is continuing and Plaintiffs will supplement.

Rule 194.2(d). The amount and any method of calculating economic damages;

RESPONSE:
Intangible damages will be left to the sole discretion of the trier of fact. As to the economic damages, Plaintiffs refer defendant to reports / opinions of Plaintiffs' experts as they may be designated pursuant to the Court's Docket Control Order and/or pursuant to the Texas Rules of Civil Procedure which will provide the defendants any past and future economic damages of the Plaintiffs. Plaintiffs will request of the jury exemplary and/or punitive damages as allowed by law. Plaintiffs will also request medical monitoring.

Rule 194.2(e). The name, address, and telephone number of persons having knowledge of relevant facts, and a brief statement of each identified person's connection with the case;

RESPONSE:
See Exhibit "A" attached hereto and incorporated herein for all purposes.
Discovery is continuing, and Plaintiff reserve the right to supplement.

Rule 194.2(f). For any testifying expert:

1. The expert's name, address, and telephone number;
2. The subject matter on which the expert will testify;
3. The mental impressions and opinions held by the expert and the basis

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for them (or documents reflecting such information if the expert is not retained by, employed by, or otherwise subject to your control.)

4. If the expert is retained by, employed by, or otherwise subject to your control:
   A) produce all documents, tangible things, reports, models or data compilations that have been provided to, reviewed by, or prepared by or for the expert in anticipation of the expert's testimony; and
   B) produce the expert's current resume and bibliography;

RESPONSE:
Plaintiffs will supplement in accordance with Texas Rules of Civil Procedure and/or the Court's docket control order.

Rule 194.2(g). Produce any indemnity and insuring agreements as described in Rule 192.3(f);

RESPONSE:
None.

Rule 194.2(h). Produce any settlement agreements as described in Rule 192.3(g);

RESPONSE:
None.

Rule 194.2(i). Produce any witness statements as described in Rule 192.3(h);

RESPONSE:
Plaintiffs refer defendants to any and all depositions taken in this matter up and until the time of trial and any and all investigative reports produced in this case.

Rule 194.2(j). Produce all medical records and bills that are reasonably related to the injuries or damages asserted or, in lieu thereof, an authorization permitting the disclosure of such medical records and bills; and

RESPONSE:
Discovery is continuing. Plaintiffs will supplement.

Rule 194.2(k). The name, address, and telephone number of any person who may be designated as a responsible third party.

RESPONSE:
None at this time. If necessary, responsible third parties will be appropriately designated pursuant to Chapter 33 of Tex. Civ. Prac. & Rem. Code.

Received Time Jun. 22. 6:15PM

CAUSE NO.2009-03493

CHARLES E. JONES, JR., ET. AL.	§	IN THE DISTRICT COURT OF
	§	
Plaintiffs,	§	
	§	
v.	§	HARRIS COUNTY, TEXAS
	§	
CES ENVIRONMENTAL SERVICES, INC.,	§	
	§	
Defendant.	§	61ST JUDICIAL DISTRICT

EXHIBIT "A"

PLAINTIFFS' LIST OF PERSONS WITH KNOWLEDGE OF RELEVANT FACTS

TO THE HONORABLE JUDGE OF SAID COURT:

COMES NOW, Plaintiffs and file this List of Persons with Knowledge of Relevant Facts in compliance with Tex. R. Civ. P. 194(e) as follows:

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Name	Address/Phone Number	Area of Knowledge
Charles E. Jones, Jr. Charles E. Jones, III David L. Anderson Rayfield Bell Felita Wiggins Lauren Wiggins Lyra Wiggins Carl Anthony Wiggins, Jr. Thomas Harold Richard, Jr. Lillie M. Richard Rodney Harold Roger Loings Ruby Jones Myoshia Jones Danielle Jones Louie Ceaser Alicia Davis Pamela Bevel Shalaina Reeves Tyrone SBell Lam Ida August Dalfred Green Laura Green Jason Williams Jose Solis Judy Marie Jones Bettye Riley Wilbert Riley Carla Womack Mary L. Woodard Jacqueline Delmore Carlyle Woodard, Jr. Carlyle Catrell Woodard, III Terrence Terrell Woodard Trevion Lee Larry Dotrey Stephen Carr Kenneth Fisher Mattie Jones Louise Garrett Dannie Green Laverne Stelly Mary Jordan Debra Lewis Lee Dixon Thelda Lewis Dean Murrell	c/o Benjamin L. Hall, III The Hall Law Firm 530 Lovett Boulevard Houston, Texas 77006 (713) 942-9600	May have knowledge regarding odors emitting from CES and complaints/reports to CES and City of Houston; may also have personal knowledge of the effects of CES' operations and activities.

Cynthia Hammett Glen Hunter Jaqulain Gilbert Gwendolyn Y. Rose Sarah Lancelin Youlanda Fisher Justin Fisher Jasmine Fisher Jacques Williams Lavita Anderson Daniel Smith Alice Smith Johnny Fournier Davita Lee Harris David Tyrone Sanders Kimberly Sadberry Jimmy Sadberry TyroneCambell BeverlySadler Adjei Donald Ray Randon Willie H. Hamilton Patricia A. Bradford Martha Washington Leroy Monroe Eugen Legier		
Stephen L. Williams, Director Health & Human Services	City of Houston 8000 N. Stadium Drive Houston, Texas 77054-1823 713-794-9311	Knowledge of complaints received pertaining to CES located at 4904 Griggs
E. Phillips	City of Houston Department of Health & Human Services 7411 Park Place Houston, Texas 77087 713-640-4399	Knowledge of complaints received pertaining to CES located at 4904 Griggs
Naomi Macias	City of Houston Department of Health & Human Resources Bureau of Laboratory Services 1115 S. Braeswood Houston, Texas 77030 713-558-3400	Knowledge of City of Houston Organic Lab Reports and all other City of Houston reports, testing done to samples taken/received from CES located at 4904 Griggs
A.Abin	City of Houston Department of Health & Human Resources Bureau of Laboratory Services 1115 S. Braeswood Houston, Texas 77030 713-558-3400	Knowledge of City of Houston Organic Lab Reports and all other City of Houston reports, testing done to samples taken/received from CES located at 4904 Griggs

Benita Waas, Laboratory Supervisor	City of Houston Department of Health & Human Resources Bureau of Laboratory Services 1115 S. Braeswood Houston, Texas 77030 713-558-3400	Knowledge of City of Houston Organic Lab Reports and all other City of Houston reports, testing done to samples taken/received from CES located at 4904 Griggs
Corporate Representative	Houston Department of Health & Human Services Public Health Engineering 7411 Park Place Houston, Texas 77087	Knowledge of samples received from CES located at 4904 Griggs and samples submitted to City of Houston for testing
Emina M., Lab Supervisor	City of Houston Department of Health & Human Resources Bureau of Laboratory Services 1115 S. Braeswood Houston, Texas 77030 713-558-3400	Knowledge of City of Houston Organic Lab Reports and all other City of Houston reports, testing done to samples taken/received from CES located at 4904 Griggs
BW, Analyst	City of Houston Department of Health & Human Resources Bureau of Laboratory Services 1115 S. Braeswood Houston, Texas 77030 713-558-3400	Knowledge of City of Houston Organic Lab Reports and all other City of Houston reports, testing done to samples taken/received from CES located at 4904 Griggs
Daisy James	City of Houston BAQC 7411 Park Place Blvd. Houston, TX 77087 Phone: 713-640-4200	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Dr. Pamela Berger	City of Houston – EHD BPHE/WRP Address and telephone number unknown. Will supplement.	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Sharon Reese	COH-PHE/WRP Address and telephone number unknown. Will supplement.	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility

Jed Anderson	Attorney for CES Address and telephone number unknown. Will supplement.	May have knowledge regarding operations of CES
Dennis Winkler	Winkler PR for CES Address and telephone number unknown. Will supplement.	May have knowledge regarding operations of CES
Anissa Wright	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-676-1460	May have knowledge regarding operations of CES
Paulette W.	City of Houston Address and telephone number unknown. Will supplement.	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Sonja Lewis	City of Houston BAQC 7411 Park Place Blvd. Houston, Texas 77087 713-640-4200	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Arturo Blanco	City of Houston BAQC 7411 Park Place Blvd. Houston, TX 77087 713-640-4200	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Don Richnes	City of Houston BAQC 7411 Park Place Blvd. Houston, TX 77087 Phone: 713-640-4200	Knowledge of complaints received pertaining to CES facility; knowledge of testing done by the City of Houston; knowledge of reports generated from samples taken from the CES facility
Alan Stewart	ISI Address and telephone number unknown. Will supplement.	

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Robbie	Address and telephone number unknown. Will supplement.	May have knowledge regarding operations of CES
Karl Guidry	Address and telephone number unknown Will supplement	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
C. Habin	Address and telephone number unknown. Will supplement.	May have knowledge regarding operations of CES
Prabhakar R. Thangudu	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-676-1460 281-433-9793 (cell)	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
J. Hernandez	Address and telephone number unknown. Will supplement.	Knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
Vaishali Tendolkar, MC130	Texas Commission on Environmental Quality P. O. Box 13087 Austin, Texas 78711-3087 512-239-5747	Knowledge of permits and modification of permits pertaining to the CES facility located at 4904 Griggs
Marlin Moser	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 281-785-0764	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
Patricia Davis	City of Houston Bureau of Air Quality Control 7411 Park Place Blvd. Houston, TX 77087 Phone: 713-640-4200	Knowledge of complaints received pertaining to the operations at the CES facility located at 4904 Griggs, Houston, Texas

Joann Huffman Ira Wade Leonardo DeSousa Jennie Brixey	City of Houston Bureau of Air Quality Control 7411 Park Place Blvd. Houston, TX 77087 Phone: 713-640-4200	Knowledge of complaints received pertaining to the operations at the CES facility located at 4904 Griggs, Houston, Texas; knowledge of investigations of the CES facility; knowledge of Service Request Summary Reports and all other reports generated from complaints about the CES facility; knowledge of Notices of Violations and Citations issued to CES
Greg Bowman Vice President of Accounting, Finance & Administration	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-419-6076	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
Dan Bowman	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-419-6076	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
Matt Bowman	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-419-6076	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES

Marlin Moser	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-419-6076	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES
Ryan Thomas	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021 713-419-6076	Knowledge of the day-to-day operations at the CES facility; knowledge of complaints received by individuals; knowledge of leaks, etc. at the CES facility; knowledge of Uniform Hazardous Waste Manifest forms pertaining to CES

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HOUSTON POLICE DEPARTMENT

Incident No. P02082409-Y

Title SHOOTING / JUST OCCURD

Address 4904 GRIGGS

Date 2/10/09

Officer's Name CASTILLO

Unit No. 14D17E

PAT-0055

EPAHO04001129

No. 2009-03493

CHARLES C. JONES, JR., DAVID L. ANDERSON, RAYFIELD BELL, FELITA WIGGINS, RODNEY HAROLD, ROGER LOINGS, RUBY JONES, ALICIA DAVIS, PAMELA BEVEL, SHALAMA REEVES, TYRONE SBELL LAM, IDA AUGUST, DALFRED GREEN, LAURA GREEN, JASON WILLIAMS, JOSE SOLIS, JUDY MARIE JONES, BETTY RILEY, WILBERT RILEY, CARLA WOMACK, MARY L. WOODARD, JAQUELINE DELMORE, CARLYLE WOODARD JR., CARLYLE CATRESS WOODARD III, TERRENCE TERELL WOODARD, TREVION LEE, LARRY DOTREY, STEPHEN CARR, KENNETH FISHER, MATTIE JONES, LOUISE GARRETT, DANNIE GREEN, MARY JORDAN, DEBRA LEWIS, LEE DIXON, THELDA LEWIS, DEAN MURRELL, and CYNTHIA HAMMETT,	§	IN THE DISTRICT COURT OF
Plaintiffs,	§	
CES ENVIRONMENTAL SERVICES, INC.	§	
Defendant,	§	HARRIS COUNTY, TEXAS
	§	61ST JUDICIAL DISTRICT

DEFENDANT'S ORIGINAL ANSWER & COUNTERCLAIM TO PLAINTIFF'S ORIGINAL PETITION

Defendant, CES Environmental Services, Inc, files this original answer to Plaintiff's, original petition.

A. General Denial

1. Defendant generally denies the allegations in Plaintiff's original petition and Defendant is entitled to judgment as "a matter of law."

B. Affirmative Defenses

2. Even if plaintiff proves the allegations in its petition, defendant is not liable to Plaintiffs because of the below listed ***AFFIRMATIVE DEFENSES FROM TEX. R. CIV. P. 94***

(A) Plaintiff's claims are barred by the **doctrine of estoppel**.

(B) Of **fraud** in that Plaintiff and/or its attorney of record have made an attempt to induce the Court to participate in actions they now know, previously knew, should have known or at a minimum had a responsibility to know would make this Honorable Court complicit in an unlawful fraudulent act(s) which violate not only the statutes of fraud, but also display a willful disregard for the judicial canons of ethics, disrespect for this Honorable Court and the rule of law. Plaintiffs are attempting to have this Court to inflict severe economic distress on Defendant(s) to the detriment of Defendant(s). Should the Court follow such a course of action, Defendant would be prejudiced to a point of having to incur the expense of litigation through all appellate phases of the Courts, which would begin with a request for a new trial, an evidentiary hearing under TRCP 165a, preparation of a memorandum of law as well as potential appearances before the Appellate and Supreme Court(s) of the State of Texas.

(C) Of **illegality** in that Plaintiff knew, should have known or at a minimum had a responsibility to know its actions were and remain illegal under the TRCP, TRE and Tex. Civ. Rem. and Practices Code and the Texas Penal Code regarding attempted extortion and theft. Extortion occurs when someone obtains money through threat of harm. Plaintiff, Judy Marie Jones made such an extortion attempt against Defendants. Theft occurs when property is removed without the effective consent of the owner. Plaintiffs and or persons acting on their behalf committed theft of Defendant's property.

(D) Of **laches** in that Plaintiff could have reasonably sought relief prior to engaging in criminal conduct to their own peril. In May 2008, Plaintiff, Judy Marie Jones requested a meeting with officers of CES Environmental Services, Inc. The meeting took place at the residence of Plaintiff, Judy Marie Jones, whose address is (b) (6) , (b) (6) Present at the meeting were three witnesses who are prepared to testify Judy Marie Jones made the following statement to witnesses present at the meeting requested by Judy Marie Jones. Specifically, Judy Marie Jones stated; "Give me two million dollars ($2,000,000) and you can do whatever the hell you want to do. If you do not pay me, I will start a petition against your company, organize my neighbors to call in complaints against you everyday and complain to the City until they close you down. I

will call an ambulance everyday and go to the hospital and have them send you the bill." The Court should take Judicial Notice of the fact Judy Marie Jones followed through on her extortion threat to cause harm to Defendants. Such factual evidence can be proven in a pre-trial hearing to establish such facts as;

1. Judy Marie Jones began circulating a petition against Defendant's business in May 2008. Under the "best evidence rule" at a pre-trial hearing the Court should order the petition brought to Court for inspection, authenticity, verification and to be made available for use by Defendants to impeach the credibility of Plaintiffs and Plaintiffs witnesses. In the interest of Judicial economy, the pre-trial hearing will allow the Court to review the evidence to determine if such evidence of overwhelming weight supports Defendants claims and assertions of criminal extortion on the part of Judy Marie Jones.

2. Judy Marie Jones organized her neighbors in concert with her actions to engage in a complaint calling campaign to City of Houston Bureau of Air Quality daily as she had threatened in her extortion attempt against Defendants.

3. Such proof Judy Marie Jones engaged in such threatened conduct is a matter of public record in the Office of the City of Houston Bureau of Air Quality. Proof of such evidence of overwhelming weight to support Defendant's assertion which will be found in the public record, is the history of odor complaints against Defendants.

4. From a period beginning in December 2005 through May 10, 2008, City of Houston Bureau of Air Quality complaints against Defendants averaged less than two complaints per month with four confirmed odors and the issuance of three citations to Defendants. (31 complaints in 29 months)

5. After Judy Marie Jones organized the complaint calling campaign to the City of Houston Bureau of Air Quality, odor complaints covering a period of time beginning May 19, 2008 through August 19, 2008 totaled ninety (90) complaints, and average of one complaint per day. Under the "best evidence rule" at a pre-trial hearing the Court should order the City of Houston Bureau of Air Quality call records relevant to this case, be brought to Court for inspection, authenticity, verification and to be made available for use by Defendants to impeach the credibility of Plaintiffs and Plaintiffs witnesses. In the interest of Judicial economy, the pre-trial hearing will allow the Court to review the evidence to determine if such evidence of overwhelming weight supports Defendants claims and assertions of criminal extortion on the part of Judy Marie Jones. The Court has the discretion to exercise judicial economy and conduct a pre-trial hearing to determine if Defendant assertions Plaintiffs cause of action was borne of criminal intent and not supported by statute(s). Upon such a finding the Court has the discretion to dismiss this case with prejudice and impose sanctions on some or all Plaintiffs and/or Plaintiffs attorney of record, including a referral for disbarment proceedings.

6. City of Houston Bureau of Air Quality Environmental Investigators will be called to testify to the fact their office was inundated with so many complaints from Plaintiffs in such a short period of time, City of Houston Bureau of Air Quality employees pleaded with Defendants to; "do whatever it takes to make the complaints stop." The complaints were so prevalent from Grace Lane, City of Houston Bureau of Air Quality personnel stopped investigating the facility and began showing up at the CES facility with Notice of Violation documents already filled out and issued such NOV documents without performing required protocol of signing in at the time they arrived onsite and issuing the NOV's at the facility's main entrance gate. On several occasions, City

of Houston Bureau of Air Quality personnel were so intimidated by Judy Marie Jones, City of Houston Bureau of Air Quality personnel actually admitted they could not smell any odor on the CES facility but felt compelled to issue the NOV anyway in an effort to pacify Judy Marie Jones and her neighbors.

(E) Of **the statute of frauds** in that Plaintiff knew, should have known or at a minimum, had a responsibility to know its actions are barred by the statutes of fraud and fraudulent inducement, which do not allow for unjust enrichment in this case to the benefit of Plaintiffs.

(F) Of the statutes of criminal activity, **FRAUD** and **TEXAS PENAL CODE TITLE 7 OFFENSES AGAINST PROPERTY CHAPTER 31. THEFT**. Plaintiffs and/or persons acting on their behalf, specifically Ralph Evans, AKA Quanell X and others have informed Defendant he Quanell X is in unlawful possession of Defendant's property, obtained unlawfully by Ralph Evans' and persons conspiring with Ralph Evans' unlawful entry onto Defendant's property located at 4904 Griggs Road. The removal of such property without the effective consent of the owner constitutes theft under Texas Penal Code Title 7 Chapter 31. Defendant would be prejudiced if Plaintiffs are allowed to use evidence without production of specific information required by Texas Rules of Evidence. Specifically; Chain of Custody documentation indicating what the material is, date material was obtained and by whom, date material was relinquished and to whom, preservatives used to maintain the integrity of such material to prevent deterioration and degradation of such material, location of where material was sourced, location of where material has been transferred and in whose custody has the material been entrusted to demonstrate credibility before this Court as well as adherence to the rules, regulations, laws, codes, safety and health requirements for handling, transporting and analysis of any such unlawfully procured material.

The Court is hereby advised that upon production of such documents, products, wastes or all such other and further material claimed by Plaintiffs to have originated or had been

procured from Defendants secured facility or transport equipment, will be met with an immediate filing of charges under the aforementioned statute against all persons having or seeking a financial stake in this case.

Furthermore, because of the changes to hazardous material rules after September 11, 2001, the theft of such material may constitute "domestic terrorist activity on the part of Plaintiffs or persons acting on behalf of Plaintiffs." Such individuals who have taken part in or seeking to benefit from such unlawful acquisition of material from Defendants secured facility or transport equipment will be referred to the United States Government law enforcement agency having jurisdiction over such matters with a request such persons be prosecuted to the full extent of the applicable federal law with specific emphasis on homeland security law violations. The Court will be asked to concur with such recommendations.

(H) **Defendant's statements about plaintiff are true.**

(G) Plaintiff's actions are barred by the statute of limitations. This Court is also asked to decide whether there is any relevance in this case where the Defendant did not exercise any right of control over access to the land where the Plaintiffs claim injury. Plaintiff must appear and prove "a potential instrument or medium in disease transmission" to them to fulfill the statutory definition of a public health nuisance contained in Section 341.011 of the Texas Health and Safety Code. Defendant will require full access to each and every individual Plaintiff's medical records, family medical history, information about drug use and/or deviant lifestyle practices by each Plaintiff, individually or in combination.

Plaintiff's cause of action appears to be for common law nuisance *per se*, with reference to the statute merely to establish its existence under the Legislature's definition, not to prove the existence of any harm caused by Defendant to Plaintiffs. Defendant asserts Plaintiff's claims are barred by the precedent set in **THE SUPREME COURT OF TEXAS** No. 03-0236 SCHNEIDER NATIONAL CARRIERS, INC. ET AL., PETITIONERS, v. ANDREA L. BATES ET AL., RESPONDENTS. The Supreme Court of Texas ruled in the case; "We hold that the Plaintiff's own vast number of

complaints of odor, dusts, fumes, etc, coupled with information contained in Plaintiff's own affidavits indicate Defendants operations constitute a permanent nuisance, therefore Plaintiffs claims are barred by statute of limitations.

C. Counterclaim

3. Plaintiff is liable to Defendant because Plaintiffs cause of action against Defendant(s) was borne out of criminal intent of extortion, greed, retaliation and a strong desire for unjust enrichment of Plaintiffs to the detriment of Defendants. Plaintiff's petition is frivolous, untrue, unjust and without merit. Plaintiff's petition contains statements Plaintiff knew, should have known or at a minimum, Plaintiff had a responsibility to know such statements were untrue at the time such untrue statements were made. Plaintiff's petition is groundless and brought in bad faith and brought for the purpose of harassment and unjust enrichment in violation of TRCP 10. Plaintiffs should be sanctioned because Plaintiff's pleadings lack evidentiary or legal support, were filed for an "improper purpose," and without "due diligence".

Defendant was reliant upon Plaintiffs to their detriment by relying upon Plaintiffs to comply with all laws, rules, regulations and all such other and further requirements and obligations requiring Plaintiff and its attorney of record to bring a cause of action likely to have legally sufficient evidentiary support of its claims and allegations on a trial of the case before a Judge and jury acting as fact finder.

D. Conditions Precedent

4. All conditions precedent has been performed by Defendant(s) or has occurred in accordance with the requirements of *Tex. R. Civ. P. 54.*

E. Exemplary Damage Cap

5. The Exemplary Damages Act applies to restrict and limit plaintiff's claim for exemplary damages, and Defendant intends to invoke the damage cap if exemplary damages are awarded.

F. Demand for Jury

6. Defendant demands a jury trial and tenders the appropriate fee with the answer. Plaintiffs should be cited to appear and meet each and every element of their burden of proof, as individual Plaintiffs, since class action status for this cause of action is unwarranted. The Court is advised Defendant will vigorously defend itself against the untrue and unjust allegations contained in Plaintiffs petition.

G. Conclusion

7. Plaintiff's claims and allegations raise credibility issues in this case. Specifically; Plaintiff has no evidence nor is likely to produce any evidence which would be legally sufficient to support their allegations on a trial of the case before a judge and jury acting as fact finder. The Court is aware that it is settled law that; "when the credibility of a witness could be a dispositive factor on the outcome of the case, the testimony of the witness should be disbelieved and all doubt favors the opposing party." Plaintiff's allegations are hearsay as that term is defined by Rule 801 of the Texas Rules of Evidence.

Additionally, this Court is asked to clarify whether Plaintiffs in this case can recover for damages caused by a premises defect, or whether the Plaintiff must show that the alleged harm resulted from a grossly negligent contemporaneous activity by Defendant. In deciding these issues, it is also necessary for this Court to determine whether the claims of the Plaintiffs in this case arise from criminal intent to perpetrate a fraud upon this Court by Plaintiffs or a negligent activity conducted by Defendant.

With respect to the possible applicability of the Recreational Use Statute to the claims of Plaintiff, there are no Texas cases addressing the necessity of a right of control over the premises on which a Plaintiff claims injury or harm in order to enjoy the liability limitations contained in the Recreational Use Statute. With respect to the elements necessary for a Plaintiff to recover in a premises liability

case as describe herein by Plaintiff, there is no clear authority in the Texas statutes.

With Respect to Plaintiffs request for class action, the Court should bar such a request in that not all Plaintiffs' have proven they have standing to bring a cause of action against Defendant. Each Plaintiff cannot argue they were harmed in the exact percentage of harm, in the exact manner of harm, at the exact same time of harm and under the "reasonable person theory", it is not reasonable that each and every Plaintiff can produce a physician licensed to practice medicine in the State of Texas, who will state under oath with reasonable, medical certainty that each Plaintiff was harmed to such an extent by smelling odors from Defendants operations, damages requested are reasonable to make Plaintiffs whole.

H. Prayer

7. For these reasons, defendant asks the court to enter judgment that plaintiff take nothing, assess costs against plaintiff, and award defendant all other relief to which he is entitled.

Respectfully submitted,

_____

MATTHEW L. BOWMAN

Certificate of Service

I do hereby certify that a true and correct copy of Defendant's Answer to Plaintiff Griggs Terrace's Original Petition was served upon the Office of Benjamin L. Hall III. Whose address is 530 Lovett Boulevard Houston, Texas 77006 with specific attention to Benjamin L. Hall III State Bar No. 08743745 Attorney-in-Charge for Plaintiff Griggs Terrace, by Certified Mail, Return Receipt Requested by the U.S. Postal Service on this ____ day of January, 2009.

By: _____

MATTHEW L. BOWMAN

No. 2009-03493

CHARLES C. JONES, JR., DAVID L. ANDERSON, RAYFIELD BELL, FELITA WIGGINS, RODNEY HAROLD, ROGER LOINGS, RUBY JONES, ALICIA DAVIS, PAMELA BEVEL, SHALAMA REEVES, TYRONE SBELL LAM, IDA AUGUST, DALFRED GREEN, LAURA GREEN, JASON WILLIAMS, JOSE SOLIS, JUDY MARIE JONES, BETTY RILEY, WILBERT RILEY, CARLA WOMACK, MARY L. WOODARD, JAQUELINE DELMORE, CARLYLE WOODARD JR., CARLYLE CATRESS WOODARD III, TERRENCE TERELL WOODARD, TREVION LEE, LARRY DOTREY, STEPHEN CARR, KENNETH FISHER, MATTIE JONES, LOUISE GARRETT, DANNIE GREEN, MARY JORDAN, DEBRA LEWIS, LEE DIXON, THELDA LEWIS, DEAN MURRELL, and CYNTHIA HAMMETT,	§	IN THE DISTRICT COURT OF
Plaintiffs,	§	HARRIS COUNTY, TEXAS
CES ENVIRONMENTAL SERVICES, INC.	§	
Defendant,	§	61ST JUDICIAL DISTRICT

DEFENDANT'S REQUEST FOR DISCLOSURE

To: Plaintiff, Griggs Terrace, Inc, through its attorney of record, Benjamin L. Hall III, 530 Lovett Boulevard, Houston, TX 77006.

Under Texas Rule of Civil Procedure 194, Plaintiff is requested to disclose, within 50 days of service of this request, the information or material described in Texas Rule of Civil Procedure 194.2 *(a), (c), (d), (e) and (f)*}.

Defendant hereby requests disclosure of any or all of the following:
(a) the correct names of the parties to the lawsuit;
(b) the name, address, and telephone number of any potential parties;
(c) the legal theories and, in general, the factual bases of the responding party's claims or defenses;
(d) the amount and any method of calculating economic damages;
(e) the name, address, and telephone number of persons having knowledge of relevant facts, and a brief statement of each identified person's connection with the case;
(f) for any testifying expert:
(1) the expert's name, address, and telephone number;

(2) the subject matter on which the expert will testify;
(3) the general substance of the expert's mental impressions and opinions and a brief summary of the basis for them, or if the expert is not retained by, employed by, or otherwise subject to the control of the responding party, documents reflecting such information;
(4) if the expert is retained by, employed by, or otherwise subject to the control of the responding party:
(A) all documents, tangible things, reports, models, or data compilations that have been provided to, reviewed by, or prepared by or for the expert in anticipation of the expert's testimony; and
(B) the expert's current resume and bibliography;
(g) any indemnity and insuring agreements described in Rule 192.3(f);
(h) any settlement agreements described in Rule 192.3(g);
(i) any witness statements described in Rule 192.3(h);
(j) allegations of physical or mental injury and damages from the occurrence that is the subject of the case, all medical records and bills that are reasonably related to the injuries or damages asserted or, in lieu thereof, an authorization permitting the disclosure of such medical records and bills;

REQUEST 1: You are requested to disclose the correct names of the parties to the lawsuit as required by Rule 194.2(a).

REQUEST 2: You are requested to disclose the names, addresses and telephone numbers, (work and home) of potential parties as required by Rule 194.2(b). Please answer to the full extent authorized by the rule while including the names of all

(A) Individuals and entities with an ownership interest in the land or other things made the basis of the suit.

(B) Attending healthcare providers for each Plaintiff during time period of all allegations contained in the complaint and all other persons known by Plaintiffs who have similar claims for injuries alleged to have been caused by Defendant's actions.

(C) Similarly situated individuals and entities known by Plaintiffs that have similar claims against Defendant for injuries alleged to have been caused by Defendant's actions.

REQUEST 3: You are requested to disclose the legal theories and, in general, the factual bases of your claims and defenses as required by Rule 194.2(c).

REQUEST 4: You are requested to disclose the amount and any method of calculating economic damages as required by Rule 194.2(d).

REQUEST 5: You are requested to disclose the name, address (work and home), and telephone number (work and home) of persons having knowledge of relevant facts with a brief statement of each person's connection with the case as required by Rule 194.2(e). Please answer to the full extent authorized by the rule while including the names of

(A) any consulting experts who have first-hand knowledge of the facts of the case or who have knowledge of facts about the case that were not obtained in preparation for trial or in anticipation of litigation.

(B) Current or former CES Environmental employees who were present at any event made the basis of the suit

(C) All family members of each Plaintiff who are aware of the nature and extent of plaintiff's injury and/or disability.

(D) All attending healthcare providers, including doctors, nurses, physician assistants, pharmacists, and orderlies who are aware of the nature and extent of plaintiff's injury and/or disability.

REQUEST 6: You are requested to disclose the information about testifying experts and consultants required by Rule 194.2(f). A complete answer will include a list of all witness fees paid by you to the expert within the last five years. Please answer to the full extent authorized by the rule while including the following information.

1. For retained testifying experts, as defined by Rule 194.2(f)(4):

   a. The expert's name, address, and telephone number.

   b. The subject matter on which the retained expert will testify.

   c. The general substance of the experts' mental impressions and opinions and a brief summary of the basis for them.

   d. All reports prepared by the expert in anticipation of the expert's testimony.

   e. All documents, tangible things, reports, models, or data compilations that have been provided to, reviewed by, or prepared for the expert in anticipation of the expert's testimony.

   f. The expert's current resume and bibliography. The resume should include a list of all other cases in which the expert has testified as an expert at trial or by deposition within the last four years.

2. For nonretained testifying experts:

   a. The expert's name, address, and telephone number.

b. The subject matter on which the expert will testify.

c. Either the general substance of the expert's mental impressions, opinions and a brief summary of the basis for them, or documents reflecting such information.

3. For consulting experts whose work was reviewed by a testifying expert, the same information as for retained testifying experts, as outlined above in 1.

REQUEST 7: You are requested to disclose the discoverable indemnity and insuring agreements relative to each and every Plaintiff in this case as required by Rule 194.2(g).

REQUEST 8: You are requested to disclose the discoverable settlement agreements of each and every Plaintiff in this case as required by Rule 194.2(h).

REQUEST 9: You are requested to disclose a list of all discoverable witness statements as required by Rule 194.2(i). Please answer to the full extent authorized by the rule while including in your response the names of all witnesses who have given written statements or made oral statements that were recorded about the facts of the case to you, your agents, employees, representatives, insurance company's representatives, and attorneys. The only witness statement you are permitted to withhold is a witness statement made by a Plaintiff and taken by Plaintiff's attorney, which is privileged under Texas Rule of Evidence 503. Attach to your response all the witness statements listed in your response to this request.

REQUEST 10: Because this is a suit alleging physical or mental injury and damages from the occurrence made subject of the case, you are requested to disclose the medical records and bills that are reasonably related to the injuries or damages asserted in this case as required by Rule 194.2(j). In lieu of the medical records and bills, you may provide an authorization permitting the disclosure of such medical records and bills.

REQUEST 11: Because this is a suit alleging physical or mental injury and damages from the occurrence made subject of the case, you are requested to disclose all medical records and bills obtained by virtue of an authorization furnished by Plaintiff, as required by Rule 194.2(k).

No. 2009-03493

CHARLES C. JONES, JR., DAVID L. ANDERSON, RAYFIELD BELL, FELITA WIGGINS, RODNEY HAROLD, ROGER LOINGS, RUBY JONES, ALICIA DAVIS, PAMELA BEVEL, SHALAMA REEVES, TYRONE SBELL LAM, IDA AUGUST, DALFRED GREEN, LAURA GREEN, JASON WILLIAMS, JOSE SOLIS, JUDY MARIE JONES, BETTY RILEY, WILBERT RILEY, CARLA WOMACK, MARY L. WOODARD, JAQUELINE DELMORE, CARLYLE WOODARD JR., CARLYLE CATRESS WOODARD III, TERRENCE TERELL WOODARD, TREVION LEE, LARRY DOTREY, STEPHEN CARR, KENNETH FISHER, MATTIE JONES, LOUISE GARRETT, DANNIE GREEN, MARY JORDAN, DEBRA LEWIS, LEE DIXON, THELDA LEWIS, DEAN MURRELL, and CYNTHIA HAMMETT,	§	IN THE DISTRICT COURT OF
Plaintiffs,	§	HARRIS COUNTY, TEXAS
CES ENVIRONMENTAL SERVICES, INC.	§	
Defendant.	§	61ST JUDICIAL DISTRICT

DEFENDANT CES ENVIRONMENTAL'S
FIRST SET OF INTERROGATORIES TO PLAINTIFF, GRIGGS TERRACE

To: Plaintiff, Griggs Terrace, Inc, through its attorney of record, Benjamin L. Hall III, 530 Lovett Boulevard, Houston, TX 77006.

Defendant CES Environmental Services, Inc serves these interrogatories on Plaintiffs, as allowed by Texas Rule of Civil Procedure 197. Plaintiff must admit or deny each request, in writing, within 50 days after service.

A. Instructions

For any requested information about a document that no longer exists or cannot be located, identify the document, state how and when it passed out of existence or when it

could no longer be located, and give the reasons for the disappearance. Also, identify each person having knowledge about the disposition or loss, and identify each document evidencing the existence or nonexistence of each document that cannot be located.

B. Definitions

The following definitions shall have the following meanings, unless the context requires otherwise:

1. "Plaintiff" or "defendant," as well as a party's full or abbreviated name or a pronoun referring to a party, means the party, and where applicable, the party's agents, representatives, officers, directors, employees, partners, corporate agents, subsidiaries, affiliates, or any other person acting in concert with the party or under the party's control, whether directly or indirectly, including any attorney.

2. "You" or "your" means Plaintiff, Griggs Terrace, its successors, predecessors, divisions, subsidiaries, present and former officers, agents, employees, and all other persons acting on behalf of Plaintiff or its successors, predecessors, divisions, and subsidiaries.

3. "Document" means all written, typed, or printed matter and all magnetic, electronic, or other records or documentation of any kind or description in your actual possession, custody, or control, including those in the possession, custody, or control of any and all present or former directors, officers, employees, consultants, accountants, attorneys, or other agents, whether or not prepared by you, that constitute or contain matters relevant to the subject matter of the action.

4. "Possession, custody, or control" of an item means that the person either has physical possession of the item or has a right to possession equal or superior to that of the person who has physical possession of the item.

5. "Person" means any natural person, corporation, firm, association, partnership, joint venture, proprietorship, governmental body, or any other organization, business, or legal entity, and all predecessors or successors in interest.

6. "Mobile device" means any cellular telephone, satellite telephone, pager, personal digital assistant, handheld computer, electronic rolodex, walkie-talkie, or any combination of these devices.

7. "Contract" means the agreement that is the subject of this lawsuit.

8. "Identify" or "describe" when referring to a person, means you must state the following:

a. The full name.

b. The present or last known residential address and residential telephone number.

c. The present or last known office address and office telephone number.

d. The present occupation, job title, employer, and employer's address at the time of the event or period referred to in each particular interrogatory.

e. In the case of any entity, identify the officer, employee, or agent most closely connected with the subject matter of the interrogatory and the officer who is responsible for supervising that officer or employee.

9. "Identify" or "describe" when referring to a document, means you must state the following:

a. The nature (*e.g.*, letter, handwritten note) of the document.

b. The title or heading that appears on the document.

c. The date of the document and the date of each addendum, supplement, or other addition or change.

d. The identity of the author and of the signer of the document, and of the person on whose behalf or at whose request or direction the document was prepared or delivered.

e. The present location of the document, and the name, address, position or title, and telephone number of the person or persons having custody of the document.

INTERROGATORY NO.1:
Please identify all persons with knowledge of relevant facts and/or who may be called to testify at trial and describe the issues upon which you believe they have knowledge.

Answer:

INTERROGATORY NO.2:
Please list each participant to this suit's employment history from high school to the present. Include, for each job, the time period during which they held the job, the name of the business, its address, the name of their supervisor(s), their position, their duties,

their salary or wage level, the number of hours worked per week, and the reason for terminating employment.

Answer:

INTERROGATORY NO.3:
Please list each party to this suit's educational history from high school to present, including the name and address of each school attended, the years attended, any degrees received and the date received, whether they were in school full time, and what name their records are listed under, if different from that used in this proceeding. Please also include any continuing education courses, seminars, or special training sessions each Plaintiff may have attended and any licenses or certifications each party to this suit have received.

Answer:

INTERROGATORY NO.4:
Please identify every regulatory agency, law enforcement agency contacted regarding complaints against Defendant, dates such complaints were made, name of regulatory person who took the complaint(s), summary of information provided to each regulatory agency by each Plaintiff, status and disposition of each complaint made by each Plaintiff in this case.

Answer:

INTERROGATORY NO.5:
Please identify specifically all sources of income each Plaintiff has received by check, cash, loans, exchange in any kind or other form of payment, for the period of time commencing with the alleged date of injury to the present, including the amounts received and the date of receipts.

Answer:

INTERROGATORY NO.6:
Please identify each lawsuit or other legal or administrative proceeding, criminal or civil, to which each Plaintiff has been a party, including identities of the other parties to the lawsuit or proceeding, cause or charge number, the court or forum in which such action was instituted, the nature of the action, and the outcome of the action, including deferred adjudication.

Answer:

INTERROGATORY NO 7.:
Please identify every person (other than your attorney), including current or former Griggs Terrace residents, property owners and renters, with whom each Plaintiff has had contact or communication, or with whom each Plaintiff in any manner have discussed the events or allegations set forth in Plaintiff(s) complaint, either before or after Plaintiff(s) filed this lawsuit, and state the dates and locations of each such communication or discussion, the substance of such communication or , the identity of all persons present during each such communication or discussion, and whether Plaintiff(s) obtained a statement, either oral or written, from each such person

Answer:

INTERROGATORY NO 8.:
As to each expert who is used for consultation and who is not expected to be called as a witness, but whose opinions, mental impressions, or work products have been reviewed by a testifying expert, state the identity (name, address, telephone number, occupation, and business address) of the expert, the subject matter on which the expert was consulted, the mental impressions and opinions held by the expert, and the facts known to the expert, (regardless of when the factual information was acquired) that relate to or form the basis of the mental impressions and opinions held by the expert.

Answer:

INTERROGATORY NO 9.:

Please identify each and every complaint or claim, whether formal or informal, made by any party to this case for nuisance, negligence, interference with property rights, fraud and trespass or otherwise, prior to, during, or subsequent to Plaintiff(s) filing of this suit, and with respect to each, give each party's name at the time of the complaint or claim, and the substance and outcome of each complaint or claim.

Answer:

INTERROGATORY NO.10:
Please describe fully any criminal offense of which any of the specific Plaintiff(s) to this case have been convicted. For each Plaintiff who has not been convicted of any criminal offense, please generate a statement to such facts.

Answer:

INTERROGATORY NO.11:
Please identify with specificity the fee arrangement with each Plaintiff and the attorney representing you in this matter.

Answer:

INTERROGATORY NO.12:
Please identify all health care professionals that each Plaintiff has seen, consulted with, or that have treated or examined Plaintiff(s), over the last ten (10) years for any reason, including the name and address of the professional, type of professional, date(s) seen, reason for seeing, any diagnosis made, and the identity of each person or organization that paid benefits or compensation to Plaintiff(s) or on Plaintiff(s) behalf for each injury or treatment.

Answer:

INTERROGATORY NO.13:

Have any video or audio tape recordings been made concerning any event that may be relevant or related to this action? If so, please identify each person recorded on the tape and state: (1) whether the tape is audio, video or both; (2) the date of such recording; (3) the location of such recording; (4) whether each person recorded on the tape has knowledge that he or she was being recorded; and (5) whether the tape is still in your possession.

Answer:

INTERROGATORY NO.14:

Please list and itemize in detail all damages each Plaintiff claims as a result of the incidents made the basis of this suit, including lost wages and benefits, both in the past and in the future, emotional pain, mental anguish, suffering, inconvenience, loss of enjoyment of life in the past and in the future, attorney's fees, exemplary damages sought to be recovered in this suit, state in detail the elements used to calculate such damages and the basis of the calculations.

Answer:

No. 2009-03493

CHARLES C. JONES, JR., DAVID L. ANDERSON, RAYFIELD BELL, FELITA WIGGINS, RODNEY HAROLD, ROGER LOINGS, RUBY JONES, ALICIA DAVIS, PAMELA BEVEL, SHALAMA REEVES, TYRONE SBELL LAM, IDA AUGUST, DALFRED GREEN, LAURA GREEN, JASON WILLIAMS, JOSE SOLIS, JUDY MARIE JONES, BETTY RILEY, WILBERT RILEY, CARLA WOMACK, MARY L. WOODARD, JAQUELINE DELMORE, CARLYLE WOODARD JR., CARLYLE CATRESS WOODARD III, TERRENCE TERELL WOODARD, TREVION LEE, LARRY DOTREY, STEPHEN CARR, KENNETH FISHER, MATTIE JONES, LOUISE GARRETT, DANNIE GREEN, MARY JORDAN, DEBRA LEWIS, LEE DIXON, THELDA LEWIS, DEAN MURRELL, and CYNTHIA HAMMETT,	§	IN THE DISTRICT COURT OF
Plaintiffs,	§	
CES ENVIRONMENTAL SERVICES, INC.	§	HARRIS COUNTY, TEXAS
Defendant,	§	61ST JUDICIAL DISTRICT

DEFENDANT, CES ENVIRONMENTAL'S
FIRST REQUEST FOR ADMISSIONS TO PLAINTIFFS, GRIGGS TERRACE

To: Plaintiff, Griggs Terrace, Inc, through its attorney of record, Benjamin L. Hall III, 530 Lovett Boulevard, Houston, TX 77006.

Defendant CES Environmental Services, Inc serves these requests for admissions on Plaintiff, as allowed by Texas Rule of Civil Procedure 198. Plaintiff must admit or deny each request, in writing, within 50 days after service.

Definitions

1. "Plaintiff" or "defendant," as well as a party's full or abbreviated name or a pronoun referring to a party, means the party, and where applicable, the party's agents, representatives, officers, directors, employees, partners, corporate agents, subsidiaries, affiliates, or any other person acting in concert with the party or under the party's control, whether directly or indirectly, including any attorney.

2. "You" or "your" means Plaintiff, Griggs Terrace, its successors, predecessors, divisions, subsidiaries, present and former officers, agents, employees, and all other persons acting on behalf of Plaintiff or its successors, predecessors, divisions, and subsidiaries.

3. "Person" means any natural person, corporation, firm, association, partnership, joint venture, proprietorship, governmental body, or any other organization, business, or legal entity and all predecessors or successors in interest.

4. "Communication" means any oral or written communication of which Plaintiff has knowledge, information, or belief.

5. "Mobile device" means cellular telephone, satellite telephone, pager, personal digital assistant, handheld computer, electronic rolodex, walkie-talkie, or any combination of these devices.

REQUEST 1: Defendant has operated its business at 4904 Griggs Rd since 2002.

REQUEST 2: The date of the first complaint listed in Plaintiff's original petition is April 18, 2007.

REQUEST 3: Plaintiff Judy Marie Jones requested a meeting with officers of Defendant's business in May 2008.

REQUEST 4: Defendants Officers met with Judy Marie Jones at her place of residence on Grace Lane in May 2008.

REQUEST 5: Judy Marie Jones requested she be given two million ($2,000,000) dollars by Defendant or she would take actions to harm Defendant's business.

REQUEST 6: Defendants did not give two million ($2,000,000) to Judy Marie Jones.

REQUEST 7: Judy Marie Jones circulated a petition alleging harm to her and neighbors and announcing her intent to take actions detrimental to Defendants business.

REQUEST 8: Judy Marie Jones recruited Griggs Terrace residents to participate in this suit.

REQUEST 9: Plaintiff's original petition is frivolous.

REQUEST 10: Plaintiff's complaint and cause of action was borne of criminal intent for the purpose of unjust enrichment to Plaintiffs.

REQUEST 11: Plaintiff's original petition was filed in bad faith.

REQUEST 12: Plaintiff's original petition was filed as harassment.

REQUEST 13: Plaintiff's seek unjust enrichment at expense of Defendant.

REQUEST 14: Judy Marie Jones, Ralph Evans and others criminally conspired to manufacture evidence to be used to support the allegations in this case.

REQUEST 15: Plaintiff's have no evidence that would be legally sufficient to support their allegations on a trial of the case before a judge and jury acting as fact finder.

REQUEST 16: Plaintiff's and/or persons working on their behalf unlawfully removed material and documents from Defendants place of business without the effective consent of the business owner in violation of Texas Penal Code regarding theft and Federal rules regarding the safe handling, transport, storage and documenting of custody and final disposition of hazardous materials.

REQUEST 17: Plaintiff's have no independent medical evidence to support the allegations contained in its complaint.

REQUEST 18: Plaintiff's have no authenticated, verifiable evidence to support it was harmed by odors from Defendant as is contained in the allegations in their complaint.

REQUEST 19: Plaintiff's have made statements they knew to be untrue in their original petition.

REQUEST 20: Plaintiff's untrue statements about Defendant are meant to cause Defendant harm to his reputation and land.

REQUEST 21: Plaintiff's have no evidence proving diminished land values have occurred in Griggs Terrace per the allegations contained in their original petition.

REQUEST 22: Plaintiff's witnesses are not credible before the Court.

REQUEST 23: Plaintiff previously has been declared a vexatious litigant by a state/federal court in an action/a proceeding based on the same or substantially similar facts/transactions/occurrences, consistent with Tex. Civ. Prac. & Rem. Code §11.054(3).

REQUEST 24: Ralph Evans, AKA Quanell X warned Judy Marie Jones and other Plaintiffs attending a meeting at the home of Judy Marie Jones with Ralph Evans, AKA Quanell X that any actions where individuals seeking money from Defendant is considered extortion and advised Plaintiffs to immediately cease and desist such actions.

No. 2009-03493

CHARLES C. JONES, JR., DAVID L. ANDERSON, RAYFIELD BELL, FELITA WIGGINS, RODNEY HAROLD, ROGER LOINGS, RUBY JONES, ALICIA DAVIS, PAMELA BEVEL, SHALAMA REEVES, TYRONE SBELL LAM, IDA AUGUST, DALFRED GREEN, LAURA GREEN, JASON WILLIAMS, JOSE SOLIS, JUDY MARIE JONES, BETTY RILEY, WILBERT RILEY, CARLA WOMACK, MARY L. WOODARD, JAQUELINE DELMORE, CARLYLE WOODARD JR., CARLYLE CATRESS WOODARD III, TERRENCE TERELL WOODARD, TREVION LEE, LARRY DOTREY, STEPHEN CARR, KENNETH FISHER, MATTIE JONES, LOUISE GARRETT, DANNIE GREEN, MARY JORDAN, DEBRA LEWIS, LEE DIXON, THELDA LEWIS, DEAN MURRELL, and CYNTHIA HAMMETT,	§	IN THE DISTRICT COURT OF
Plaintiffs,	§	
CES ENVIRONMENTAL SERVICES, INC.	§	
Defendant,	§	HARRIS COUNTY, TEXAS
	§	61ST JUDICIAL DISTRICT

DEFENDANT'S REQUEST FOR PRODUCTIONS

To: Plaintiff, Griggs Terrace, Inc, through its attorney of record, Benjamin L. Hall III, 530 Lovett Boulevard, Houston, TX 77006.

Defendant, Matthew L. Bowman and CES Environmental Services, Inc serve this request for production on Plaintiff, as allowed by Texas Rule of Civil Procedure 196. Plaintiff must produce all requested documents as they are kept in the ordinary course of business or organized and labeled to correspond with categories in each request for inspection and copying, not more than 30 days after service, at the office of Benjamin L. Hall III, 530 Lovett Boulevard, Houston, TX 77006.

A. Instructions

1. Answer each request for documents separately by listing the documents and by describing them as defined below. If documents produced in response to this request are numbered for production, in each response provide both the information that identifies the document and the document's number.

2. For a document that no longer exists or that cannot be located, identify the document, state how and when it passed out of existence, or when it could no longer be located, and the reasons for the disappearance. Also, identify each person having knowledge about the disposition or loss of the document, and identify any other document evidencing the lost document's existence or any facts about the lost document.

a. When identifying the document, you must state the following:

(1) The nature of the document (*e.g.*, letter, handwritten note).

(2) The title or heading that appears on the document.

(3) The date of the document and the date of each addendum, supplement, or other addition or change.

(4) The identity of the author and of the signer of the document, and of the person on whose behalf or at whose request or direction the document was prepared or delivered.

b. When identifying the person, you must state the following:

(1) The full name.

(2) The present or last known residential address and residential telephone number.

(3) The present or last known office address and office telephone number.

(4) The present occupation, job title, employer, and employer's address.

B. Definitions

The following definitions shall have the following meanings, unless the context requires otherwise:

1. "Plaintiff" or "defendant," as well as a party's full or abbreviated name or a pronoun referring to a party, means the party, and where applicable, the party's agents, representatives, officers, directors, employees, partners, corporate agents, subsidiaries, affiliates, or any other person acting in concert with the party or under the party's control, whether directly or indirectly, including any attorney.

2. "You" or "your" means Plaintiff, Griggs Terrace, its successors, predecessors, divisions, subsidiaries, present and former officers, agents, employees, and all other

persons acting on behalf of Plaintiff or its successors, predecessors, divisions, and subsidiaries.

3. "Document" means all written, typed, or printed matters, and all magnetic, electronic, or other records or documentation of any kind or description in your actual possession, custody, or control, including those in the possession, custody, or control of any and all present or former directors, officers, employees, consultants, accountants, attorneys or other agents, whether or not prepared by you, that constitute or contain matters relevant to the subject matter of the action.

4. "Possession, custody, or control" of an item means that the person either has physical possession of the item or has a right to possession equal or superior to that of the person who has physical possession of the item.

5. "Person" means any natural person, corporation, firm, association, partnership, joint venture, proprietorship, governmental body, or any other organization, business, or legal entity, and all predecessors or successors in interest.

6. "Mobile device" means cellular telephone, satellite telephone, pager, personal digital assistant, handheld computer, electronic rolodex, walkie-talkie, or any combination of these devices.

REQUEST 1: Produce all leases, contracts, warrants, permits, test results, boring process description, names of companies or persons who performed sampling, analysis, testing or all such other and further activity directly or indirectly related to the properties of Griggs Terrace, the subject of this suit.

REQUEST 2: Produce the following documents/tangible things for testing and sampling: soil, water or air "retained samples" or the name and address of the entity performing such sampling and analysis. The retained soil, water or air will be sampled/tested by a third party Certified Industrial Hygienist and an independent third part certified industrial laboratory.

REQUEST 3: Produce medical/mental health records regarding each Griggs Terrace resident, former residents and any nonparty having a claim in this suit.

REQUEST 4: Produce all electronic/magnetic data relating to the allegations contained in the complaint.

REQUEST 5: Produce any and all communications and documents sent to or received from, or exchanged by and between you and Defendant and its agents, employees, or representatives concerning the subject matter of this lawsuit.

REQUEST 6: Produce any and all communications and documents sent to or received from, or exchanged by and between each Plaintiff and any regulatory agency and its agents, employees, or representatives concerning the subject matter of this lawsuit.

REQUEST 7: Produce all documents generated by each Plaintiff regarding communications for the recruitment of Griggs Terrace residents to attend strategy planning meetings with Ralph Evans, AKA Quanell X and any regulatory agency.

REQUEST 8: Produce all medical prescription information for each Plaintiff in this case.

REQUEST 9: Produce all documents that relate to ownership or right to inhabit property in any dwelling located in Griggs Terrace for each Plaintiff in this case.

REQUEST 10: Produce the original of the guaranty of the contract on which property located in Griggs Terrace was purchased or in the alternative produce the deed for each property owner who is a Plaintiff related to the allegations on which this suit is based.

REQUEST 11: Produce school records for each minor child listed as a Plaintiff in this case to prove residence in Griggs Terrace during the period of time on which this suit is based.

REQUEST 12: Produce all telephone bills, logs, handwritten notes, communications, documents and all tangible things proving each Plaintiff in this case complained of Defendants activities on its property, which are the basis of this suit.

REQUEST 13: All documents mentioning, reflecting, regarding, or relating to any conversations, correspondence, meetings, discussions, interviews or contact between each Plaintiff and any of the following:

(a) any employee, former employee, representative or agent of CES Environmental Services, Inc concerning or relating in any manner directly or indirectly with the subject matter of this complaint;
(b) any governmental agency, person or entity, state, local or federal, in dealing in any manner, directly or indirectly, with allegations in this complaint; and
(c) any person or entity, public or private, dealing in any manner with the allegations contained in this complaint, other than Plaintiff's attorneys.

Response:

REQUEST 15:
All federal income tax returns for each Plaintiff for the years 2005 through the present. In the alternative, each Plaintiff may complete and return the IRS 4506 Authorization attached hereto to obtain those tax returns.

Response:

REQUEST 16:
All documents reflecting all income earned before taxes for each Plaintiff in this case (*e.g.* copies of IRS Form 1099, financial statements, receipts, account payables, accounts receivables, IRS Filings, etc.) since the first day of alleged harm or injury, the subject of this suit through date of receipt of these discovery requests.

Response:

REQUEST 17:
All documents you have sent to or received from CES Environmental Services, Inc, employees of CES Environmental Services, Inc, or former employees of CES Environmental Services, Inc relevant to the subject matter of this lawsuit.

Response:

REQUEST 18:
All documents mentioning, reflecting, regarding, or relating to Plaintiff's development of the allegations, the subject of this suit.

Response:

REQUEST 19:

All audio or video tapes and/or other recordings and/or documents (including any transcripts) made by or for each Plaintiff of any conversations between any Plaintiff and any other person concerning the subject matter of this lawsuit. This request specifically includes any video, photographs, still pictures, hand drawn depictions, television footage and all such other material or documents meeting the definition of documents and other tangible things, intended to be used in this case or not. This request also includes any evidence which may be exculpatory to Defendants in this case.

This request also specifically includes any and all plea bargains, compromise settlement agreements, covenants not sue, hold harmless agreements, indemnity agreements, guarantee agreements, "deals," Mary Carter agreements, agreements to agree, releases in full, or any other similar agreements, arrangements, or understanding with any other party to this lawsuit or anyone who is not a party to this lawsuit for the five year period prior to Plaintiff's complaint.

Response:

REQUEST 20:

All written reports of each expert you intend to call as a witness and each expert's complete file concerning this case, including any correspondence you have sent to or received by the expert regarding this case,

Response:

REQUEST 21:

If any expert has not prepared a written report, or if the written report of any expert does not contain all of the information mentioned above, then Defendant requests that each expert make a written report as described above and that you produce each report for inspection and copying.

Response

REQUEST 22:

All documents and tangible things, including all reports, physical models, compilations of data, and other materials prepared by an expert or for each expert you intend to call as a witness.

Response:

REQUEST 23:

Produce a copy of all fee arrangements with any discoverable experts.

Response:

REQUEST 24:

All calendars, notes, handwritten materials, or other documents in your possession that mention Defendant and/or any of the incidents or facts upon which you base your claim in this lawsuit.

Response:

REQUEST 25:

All documents mentioning, reflecting, regarding, or relating to any contact between any Plaintiff in this case and Defendant.

Response:

REQUEST 26:

All documents mentioning, reflecting, regarding, or relating to any contact between Plaintiff and any of Defendant's present or former employees, which are relevant to the subject matter of this lawsuit.

Response:

REQUEST 27:

All documents mentioning, reflecting, regarding, or relating to any statements made by any of Defendant's employees or former employees relevant to the subject matter of this lawsuit.

Response:

REQUEST 28:

All documents you have sent to or received from City of Houston, Harris County, State of Texas or U. S. Government regulatory agencies which are relevant to Defendant in any manner up to but not limited to use in this suit.

Response:

REQUEST 29:

All documents reflecting, regarding or relating to any civil or criminal litigation, allegations of criminal acts, breach of contract, or any other violation of law allegations, charges or implications of impropriety against any Plaintiff to this suit, including status and disposition of such civil or criminal litigation, allegations of criminal acts, Sarbanes-Oxley violations, breach of contract, or any other violation of local, state and federal law allegations, charges or implications of impropriety, unlawful acts or behaviors and/or criminal wrongdoing against CES Environmental Services, by any other party since beginning development of the allegations the subject of this suit.

Response:

REQUEST 30:

All documents reflecting, regarding or relating to any showing of diminished property valuations.

[redacted]

Citgo (Citgo, Lake Charles)
Hazardous Sour Wastewater

EPAHO044001160

9/4/09
WKS
K-3 (2)

CES Environmental Services, Inc.

CONFIDENTIAL **Profit & Loss Sheet** CONFIDENTIAL

Billing/AP Information	
Name:	
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	
Assigned:	Unassigned:

Folder I.D.#	

Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:	N:	Fuel Surcharge:	Y:	N:
City of Houston:	Y:	N:	4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge

Customer Special Request/Requirement

CONFIDENTIAL

Head Space Untreated
- Sulfur Speciation

ENVIRON EXPRESS LABS
401 N. 11TH STREET
LA PORTE, TEXAS 77571
281-471-0951 (WORK)
281-471-5821 (FAX)

Untreated
- Inbound Phenolics
- Ammonia
- SVOC

Treated
- Ammonia
- Phenolics
- Sulfides
- Copper
- Nickel
- Zinc

FACSIMILE COVER

COMPANY: CES ENVIRONMENTAL

PLEASE DIRECT FOLLOWING PAGE(S) TO: Clark Hickman

PAGES INCLUDING COVER LETTER: 3

Untreated
Phenolics & SVOC & AMMONIA
To Follow Monday.

FAX: 713-676-1676

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ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

CERTIFICATE OF ANALYSIS NO: 63058.01 2of 3

Customer: **CES**
Project ID: **Citgo 05**
Project Loc:
Charge/P.O.: **0308-118**
Dilution: **100.0**

Sample ID: **Untreated Citgo Sour Water TK 37 (Bottom)**
Matrix: **Liquid**
Type: **Grab**
Extracted: **04-01-08**

Environ ID: **63058.01**
Sampled: **03-27-08**
Received: **03-30-08**
Reported: **04-01-08**
Analyzed: **04-01-08 15:12**
Analyst: **JAC**

VOLATILES - EPA SW-846/8260B GCMS # 1

ANALYTE/ PARAMETER	RESULT (mg/L)	REG * (mg/L)	MQL (mg/L)	CAS #
Acetone	8.9	400	5.0	67-64-1
Acetonitrile	< 10.0	20	10.0	75-05-8
Acrylonitrile	< 2.5	0.6	2.5	107-13-1
Benzene	9.0	0.5	0.5	71-43-2
Bromodichloromethane	< 0.5	0.3	0.5	75-27-4
Bromoform (Tribromomethane)	< 0.5	70	0.5	75-25-2
Bromomethane (Methyl bromide)	< 1.0	5	1.0	74-83-9
2-Butanone (MEK)	2.5	200	2.5	78-93-3
Carbon disulfide	< 0.5	400	0.5	75-15-0
Carbon tetrachloride	< 0.5	0.5	0.5	56-23-5
Chlorobenzene	< 0.5	70	0.5	108-90-7
Chloroform (Trichloromethane)	< 0.5	6	0.5	67-66-3
1,2-Dichloroethane (EDC)	< 0.5	0.5	0.5	107-06-2
Dichlorodifluoromethane (Freon 12)	< 1.0	700	1.0	75-71-8
1,1-Dichloroethene	< 0.5	0.6	0.5	75-35-4
cis-1,3-Dichloropropene	< 0.5	1	0.5	10061-01-5
trans-1,3-Dichloropropene	< 0.5	(c&t)	0.5	10061-02-6
1,4-Dioxane	< 20.0	400	20.0	123-91-1
Ethyl benzene	0.7	400	0.5	100-41-4
1,2-Dibromoethane (EDB)	< 0.4	0.004	0.4	106-93-4
Isobutanol (Isobutyl alcohol)	21.0	1,000	20.0	78-83-1
Methacrylonitrile	< 10.0	0.4	10.0	126-98-7
4-Methyl-2-pentanone (MIBK)	< 2.5	200	2.5	108-10-1
Methylene chloride (Dichloromethane	< 20.0	50	20.0	75-09-2
Styrene	< 0.5	700	0.5	100-42-5
1,1,1,2-Tetrachloroethane	< 0.5	10	0.5	630-20-6
1,1,2,2-Tetrachloroethane	< 1.0	2	1.0	79-34-5
Tetrachloroethene	< 0.5	0.7	0.5	127-18-4
Toluene	6.1	1,000	0.5	108-88-3
1,1,1-Trichloroethane	< 0.5	300	0.5	71-55-6
1,1,2-Trichloroethane	< 0.5	6	0.5	79-00-5
Trichloroethene	< 0.5	0.5	0.5	79-01-6
Trichlorofluoromethane (Freon 11)	< 1.0	1,000	1.0	75-69-4
1,2,3-Trichloropropane	< 1.0	20	1.0	96-18-4
Vinyl chloride	< 1.0	0.2	1.0	75-01-4
m&p-Xylene	2.9	7,000	1.0	108-38-3&106-42-3
o-Xylene	1.4	(o,m&p)	0.5	95-47-6

QUALITY CONTROL -- SURROGATE RECOVERIES

SURROGATE	RESULT	% RECOVERY	RANGE
Dibromofluoromethane (SS)	0.053	106	80-120
Toluene-d8 (SS)	0.049	98	80-120
4-Bromofluorobenzene (SS)	0.049	97	80-120

Key: TCLP - Toxicity Characteristic Leaching Procedure
EPA - Environmental Protection Agency
TCEQ - Texas Commission on Environmental Quality
MQL - Method Quantitation Limit
REG - TCLP TCEQ Regulatory Limit (User Should Verify)
mg/l - Milligrams per Liter (PPM Volume)
mg/kg - Milligrams per Kilogram (PPM Weight)
* REG<MQL Use MSDS, Process Knowledge

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO044001164

Hazardous for:
D003 - Sulfider
D018 - Benzene

ENVIRON EXPRESS LABORATORIES, INC.
401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

CERTIFICATE OF ANALYSIS NO: 63058.01

Customer: **CES**
Project ID: **Citgo 05**
Project Loc:
Charge/P.O.: **0308-118**

Sample ID: **Untreated Citgo Sour Water TK 37 (Bottom)**
Matrix: **Liquid**
Type: **Grab**

Environ ID: **63058.01**
Sampled: **03-27-08**
Received: **03-30-08**
Reported: **03-31-08**

ANALYTE/ PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	TEST BY	DATE	TIME
ORGANICS								
Phenolics		mg/l	--	10	EPA 600.625	CL		
SULFIDE								
Sulfide (Total)	1,400	mg/l	--	1	SM 4500-S^2 D	CL	03-31-08	16:45
RCI								
Reactive Cyanide	0.84	mg/kg	250	0.25	EPA SW846.7.3	CL	04-02-08	13:30
Reactive Sulfide	0.56	mg/kg	500	0.25	EPA SW846.7.3	CL	04-02-08	13:30
Corrosivity (pH)	9.69	su	=>2; =<12.5	--	EPA SW846.9045D	JC	04-01-08	13:00
Ignitability	> 150	°F	> 140	--	EPA SW846.1010A	DEB	04-01-08	13:00
METALS - TCEQ-TCLP					EPA SW846.1311	MN		
Antimony	< 0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Arsenic	< 0.1	mg/l	1.8	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Barium	< 2.0	mg/l	100	2.0	EPA SW846.6010C	JA	04-02-08	14:03
Beryllium	< 0.05	mg/l	0.08	0.05	EPA SW846.6010C	JA	04-02-08	14:03
Cadmium	< 0.1	mg/l	0.5	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Chromium	< 0.1	mg/l	5.0	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Lead	2.4	mg/l	1.5	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Nickel	< 0.1	mg/l	70	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Selenium	0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Silver	< 0.2	mg/l	5.0	0.2	EPA SW846.6010C	JA	04-02-08	14:03
Vanadium	< 0.1	mg/l	16.8	0.1	EPA SW846.6010C	JA	04-02-08	14:03
Vanadium as V2O5	< 0.2	mg/l	30.0	0.2	EPA SW846.6010C	JA	04-02-08	14:03
Mercury	< 0.02	mg/l	0.2	0.02	EPA SW846.7470A	MN		

Key: **EPA** - Environmental Protection Agency
TCEQ - Texas Commission on Environmental Qu
REG - Regulatory Limit (User Should Verify)
MQL - Method Quantitation Limit
RCVD - As Received (Wet) Basis
mg/l - Milligrams per Liter (PPM Volume)
mg/kg - Milligrams per Kilogram (PPM Weight)

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO044001165

ENVIRON EXPRESS LABS
401 N. 11TH STREET
LA PORTE, TEXAS 77571
281-471-0951 (WORK)
281-471-5821 (FAX)

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COMPANY: CES ENVIRONMENTAL

PLEASE DIRECT FOLLOWING PAGE(S) TO: Clark Hickman

PAGES INCLUDING COVER LETTER: 3 2

FAX: 713-676-1676

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ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 63058.01 1of 3

Customer: **CES**
Project ID: **Citgo 05**
Project Loc:
Charge/P.O.: **0308-118**

Sample ID: **Untreated Citgo Sour Water TK 37 (Bottom)**
Matrix: **Liquid**
Type: **Grab**

Environ ID: **63058.01**
Sampled: **03-27-08**
Received: **03-30-08**
Reported: **03-31-08**

ANALYTE/ PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	TEST BY	DATE	TIME
SULFIDE								
Sulfide (Total)	1,400	mg/l	--	1	SM 4500-S^2 D	CL	03-31-08	16:45

Key: EPA - Environmental Protection Agency
TCEQ - Texas Commission on Environmental Qua
REG - Regulatory Limit (User Should Verify)
MQL - Method Quantitation Limit
RCVD - As Received (Wet) Basis
mg/l - Milligrams per Liter (PPM Volume)
mg/kg - Milligrams per Kilogram (PPM Weight)

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO044001167

[redacted]

Enterprise Products (West Texas)
Sulfuric Acid Tank Disposal

EPAHO044001168

9/4/09
WKG
K-3
(4)

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	
Assigned:	Unassigned:

Folder I.D.#	

Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:		N:		Fuel Surcharge:	Y:	N:
City of Houston:	Y:		N:		4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge

Customer Special Request/Requirement

CONFIDENTIAL

Keenan,

Here is a quote for the tank pickup and management. Please keep in mind that we cannot haul it until it is completely empty of free liquids:
Also, we are quoting this as you would load the tank for us onto our truck.

- Transportation at $69/hour plus fuel surcharge (estimated at 6 hours)
- Tank recycling at $400
- Heel dig out and drumming at $850 flat fee
- Empty drums for heel at $35/each
- Disposal of heel at $200/drum

Please let me know if and when you would like to proceed.

Matt

p.s. it only took me 2 minutes to type this quote.

Sale of RTO

9/4/09
WKS
K-3
(2)

AGREEMENT OF INTENT

A prospective Buyer for the Anguil 12,000 Regenerative Thermal Oxidizer (hereinafter referred to as Equipment) offered for sale by CES Environmental Services, Inc. in Houston, TX (hereinafter referred to as Seller) has been located by Kono Kogs, Inc. This buyer and its representative are listed below.

Seller and/or its representatives agree not to discuss price or negotiate a sale with this Buyer. Should the Buyer purchase or acquire the equipment directly or indirectly through any other source than Kono Kogs, Inc., within six months of this agreement, the Seller shall pay Kono Kogs, Inc. a commission of 40% of the purchase price plus any and all costs of collection, including but not limited to legal fees.

If a dispute concerning the interpretation or application of this agreement arises, the law of Wisconsin will apply and the forum for the resolution of the conflict shall be in Brown County, Wisconsin.

The person signing this agreement affirms that he/she has the authority and is authorized to enter into this agreement as either a principal or agent of the Seller.

Seller agrees to show the machine to Buyer at mutually agreed upon times.

The prospective Buyer is:

ACCEPTANCE:

CES Environmental Services, Inc.	Kono Kogs, Inc.
By: Matt Baum	By: _____
Title: President	Title: _____
Date: 7-28-09	Date: _____

Matt Bowman

From: Matt Bowman
Sent: Tuesday, July 28, 2009 8:58 AM
To: 'Boyd Konowalski'; Loren Thomas
Cc: Steve Stricker; Greg Bowman; Ramiz Tafilaj; Clark Hickman
Subject: RE: Anguil RTO photos

Loren,
I have offered to sell the unit to Boyd for (b) (6) (with bank approval of course). Could you please take digital photos of the unit and the different parts (including all the pieces at our Wayland facility). Once you forward the photos to Boyd, he will send them to his potential customer.
Thanks,
Matt

-----Original Message-----
From: Boyd Konowalski [mailto:boyd@konokogs.com]
Sent: Tuesday, July 28, 2009 8:40 AM
To: Matt Bowman
Subject: Anguil RTO photos

Matt:

If you could send me some current photos of this unit, it would really help.

Sincerely,

Boyd Konowalski
Kono Kogs, Inc.
2503 Beaumont St.
Green Bay, WI 54301
Phone: (920) 432-2699
Fax: (920) 432-2517
email: boyd@konokogs.com
web site: www.konokogs.com

EPAHO04001175

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Phone: 713-676-1460
Fax: 713-676-1676

Quotation

For:
ZaCH System
PO Box 2049 – 914 South 16th Street
LaPorte, TX 77572-2049
Phone: 281-842-0237
Fax: 281-867-4965

Date: June 22, 2009

Description of Equipment to be Sold:

CES Environmental Services, Inc. will offers for sale an 18,000 SCFM, Two-tower, Regernerative Thermal Oxidizer. This oxidizer provides 95% VOC removal.

- CES will sell this RTO (delivered to ZaCH System) at a price of $200,000. CES would require $100,000 upon delivery and $100,000 after the unit is assembled and working.
- CES will provide all information and support services to ensure the unit gets assembled functioning properly. Such help will come in the form of electrical assistance, providing all contractor/consultant names, reports previously produced on the unit, etc.
- Price does not include taxes

If you have any questions or require additional information please feel free to contact me at (713) 826-1329.

Thank you,

Matt Bowman
CES Environmental Services, Inc.

Acceptance Signature:_____ Date:_____

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	
Assigned:	Unassigned:

Folder I.D.#	
Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:		N:		
City of Houston	Y:		N:		
Fuel Surcharge:	Y:		N:		
4-hour Minimum:	Y:		N:		

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO044001177

Kinder Morgan (Penn City)
Cleaning & Tank Destruction

EPAHO044001178

Call Kinder Morgan

Aubrey

713 ~~742~~ 724

8586

File Folders

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TM

8/4/09
WCS
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©

United States Business
Council for Sustainable Development

EPAHO04001181

6/4/04
K-3
9

BY-PRODUCT SYNERGY PROJECT PARTICIPANT AGREEMENT

This Agreement ("Agreement") dated as of _____, 2009 between _____, a _____ created under the laws of _____ ("Participant"), and the United States Business Council for Sustainable Development, a not-for-profit corporation created under the laws of Texas ("USBCSD" and collectively, the "Parties").

RECITALS

WHEREAS, *By-product Synergy* is the practice of matching under-valued by-product streams with potential users, helping to create new revenues or savings for the organizations involved while simultaneously addressing social and environmental impacts;

WHEREAS, the USBCSD enters into this Agreement in its capacity as the Project Coordinator for the *By-product Synergy* Project in the Greater Houston, Texas Region (the "BPS Project");

WHEREAS, the Foundation for Sustainable Development ("FSD") is a Texas non-profit 501(c)(3) organization with an office at 4425 South Mopac, Building 2, Suite 202, Austin, Texas 78735 and is a supporting organization as described in Section 509(a)(3); and the FSD was established to support the work of the US BCSD.

WHEREAS, the BPS Project will be implemented in and around the City of Houston, Texas (the "Project Area") beginning in March, 2009, with the possible expansion of the BPS Project into other areas following implementation of the BPS Project in the Project Area;

WHEREAS, the USBCSD has substantial experience in developing and implementing projects similar to the BPS Project and the Participant desires to participate in the BPS Project in order to take advantage of the potential benefits of the BPS Project to the extent possible, as set forth herein;

NOW, THEREFORE, in consideration of the mutual agreements and covenants contained herein, the USBCSD and Participant agree as follows:

AGREEMENTS

1. Obligations of the Parties

1.1 The USBCSD shall be primarily responsible for facilitating the participation of the Participant in the BPS Project and coordinating the BPS Project tasks described in the Statement of Work set forth in Attachment A (the "Services"). The Services shall include, but not be limited to, organizing meetings with the BPS Project Team and Participant; collecting, managing, and analyzing data from Participant relevant to implementing the BPS Project; assisting in the establishment of baselines from which net cost savings and net incremental revenues can be measured; and providing guidance in order to promote the success of the BPS Project. The Parties agree that the Services as set forth herein may be modified by written agreement of the Parties in order to accommodate the funding, timeliness, and extent of the BPS Project. The Parties agree further that performance of the Services by the USBCSD, including any modification of the Services by written agreement of the Parties, does not guarantee that net cost savings and/or net incremental revenues will be realized by Participant.

1.2 Participant shall select one department or business unit to represent Participant in the BPS Project and provide such contact information to the USBCSD. Participant shall provide all appropriate information pertaining to Participant's operations in the Project Area as reasonably requested from time to time by USBCSD in order to facilitate the performance of the Services set forth in this Agreement. Participant reserves the exclusive right to decide questions of appropriateness and reasonableness. Such information may include, but

not be limited to, process data from participating business units, raw material and by-product quantities and chemical characteristics, process descriptions, and process flow diagrams depicting participating business unit manufacturing processes. All such information provided to USBCSD is subject to the confidentiality provisions in Section 3.1. Notwithstanding the performance of the Services by the USBCSD, Participant shall be responsible for internal matters concerning the BPS Project, including internal communications, meeting arrangements and logistics, attendance at meetings, and overall internal BPS Project guidance.

2. Project Cost and Revolving Fund

2.1 Subject to the limitations provided herein, to participate in the Project, Participant shall pay the USBCSD a yearly fee toward total BPS Project cost ("Yearly Fee"). The amount of the Yearly Fee shall be as set forth on Attachment B – Fee Schedule.

2.2 Except as provided in this Article 2, the USBCSD shall bear all necessary and normal expenses of providing the Services and any other obligations under this Agreement.

3. Confidentiality.

3.1 The USBCSD and its contractors and subcontractors shall abide by the following confidentiality provision: the USBCSD shall maintain the confidentiality of all confidential information provided by Participant and identified as confidential ("Participant Confidential Information") and will not use or disclose such Participant Confidential Information to others without the prior written consent of Participant except for the purposes contemplated herein or when such use or disclosure is required by order of a court or governmental agency. Prior to disclosing Participant Confidential Information to the Project Team and other companies participating in the BPS Project, such other participants shall be bound by confidentiality provisions substantially similar to those contained in this Section 3.1. Participant shall maintain the confidentiality of all information identified as confidential and provided to Participant by the USBCSD ("Project Confidential Information") and will not use or disclose such Project Confidential Information to others without the prior written consent of the USBCSD, except for the purposes contemplated herein or when such use or disclosure is required by order of a court or governmental agency. Information that is generally known to the public other than as a result of a breach of this section, or that has been disclosed to the USBCSD or Participant, as the case may be, on a non-confidential basis by third parties who have a right to do so shall not be deemed Participant Confidential Information or Project Confidential Information for purposes of this Section 3.1. The terms of this section shall survive and remain in effect following any termination of this Agreement for a period of five (5) years. The USBCSD shall be allowed to publish or grant rights to publish information regarding the BPS Project, provided that no Participant Confidential Information is disclosed or able to be discerned from the publication without the prior written consent of the Participant.

4. Terms and Termination.

4.1 The initial term of this Agreement shall extend from the date indicated above and expire five (5) years from such date (the "Initial Term"). Participant and the USBCSD may agree in writing to extend the Initial Term and renew this Agreement on an annual or other basis thereafter.

4.2 **Termination for Lack of Funding.** The USBCSD may terminate this Agreement at any time with thirty (30) days prior written notice if the USBCSD does not receive sufficient funding for the BPS Project from non-profit funding sources, the Participant, and other companies participating in the BPS Project; provided, however, that in order to prevent termination of this Agreement under this provision, the Services as set forth herein may be modified by written agreement of the Parties in order to accommodate the funding, timeliness, and extent of the Project.

4.3 **Termination for Default**

(a) Participant may terminate this Agreement for default, in whole or in part, if, after thirty (30) days from the USBCSD's receipt of Participant's written notice of such default from Participant, the USBCSD fails to comply with any of the terms of this Agreement, fails to make progress so as to

endanger performance of this Agreement, or fails to provide adequate assurance of future performance. In that event, Participant shall not be liable for any services or supplies not accepted.

(b) If this Agreement is terminated for default, Participant may require the USBCSD to deliver to Participant any supplies and materials, manufacturing materials, and manufacturing drawings that the USBCSD has specifically produced or acquired for the terminated portion of this Agreement and for which Participant has paid the USBCSD. Participant shall pay the agreed upon price for services performed and accepted in addition to completed supplies delivered and accepted. Participant and the USBCSD shall agree on the amount of payment for all other deliverables.

4.4 The USBCSD shall not be liable to Participant for delays in performance occasioned by causes beyond the USBCSD's or its supplier's or subcontractors' reasonable control and without its fault or negligence.

4.5 The rights and remedies of Participant in this clause are in addition to any other rights and remedies provided by law or under this Agreement.

4.6 This agreement may be terminated for convenience on thirty (30) days' written notice or if either party fails substantially to perform through no fault of the other and does not commence correction of such nonperformance within five (5) days of written notice and diligently complete the correction thereafter.

5. Compliance with Law.

5.1 USBCSD and Participant shall comply with all applicable federal, state, and local laws and ordinances and all pertinent orders, directives, rules, and regulations and such compliance shall be a material requirement of this Agreement; provided, however, that the USBCSD shall not be liable or assume any responsibility for, nor should the USBCSD's acts or omissions related to the BPS Project be deemed to excuse or otherwise exempt Participant from, compliance by Participant with all applicable federal, state, and local laws, regulations, ordinances, and directives of any federal, state, or local governmental agency.

5.2 The USBCSD shall include language comparable to Section 5.1 in all contracts and subcontracts involving the performance of Services pursuant to this Agreement.

6. Notices. Whenever under this Agreement one party is required or permitted to give notice to the other, such notice shall be in writing and delivered by hand, facsimile, overnight mail, or United States mail to the attention of:

To USBCSD:

United States Business Council for Sustainable Development
Attn: Executive Director
4425 South Mopac, Building 2, Suite 202
Austin, Texas 78735

To Participant:

7. Governing Law. This Agreement shall be construed in accordance with the law of the State of Texas. Any controversy under this Agreement shall be finally resolved by binding arbitration under the Commercial Arbitration Rules of the American Arbitration Association. The seat of arbitration shall be Houston, Texas, and the arbitration shall be conducted in the English language. Each party shall have the right to appoint one

arbitrator and the appointed arbitrators shall jointly appoint the third arbitrator. The award of the arbitrators shall be final and binding. The arbitrators are expressly empowered to award one or both parties costs and fees.

8. Successors and Assigns. All of the provisions hereof shall inure to the benefit of and be binding upon the respective successors and assigns of the parties hereto; provided, however, that neither party shall assign this Agreement without the prior written consent of the other party hereto.

9. Interpretation. The headings of articles, sections and other subdivisions of this Agreement have been inserted for convenience of reference only and shall in no way restrict or otherwise modify any of the terms or provisions hereof or affect in any way the meaning or interpretation of this Agreement. All provisions of this Agreement were negotiated by the parties hereto and this Agreement shall be deemed to have been drafted by each of the parties hereto.

10. Number of By-product Synergies Identified. The USBCSD does not guarantee the number or success of by-product synergies that are created or implemented as a result of the performance of the Services or the execution of the BPS Project.

11. By-product Synergy Implementation. The USBCSD, by itself, is not responsible for the actual implementation of by-product synergies that may result from the execution of the BPS Project. Final implementation of the identified by-product synergies will be at the sole discretion of Participant and the Project Team.

12. Limitation of Liability. Except for breach of confidentiality obligations hereunder, neither party herein shall be responsible for the other party's consequential damages, loss of profit or operations, or any such impact that results from the execution of the BPS Project or any other obligation under this Agreement, whether such liability arises in contract, tort, or any other cause of action.

13. Site Safety/Security. In the event that Services are provided on Participant property, the USBCSD agrees that any and all services provided on Participant property shall be performed in accordance with the terms and conditions of the applicable Participant's rules and procedures for service contractors provided such site or office rules and procedures are provided to the USBCSD. The USBCSD shall comply with any other plant site or office rules and procedures for the locations at which the USBCSD will provide services provided such site or office rules and procedures are provided to the USBCSD. In addition, the USBCSD shall maintain records of all recordable injuries or illnesses (as defined by any government entity) occurring to the USBCSD employees while performing services. The USBCSD shall provide copies of such records to Participant upon request.

14. Non-exclusivity. Participant reserves the right to perform any services not covered by this Agreement, issue purchase orders or addenda hereto, and may award contracts to others for such services. The USBCSD shall fully cooperate with Participant or with such other contractors and integrate the Services with the services of Participant and such other contractors in a commercially reasonable manner and as may be directed by Participant. The USBCSD shall not commit or permit any act which will interfere with the performance of services by Participant or by any other contractor.

15. Independent Contractor. The USBCSD is an independent contractor and shall assume all the rights, obligations and liabilities applicable to it as such independent contractor. Neither the USBCSD nor any of its employees, agents, or representatives shall be considered an employee or agent of Participant, nor shall any partnership, co-venture or joint-employer relationship be created by virtue of this Agreement or of its performance. All persons engaged by the USBCSD, either as employees, subcontractors, or agents to assist the USBCSD in the performance of this Agreement, will be of its own selection, for its own account, at its own expense and under its supervision. No prior course of dealing or performance between Participant and USBCSD shall be of any effect to modify in any respect the USBCSD's status under this Agreement as an independent contractor.

16. Amendments. This Agreement may be amended only by a written instrument executed by Participant and USBCSD.

17. Entire Agreement. This Agreement, with its attachments, embodies the complete, exclusive and final agreement between the parties with respect to Services and supersedes any and all other communication, written, oral or otherwise between the parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

UNITED STATES BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT

Name: Andrew Mangan
Title: Executive Director
Date: _____

_____
[PARTICIPANT]

By: _____
Name: _____
Title: _____
Date: _____

Attachment B
Fee Schedule

1. The Yearly Fee shall be based on the gross revenues of the Participant in the previous fiscal year and, if applicable, the company's status as a US BCSD Founding Member or new full member.

2. **Members of the US BCSD** shall pay the following Yearly Fee to participate in the BPS Project, provided that the Founding Member has paid its most recent dues for continuing membership in the US BCSD:
    a. $2,500 if gross revenues exceeded $25,000,000;
    b. $1,250 if gross revenues were between $5,000,000 and $25,000,000;
    c. $500 if gross revenues were less than $5,000,000.

3. **Non-members** shall pay the following Yearly Fee to be a Participant in the BPS Project:
    a. $5,000 if gross revenues exceeded $25,000,000;
    b. $2,500 if gross revenues were between $5,000,000 and $25,000,000;
    c. $1000 if gross revenues were less than $5,000,000.

    As a Participant in the BPS Project, the company shall also be entitled to a one-year associate (non-voting) membership in the US BCSD.

4. The first Yearly Fee shall be due within thirty (30) days of the effective date of this Agreement. Subsequent Yearly Fees shall be due at 12-month intervals thereafter. Subsequent yearly fees shall be due at 12 month intervals after the first BPS project kickoff meeting referenced in Attachment A.

ATTACHMENT A –
STATEMENT OF WORK

Task 1. Finalize Scope and Project Team
A US BCSD By-Product Synergy project team has been organized that includes a project coordinator, project manager, project advisor and technical leader. A Steering Committee will be organized comprised of members of the Foundation for Sustainable Development, a BPS Project Team representative, a representative of the City of Houston, and representatives of key participating companies ("Participants"), governmental departments and other organizations. The BPS Project scope will be finalized after the number and diversity of Participants is established and funding is secured. A BPS Project web site will be launched by USBCSD for information dissemination about the BPS Project to the general public. A confidential website for access by Participants will be launched as part of the BPS Project implementation. Secure access information will be provided to Participants.

Task 2. Project Kickoff
A BPS Project kickoff meeting will be held to introduce the BPS Project to Participants, and others that might participate in the BPS Project but have not yet entered an agreement to do so. Discussions of the material flow interchange and potential synergies will commence at the kickoff meeting.

Task 3. Data Collection
Designated representatives from each Participant will be responsible for completing and submitting data collection templates on an agreed completion date. The data collection templates will catalogue inputs, products, by-products, co-products, wastes, and other materials that will be evaluated for synergies as part of the BPS Project. It is essential that Participants complete the data collection templates and submit them on the designated due date since the data are the building blocks to forming potential synergies. Members of the BPS Project Team will be available to make site visits to Participants' facilities to assist with the identification of relevant data and potential synergies.

Task 4. Data Analysis
The BPS Project Team will upload the data collection templates to the BPS Project's confidential web site for reference by Participants. The data provided by Participants will be in the format provided in the data collection template. Only the Project Team, Participants that have executed agreements with the USBCSD and those who are involved in the data analysis will be provided access to the web site due to the confidential nature of the information. A separate area of the US BCSD web site will be used for information dissemination about the BPS Project to the general public.

An independent review of the database will be conducted by the Project Team and select outside consultants, if necessary, all of whom will be required to sign confidentiality agreements. The objective of this analysis is to provide an external view of synergy ideas early in the BPS Project process to help guide Participants.

Task 5. Working Meetings
The discussions of material flow interchange and potential synergies that began in the kickoff meeting will continue in subsequent working meetings during which Participants will progressively share more details of one another's material flows and process by-products and other materials to identify and prioritize synergies.

The Project Manager and Project Advisor will co-facilitate these meetings, supported by the Technical Leaders who will assist in developing the content and facilitation tools relevant for productive discussions. The Project Manager will arrange logistics and ensure participation of team members and Participants in these meetings. The facilitators will set the tone for the working meetings, encouraging interactions and discussions. They will lay out the BPS Project schedule and milestones, introduce successive BPS steps using facilitation tools and techniques, and work with BPS Project working groups focused on specific synergy categories to formulate action plans and identify potential implementation barriers. The facilitators will emphasize the action-oriented nature of the BPS Project and the importance of adhering to milestones.

Once by-products have been catalogued from all Participants, they will be ranked according to importance for

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Participants. Those ranked as high priorities will garner the most attention in future working meetings. Working groups will be formed of Participants who share interest in similar by-products (e.g., gypsum), material group (e.g., aggregates), or synergy issue (e.g., transportation). The goal of the working groups is to further evaluate and prioritize synergies for opportunities that have the best chance for success. Synergy Project Templates will define the opportunity, due diligence, scope, timeframes, barriers and resource needs to implement the synergies. The Project Team will provide a Potential Synergy Report and continue to provide assistance in determining ways to overcome barriers to implementing priority synergies.

Task 6. Synergy Implementation and Evaluation

The Project Team will assist Participants in establishing baselines from which to measure economic, environmental, and societal synergy benefits and in monitoring and reporting the benefits received from implemented synergies. Participants will initiate synergy implementation following the actions identified in the Synergy Project Templates. Participants will ultimately be responsible for implementation of the synergies in which they are involved pursuant to agreements or other means as between relevant Participants with respect to specific synergies, including assurances that all federal, state and local environmental laws and regulations are addressed in those transactions. The Project Team will provide an initial Synergy Implementation Report highlighting results and opportunities specific to each Participant.

Task 7. Project Management

The Project Manager will be responsible for the overall management and reporting of the BPS Project. The Project Manager will ensure the BPS Project is conducted on-time, on-budget and on-schedule. The Project Manager will also lead communications with the Project Team and be responsible for approving monthly status reports summarizing performance. The Project Team will be advised throughout the process by the Steering Committee, which will also oversee BPS Project costs.

DELIVERABLES:

- *Meeting Minutes* – The Project Manager will prepare summary minutes for all BPS Project meetings and distribute to the Project Team and Participants.
- *Potential Synergy Report* – The Project Manager, Project Advisor and Technical Leaders will prepare the Potential Synergy Report after evaluation of Synergy Project Templates and distribute to the Project Team and Participants.
- *Synergy Implementation Report* – The Project Manager, Project Advisor and Technical Leaders will produce an Initial Synergy Implementation Report summarizing synergies chosen for implementation and distribute to the Project Team and Participants.
- *Year-End Report* – The Project Manager will prepare a year-end report detailing the BPS Project status and distribute to the Steering Committee, Project Team and Participants.

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The United States Business Council for Sustainable Development is the leading organization creating cross-industry relationships that solve environmental and social challenges while improving its members' bottom line.

Membership Benefits

The invitation-only membership structure of the Business Council gives members a seat at the table to share best sustainability practices within an established process that lends itself to openness among members not available in other networking settings. Membership also provides access to help from pioneers in sustainable development.

Member companies come from a wide range of sectors — from energy and chemical to construction and manufacturing. US Business Council for Sustainable Development focuses on the possibilities of collaboration among industries, not the differences. Business Council members work together on community projects surrounding three platforms critical to sustainability — Energy and Climate Change, Eco-system Services and Water Resource Management.

Energy and Climate Change — Energy efficiency is the least expensive way to address and affect climate change. US Business Council for Sustainable Development members pioneer formal processes to identify and implement solutions that help businesses become more energy efficient. Example: The Business Council worked with the City of Chicago to establish a network of businesses that in one year diverted more than 22,000 tons of landfill-bound waste, achieved $4.5 million in savings and new revenue, and reduced almost 50,000 tons of CO2 emissions.

Eco-System Services — The Business Council finds cost effective ways to conserve and restore natural resources. Example: Business Council members facilitated the reforestation of 100,000 acres of Lower Mississippi cropland — improving flood control, creating wildlife habitats and developing new income streams for landowners.

Water Resource Management — The Business Council is developing and testing processes to identify and implement successful cross-industry solutions to water contamination, water conservation, over-pumping and inadequate planning.

Conditions of Membership

Membership of the US BCSD is by invitation of the Executive Committee and is based on a demonstrated commitment to the principles of sustainable development and interest in working with others to achieve triple bottom line results. Member companies are expected to assign representatives who actively participate in US BCSD activities and meetings. The US BCSD meets bi-annually to decide the organization's priorities and to discuss its strategic direction. Attached is an activity survey and participation page to help you determine areas of interest.

Membership includes a $10,000 annual fee, which confers full voting privileges and enables members to participate in determining strategic direction of the organization. To receive more information about the US BCSD and its programs, please contact our office.

4425 South Mopac, Bldg. II, Suite 202; Austin, Texas 78735; Tel: (512) 892-6411

Membership Information for the United States Business Council for Sustainable Development

_____

Name of Member Company

Having accepted the US BCSD Conditions of Membership attached hereto, hereby applies to become a Member Company of the US BCSD to be represented on the Council of the US BCSD by:

_____

Name and title of Council Member

Alternate:

_____

Name and title of the Alternate

US BCSD member companies are expected to assign representatives who actively participate in US BCSD activities. Please indicate which project platform(s) and/or partnership activities you are interested in as a new member. This is intended to help connect you with areas of interest and is not a commitment beyond participation.

Platforms

- **X Ecosystem Services**
- **X Energy & Climate Change**
- **X Water Resource Management**
- **X Other: By-product Synergy**

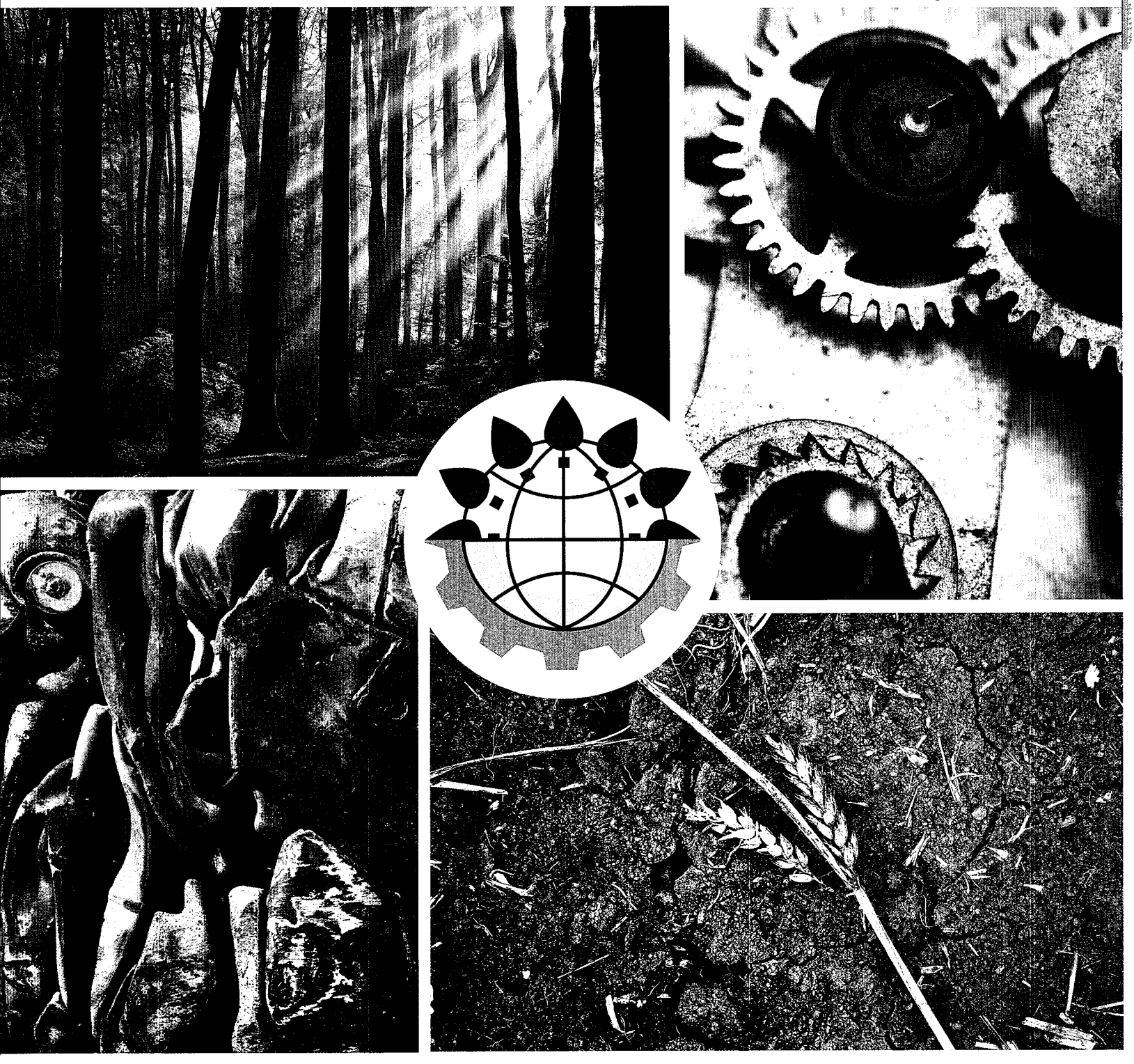
Partnerships

- ☐ **World BCSD**
- ☐ **China BCSD**
- **X US EPA**
- **X Other: US DOD, US DOE, NIST/MEP**

4425 South Mopac, Bldg. II, Suite 202; Austin, Texas 78735; Tel: (512) 892-6411

PROJECT PLATFORMS & PARTNERSHIPS	**RANK:** Please rank your interest in activities listed with a 1 - 4. *1 = high interest* *4 = low interest* Use each number only once.	**COMPETENCIES:** Please provide information on your organization's competencies. Competencies are defined as: • your organization's **goals** for the activity (e.g., market development or eco-efficiency) • the **skills** you can bring (e.g., technology, process) • **geographic** regions with facilities that might engage in the project (e.g., Gulf Coast, California, Great Lakes). Please use as much space as your require.
Ecosystem Services		Goals: Skills: Geographic Region:
Energy & Climate Change		Goals: Skills: Geographic Region:
Water		Goals: Skills: Geographic Region:
China BCSD		Goals: Skills: Geographic Region:
World BCSD		Goals: Skills: Geographic Region:
OTHER		

United States Business Council for Sustainable Development



Creating value through action

A partner of the World Business Council for Sustainable Development

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MEET THE US BCSD

What is the US BCSD?

The US BCSD is a non-profit association of businesses whose purpose is to deliver highly focused, collaborative projects that help its members and partners demonstrate leadership in the United States on sustainable development and realize business value.

What is Sustainable Development?

Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs

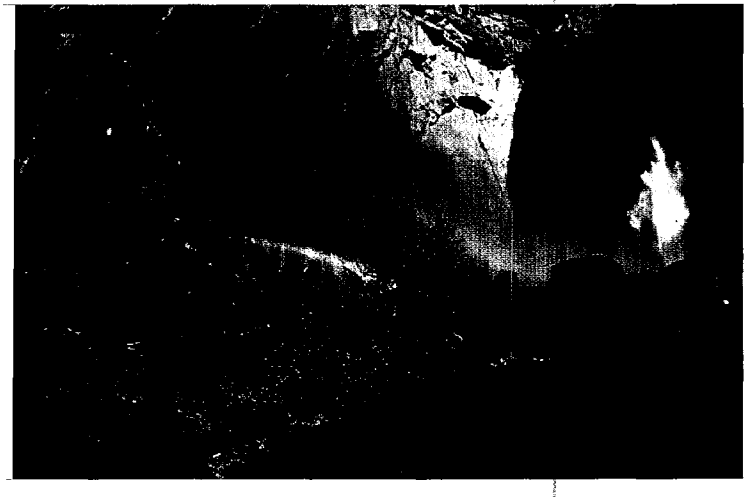
Background Information

Launched in 2002, the US BCSD is a partner organization of the World Business Council for Sustainable Development (WBCSD), a global network of 180 international companies with members drawn from 30 countries and 20 major industrial sectors. The WBCSD plays a leading role in shaping the business response to the challenges of sustainable development. The US BCSD plays a complimentary role by communicating those policies to the US business community and its stakeholders, and by implementing projects that apply sustainable development principles to real world problems. Up to 2003, the US BCSD was the Business Council for Sustainable Development Gulf of Mexico, which was established in 1993. The US BCSD believes that business success will be measured by its contribution to economic, social, and environmental sustainability.

Purpose

The United States Business Council for Sustainable Development demonstrates the business value of sustainable development through:

- Creating initiatives that foster sustainable development while creating value for business
- Offering networking and partnership opportunities
- Providing a voice for business in the sustainable development field
- Promoting public and agency credibility of our members



"If future generations are to remember us with gratitude rather than contempt, we must leave them more than the miracles of technology. We must leave them a glimpse of the world as it was in the beginning, not just after we got through with it."

– President Lyndon Johnson (on signing of the Wilderness Act, 1964)

US BCSD PROJECTS

United States Business Council for Sustainable Development

A WBCSD partner since 1993

Background Information

The US BCSD is a non-profit association of businesses whose purpose is to deliver highly focused, collaborative projects that help its members and partners demonstrate leadership in the United States on sustainable development and realize business value.

Mission

The United States Business Council for Sustainable Development creates value through:

- Initiatives that foster sustainable development
- Networking and partnerships
- Providing a voice for business

Chairman

Sabrina Watkins, ConocoPhillips

Vice Chairman

David Carroll, LaFarge North America

Contact

United States Business Council for Sustainable Development (US BCSD)
Andy Mangan, Executive Director
4425 South Mopac, Building 2, Suite 202
Austin, TX 78735 USA
Tel: (512) 892-6411; Fax: (512) 892-6443
E-mail: mangan@usbcsd.org
Website: www.usbcsd.org

Member Companies

Baker Botts
Baker Hughes
Battelle Pacific NW National Lab
Blasland, Bouck, & Lee
ConocoPhillips
Cook Composites and Polymers
Conservation Capital
The Dow Chemical Company
ENSR | AECOM
Holcim
Hydrodec
Lafarge
Marathon Oil
Shell
Temple-Inland
Thompson & Knight
URS

US BCSD project platforms

The US BCSD conducts its projects in five platform areas:

- By-Product Synergy
- Ecosystem Services
- Water
- Value Chain
- Energy & Climate Change

Each of these platforms is described below.

By-Product Synergy

By-product synergy (BPS) is the practice of matching under-valued by-product streams with potential users, helping to create new revenues or savings for the organizations involved while simultaneously addressing social and environmental impacts. Participating company engineers and operations staffs are exposed to each other's production processes, input needs, and waste streams and through facilitated collaboration identify innovative ways of integrating their operations to cut pollution, save energy, reduce material costs and improve the bottom line. The US BCSD pioneered this award-winning process and has conducted ten regional by-product synergy projects across North America since 1997 and exported the concept to the United Kingdom, where it has become one of the most productive eco-efficiency programs in the country.

- **Chicago Project** – Twenty companies and five departments of the City of Chicago launched the Chicago Waste to Profit Project in November 2006. Project goals include implementation of at least five synergies during the first 18 months of the project. Funding support comes from the participating companies, the City of Chicago, US EPA Region V, and the Illinois Department of Commerce and Economic Opportunity. The project will apply aspects of the UK National Industrial Symbiosis Program and the US BPS by-product synergy approach.

BPS projects are at various stages of development in Kansas City, Ohio, Milwaukee, Southeast Michigan and Puget Sound.

Ecosystems Services

The platform objective is to develop process models and pilot projects to demonstrate how responsible parties can conserve and restore natural resources cost effectively through innovative market mechanisms that address real barriers and engage important stakeholders.

- **Green Brownfields** – Inactive industrial sites and other brownfield properties will be transformed into productive green space under this initiative.

  Brownfield sites are properties that are underutilized and difficult to develop because of contamination concerns. These sites, many of which are located near rivers and coastal estuaries, nonetheless can have significant ecological potential. And while brownfield reclamation is not new – there is plenty of activity throughout the United States in returning brownfields to commerce – the new concept that this project offers is the use of market forces to accomplish ecological outcomes as opposed to a new strip center or apartment complex. This approach offers unique opportunities for public benefit and for the landowner.

  The first project of this kind is the Houston/Galveston Green Brownfields Initiative. As one of the nation's most industrially active regions, Houston/Galveston is blessed with a robust economy that produces a wide array of goods, including crude oil, natural gas, petroleum products, chemicals, and oil field equipment. An inevitable legacy of this industrial success is a sizeable inventory of brownfields. By converting some of these sites to green space, the initiative will enhance the quality of life in this rapidly-growing region and provide landowners with a viable and cost effective means of turning a liability into an asset.

AND PARTNERSHIPS

- **Sustainable Forestry** – When Hurricane Katrina's flood waters devastated New Orleans and much of the Gulf Coast in 2005, the world learned a valuable lesson about the importance of maintaining natural barriers to protect communities from the forces of nature. The depletion of forests and wetlands, which would have absorbed some of the advancing water, helped turn a devastating storm into a truly cataclysmic event.

  The disaster gave new urgency to an ongoing US BCSD-led reforestation project in the seven states of the Lower Mississippi River Valley, where business, environmental, government and academic leaders are joining forces to convert marginal farmland in river bottomland into sustainable forests. The project has resulted in more than 100,000 acres of cropland being converted to cottonwood and hardwood forests. The potential value from these conversions as a new crop for the landowners is estimated to be in the hundreds of millions of dollars. By reestablishing trees along the river valley, the natural barriers that can slow rainwater runoff and mitigate flooding are being restored. They are also helping protect some of the nation's most important fish and wildlife habitats from the ravages of human activity.

Energy & Climate Change

Platform objectives are to identify and support projects that encourage transition towards a sustainable energy economy, address climate change and reduce energy and carbon intensity throughout lifecycles while creating economic value.

- **Biofuels** – Companies representing the biofuels supply chain are working with technical experts from the Pacific NW National Lab to demonstrate the economic and technical feasibility of converting woody waste streams to fuel oils that could be introduced into existing refineries along with crude oil. A pilot plant is contemplated along with plans to test product in a nearby refinery.
- **Alternative Fueling Stations** – The US Army is working with the US BCSD to establish alternative fueling stations that would provide fuels for use in government (non-tactical) vehicles as well as for interested private citizens. Initial efforts are focused at Fort Lewis, Washington.

Water Resource Management

Water is a strategic issue for industry, representing both a business opportunity and potential future risk to sustainable operations. Businesses are directly affected by contamination of surface and subsurface sources, over-pumping and inadequate planning and utilization patterns. In response to these challenges, the US BCSD has set a goal of identifying specific water projects that will yield tangible results through integrated strategies and solutions.

Integrating the Value Chain

This project platform is aimed at finding effective and beneficial links among participants in a value chain. The goal is to define specific projects that demonstrate the benefits of linking previously unlinked stakeholders in a long and broad value chain. Elements may include:

- Approaches for sharing values and encouraging collaboration
- Approaches for cooperative implementation
- Methods to assess the sustainability of an entire value chain
- Methods to quantify options for improvements

Partnerships

- **United States Army** – The US Army is working with US BCSD member companies on projects that provide sustainable products, services, and business opportunities. The new Army Strategy for the Environment: Sustain the Mission – Secure the Future establishes a long-range vision that enables the Army to meet its mission today and into the future. Sustainability is the foundation for a strategy that focuses addressing present and future needs while strengthening community partnerships that improve the Army's ability to organize, equip, train, and deploy.
- **China Business Council for Sustainable Development** – Business leaders from the United States and China will collaborate on important economic, social and environmental projects under an agreement signed by leaders of the United States and China Business Councils for Sustainable Development. The agreement calls for the two councils to establish a joint exchange center in Beijing to develop projects that provide economic, environmental, and societal benefits and to disseminate project results. Initial efforts will focus on energy efficiency in three areas of concern for the councils: expanding the use of clean-burning bio-fuels, creating a more sustainable strategy for the cement industry, of which China is the world's leading producer, and implementing by-product synergy, a system that allows companies from one industry to reuse by-products as feedstocks for another.

"(Waste = Loss): The first rule of business is to survive and the guiding principle of business economics is not the maximization of profit, it is the avoidance of loss"

-Peter Drucker

MEMBERSHIP BENEFITS

"In the long term, the economy and the environment are the same thing. If it's unenvironmental it is uneconomical. That is the rule of nature."

- Mollie Beattie, director of US Fish and Wildlife Service, 1993-1996

Benchmark Sustainability Projects

The primary work of the US BCSD is to deliver projects that demonstrate the business value of sustainable development. Projects are member-led and are designed to create value through economic returns and environmental and social benefits. The US BCSD leverages industry resources with matching funds from government, foundation, and partner organizations.

Quarterly newsletters and the US BCSD website keep members informed on projects, conferences, and current events.

Networks & Partnerships

The US BCSD is an assembly of industry leaders seeking collaborative, non-confrontational approaches to environmental protection, stewardship and community development. Members gain opportunities to work constructively with local, state and federal governments, non-governmental organizations, academia, and other industries to define the values of sustainable development.

As an active WBCSD partner, the US BCSD is linked with hundreds of like-minded corporate leaders on six continents. We bring additional perspectives on US issues, including those important to smaller companies that may not have representation at a global level. For current WBCSD members, involvement in the US BCSD helps link global strategies for sustainable development to the US operations level.

A Voice for Industry

Experience from projects forms the foundation of the US BCSD's voice for business on sustainable development in the United States. Project results help members anticipate emerging social and environmental trends that may impact business activities.

Public and Agency Credibility

Council membership demonstrates corporate leadership in sustainable development, conferring public credibility and opening doors to constructive relationships with government agencies and non-governmental organizations. Membership recognition extends into relationships and networks on local, state, federal, and international levels.

Council Operations

The US Business Council is supported by member dues, projects and through contributions to the Foundation for Sustainable Development, a nonprofit corporation dedicated to charitable and educational promotion of sustainable development. Members formally meet twice each year to discuss projects and guide Council direction. Member companies appoint a senior executive to represent them at the Council's meetings and to serve as their main contact. Membership in the US BCSD is by invitation, but any company dedicated to sustainable development is invited to contact us.

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"There's nothing you can do with somebody who has decided that [sustainable development] isn't for them. My thought is: I love to compete with people who think that way."

– Dr. Gordon Forward, Chairman Emeritus, US BCSD and CEO Chaparral Steel, Retired

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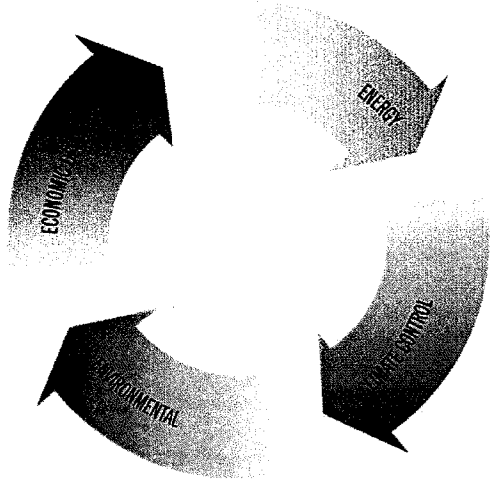
AN INTRODUCTION TO BY-PRODUCT SYNERGY

ZERO WASTE OR 100 PERCENT PRODUCT

By-product synergy (BPS) is the matching of under-valued waste or by-product streams from one facility with potential users at another facility to create new revenues or savings with potential social and environmental benefits. The methodology introduces public and private participants to one another as reuse partners and enables them to establish an ongoing collaborative network. On another level, by-product synergy offers a shift from a waste disposal to a reuse model based on regional industry and community collaboration. This leads to solutions across a number of key areas including energy, waste, water, carbon, resource management, research and education and corporate social responsibility.

The process begins by cataloging each participating organization's inflows and outflows in a confidential data base that is analyzed for synergies by an experienced project team and through facilitated working sessions with the participants. Participants develop action plans for synergies determined to be commercially viable, and organize strategies for addressing technical, regulatory or other barriers. Synergies typically cut pollution, save energy, reduce material costs, improve internal processes and improve the bottom line. Regulators have demonstrated a willingness to encourage and support the permitting of reuse options that deliver demonstrable environmental benefits.



Benefits

BPS programs have achieved remarkable success in locations throughout the United States. Established and emerging BPS programs are underway in Chicago, Kansas City, Ohio, New Jersey, New England, the Gulf Coast, Puget Sound, and the United Kingdom. The Council worked with the City of Chicago in 2007 to establish a network of businesses that by 2008 had diverted more than 22,000 tons of landfill-bound waste, achieved $4.5 million in savings and new revenue, and reduced 50,000 tons of CO2 emissions. In Kansas City companies and regulatory agencies have worked together for more than three years and explored more than 50 synergies, 29 of which have resulted in reuse of more than 33,000 tons of landfill material.

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Participants in the BPS process realize a range of environmental, economic and social benefits. Among others, these include increases in energy efficiency (with corresponding reductions in GHG emissions); reductions in energy resource consumption (e.g., motor fuels for transportation); decreases in virgin material usage; reductions in both conventional and persistent toxic pollutant discharges (to multiple media); and significant reductions in waste volumes going to landfills.

The social benefits include preservation of increasingly scarce resources (including landfill capacity); job preservation/creation (particularly within the small business community); improvements in the competitiveness and sustainability of local industries; and reductions in vehicle miles traveled (VMT) associated with hazardous waste transport on public roadways. Also significant is the heightened profile that participating companies enjoy as a good neighbor and environmentally conscious member of the corporate community. The economic leverage that these programs have delivered to date is well in excess of 5/1 in terms of economic value created as a function of the investments of public and private sector funds made to organize and drive these projects forward.

Participation is particularly beneficial from a regulatory perspective. The US Environmental Protection Agency has been a long-time supporter of BPS, actively working with synergy project teams to advance environmentally and economically beneficial synergies. Such support has also been seen at the state and local governmental level, both within the regulatory and economic development communities.

Keys to Success
BPS programs share four principal "secrets of success:"

- **Diversity**: Participants represent a wide variety of industries and organizations, thereby broadening the markets in which participants can find opportunities.
- **Communication**: BPS provides a safe forum to share ideas without fear of legal, regulatory or other threats. The process stimulates thinking beyond fencelines.
- **Partnerships**: By leveraging technical consultants, regulatory agencies, research organizations and funding sources to assist participants, barriers to implementing the synergies are greatly reduced.
- **Quantifiable Benefits**: All BPS programs carefully track associated environmental, economic and social benefits. This provides current and prospective participants, as well as government funders and other interested parties, with a continuing incentive to maintain and expand the program.

For more information, case studies and links to project sites please visit our website by-product synergy page: http://usbcsd.org/byproductsynergy.asp

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FREQUENTLY ASKED QUESTIONS

Q What is *By-Product Synergy*?
A The concept of *By-Product Synergy* (BPS) is turning one company's waste, or by-product, into a valuable resource for another company, creating a synergy. The BPS project brings together 15 to 20 companies and organizations to look for profitable synergies.

Q How is BPS different from a waste exchange?
A BPS is active, while a waste exchange is passive. Additionally, BPS is a process, whereas materials exchanges tend to be static tools. With a waste exchange, the participants need to know exactly what material they are looking for at the outset. Also, in a waste exchange participants have to take what they can get. The material available may not meet the specs required for a given process, the material may not be available in the quantity needed, or the future supply of a material may be uncertain.

In BPS, all these barriers are overcome using by-products as inputs. For one, synergies may be discovered that would never have been thought of outside of the program. The BPS project may also identify process changes that will allow certain synergies to occur that otherwise would not be feasible. Also, all synergies that are implemented in the BPS project are implemented as business agreements between the interested parties, and therefore incorporate quality and supply issues, mitigating those risks. Experience has shown that it is not usually sufficient to simply identify opportunities in an impersonal format; there are usually barriers to be overcome before results can be achieved. BPS provides the process for communication and the resources to overcome some of these barriers.

Q How can an organization benefit from BPS if it is already very efficient?
A Many of the companies that have benefited from the other BPS projects were already leaders in efficiency, and often have benefited to a greater extent than less efficient companies. The efficiency gains possible within one organization may have been exhausted; however, BPS can open access to new markets in which to find profitable homes for by-products or less expensive raw materials. BPS also expands the search for synergies beyond materials to include items like transportation, space, logistics, and other resources. Investigating synergy opportunities with other industries can provide a new way to improve a facility's efficiency. Some of the most profitable synergies have been discovered between very diverse industries. In today's corporate environment, downsizing trends tend to preclude interaction among diverse industries unless they are in the supply chain. BPS creates and fosters this link to diverse industries.

Q What if an organization has already tried something like this and it didn't work? What is different about this program?
A There are three keys to this program's success, and why it can provide new opportunities. The first is diversity. The companies brought together in these projects

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represent a wide variety of industries, broadening the markets in which participants find business opportunities. The second is communication. The project provides a forum in which participants are comfortable sharing ideas that stimulate creative thinking. It encourages participants to look beyond their company fence-line for opportunities. The third is partnerships. The BPS process leverages relationships with technical consultants, regulatory agencies, research organizations, and funding sources to assist participants in overcoming barriers to implementing the synergies they identify. Participating in the project also exposes an organization to opportunities for synergies with companies in other BPS projects around the country.

Q How are trade secrets protected during collaboration with other industries?
A All participants in the BPS project sign a participation agreement, which includes a confidentiality clause. All data collected in the material synergy database is treated as confidential, and participants choose what data they wish to report. In addition, participants have complete control of what they discuss about their company's products and processes in the working meetings.

Q How much time will be required to participate?
A A representative will need to attend the project working meetings, which occur every six to eight weeks during the first stage of the project. This person will need to coordinate the data collection effort for their company, but the bulk of that work can be delegated to a junior-level engineer. In addition, a company representative may wish to be a part of task groups that evolve around researching particular synergies.

Q Can multiple facilities within the same company be included in the process?
A Organizations with multiple facilities may include as many of their facilities as they choose, all for the same subscription fee. However, the facilitators will only visit one facility per organization, and one representative of the entire organization should be designated as the main participant in the working meetings. It is important to weigh the monetary investment of having each facility join separately versus the investment in staff time to coordinate data collection and participation of multiple area facilities under one subscription fee.

Q Will joining the project guarantee that a company will find a synergy?
A There is no guarantee that a company will find a synergy. However, between the material synergy database and the facilitated brainstorming sessions with all the participants, the group attempts to identify all the possible synergies that can be created. The BPS group can leverage all of the technical, regulatory, and financial partner relationships to maximize the potential for identified synergies to be implemented.

Many of the past participants have stated that monetary benefits from implemented synergies were not the only reasons they joined the BPS project. For many, the opportunity to network with sustainability-oriented business leaders, the introduction to new markets in which they may find business opportunities and being provided a tool for implementing sustainable development within their organization were just as valuable benefits as financial gains.

By-product synergy networks, driving innovation through waste reduction and carbon mitigation

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ABSTRACT

By-product synergy (BPS) is the practice of matching under-valued by-product streams with potential users. BPS can offer true business opportunities beyond cost-reduction if wastes are viewed not as wastes, but as raw materials for other industries. The US Business Council for Sustainable Development has developed a process to help regions cultivate these waste-to-product networks. These synergies reduce waste, promote the efficient use of natural resources, and create a legally protected forum in which companies can explore reuse opportunities. Along with reducing waste and avoiding pollution, BPS can reduce climate-changing greenhouse gas emissions.

Keywords: by-product synergy, waste to energy, waste to profit network

1 INTRODUCTION

By-product synergy (BPS) is the matching of under-valued waste or by-product streams from one facility with potential users at another facility to create new revenues or savings with potential social and environmental benefits. The process may involve the physical exchange of materials, energy, water and/or by-products and represents a crucial business opportunity to innovate across industrial processes and organizations by exercising best practices in waste reduction and environmental mitigation. By turning waste output from one company into a product stream for another company not only are there reductions in waste, greenhouse gas emissions, and the need for virgin-stream materials, but there are also great opportunities for innovating new products and processes. The process brings clusters of facilities together to create closed-loop systems in which one facility's wastes become another's raw materials.

The US Business Council for Sustainable Development (US BCSD) has cultivated and facilitated by-product synergy networks throughout the United States and abroad in locations including Chicago, along the Gulf Coast, in Kansas City, and the Pacific Northwest.

Several terms are used in discussing concepts similar to by-product synergy. A **waste exchange** refers to a static process, whereas by-product synergy is an active process that may involve process changes that allow synergies that would otherwise not be feasible. Unlike **eco-industrial parks**, BPS networks do not depend upon co-locating industries, but rather taking advantage of existing ones in heavily industrialized areas.

This paper will describe the origins of BPS, briefly outline the process that a region would undertake to develop a network, describe some of the barriers and benefits of BPS, and provide an example of such a network in Chicago. This paper will illustrate the ways in which BPS has provided an opportunity for addressing waste reduction and carbon mitigation through process innovation and cross-sector interaction.

2 BPS ORIGINS

Industrial symbiosis and BPS have been cited as tangible and applied examples of Industrial Ecology, a term defined in 1989 by Frosch and Gallopoulos [1]. Industrial symbiosis as described by Chertow et al. engages traditionally separate entities in a collective approach to competitive advantage involving physical exchange of materials, energy, water, and by-products [2]. Following the United Nation Conference on Environment and Development in Rio de Janeiro, the Business Council for Sustainable Development of Latin America was founded in 1992. A member organization was established in 1993, the Business Council for Sustainable Development for the Gulf of Mexico (BCSD-GM), an organization of business leaders with the belief that business success is increasingly measured by contribution to economic, social and environmental sustainability. This organization evolved to become the US BCSD in 2002.

In 1995, the EPA, working with industry to promote incentives for green twinning (as it was called by EPA) established grants to promote joint commercial development of one economic sector with a related environmental sector. Later that year BCSD-GM received an EPA grant to identify case studies and opportunities in green twinning, which the BCSD-GM called by-product synergy. This venture stemmed from the efforts of Gordon Forward, then president of two neighboring companies in Texas, Chaparral Steel and Texas Industries [3]

2.1 Chaparral Steel and CemStar

One of the first companies to formulate the BPS concept was Chaparral Steel Company (now Gerdau Ameristeel), based in Midlothian, Texas. Its parent company, Texas Industries (TXI), produced construction materials from sand, aggregates, cement and concrete. In

the early 1990s, led by company president, Gordon Forward, managers of the two jointly-owned businesses began exploring synergies through a series of conversations. Several potential synergies emerged from these conversations, illustrated in Figure 1, to remove redundancies between the two companies [4].

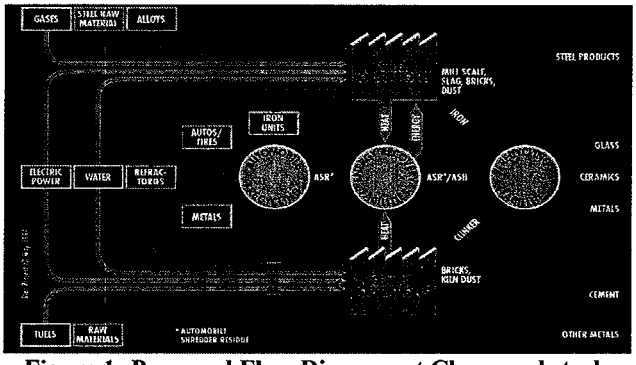

Figure 1: Proposed Flow Diagram at Chaparral steel

The primary synergy to emerge was based on the premise that steel slag could be converted to a raw material in Portland cement, thereby patenting the CemStar process. Steel slag contains dicalcium silicate, formed by the high temperatures of steelmaking, which constitutes a building block of Portland cement. By using lime that has already been calcined, cement manufacturers were able to skip a energy and CO_2 intensive step in their process [5]. Previously, slag was cooled, crushed, and sold to the road construction industry. By using the steel slag instead of purchased lime, TXI significantly reduced the energy requirements and related emissions of the cement making process. CemStar has resulted in 10-15% overall energy savings, 10% CO_2 reductions, 25-45% NO_x reductions, and 5-15 % production increase. In addition, the value of slag increased 20 times over its previous use as road construction fill [5].

Chaparral discovered further potential synergies using a density separation process originally developed to sort carrots in Belgium. With the auto shredder working through one million automobiles per year (one every nine seconds) Chaparral was producing approximately 120,000 tons of shredder residue. Auto shredder residue (ASR), also called fluff, consists of about 25% of the automobile by mass [6] and includes materials not removed by standard steps in the shredding process, such as plastics, oxides, fluids and foams. The food industry-imported technology enabled high throughput and inexpensive separation of these materials, including 15% additional metals over what was obtained in the shredder. In addition, this separation generated a stream of concentrated non-chlorinated plastics, a potential fuel source that would otherwise be landfilled. This potential ASR-derived fuel source has a calorific value of 14,000 btu/lb, the equivalent of a light bituminous coal. A version of this synergy is being pursued by Gerdau Ameristeel and Lafarge Cement as part of the Kansas City BPS project [7]. The regulatory hurdle preventing final implementation involves the 50 ppm of polychlorinated biphenyl (PCB) present in the fluff, however the incineration process used in the kilns may prove to be as effective as current methods for destroying PCBs [4], [8].

3 BPS METHODOLOGY

The US BCSD BPS methodology involves establishing a forum where companies, regulators and municipalities explore reuse opportunities through collected information and facilitated interactions. Participants sign an agreement that spells out deliverables, confidentiality issues and intellectual property rights. Rather than simply declaring potential exchanges, the BPS process fosters relationships among companies and municipalities. The process is about information gathering and facilitation, but also about trust and bridge building.

Teaming with a local coordinating body, often a local non-profit such as the Chicago Manufacturing Center in Chicago or Bridging the Gap in Kansas City, is an important component. Making use of an independent facilitator eases the difficulties in bringing together companies of all shapes and sizes across traditional sector and industry boundaries [9]. Several additional components need to be in place for a potential synergy network, including project champions, a researched and justifiable location, and several interested stakeholders. Adequate funding is also necessary to staff the network, search for synergies, and perform ongoing evaluation and measurement. Implementation requires broad based support from local, state and federal government agencies as well as network participants. The government's role in developing synergy networks has been to provide technical expertise and funded grants, coordinate learning and resource sharing across regions, and ensure the appropriate regulations are in place. However, there are limits to what the government can enforce; by-product synergy networks need to evolve synergistically, with the support of agencies, but without mandates [10].

4 BARRIERS AND CHALLENGES

The BPS process provides many opportunities for businesses and municipalities, but in order for networks to be implemented successfully, participants must overcome substantial challenges and barriers. These challenges, described in detail below, include regulatory, technical, economic and organizational (or communication) barriers.

Potential by-product synergies may be at odds with local and national environmental ***regulatory*** requirements. However, viewing regulators as partners rather than obstacles enables the network to account for the correct regulations along the way and not simply when a process is ready to be changed. Regulators have been willing to consider permitting reuse options when projects produce environmentally beneficial results [3]. In some cases, regulation provides incentive for by-product synergy

development through mechanisms such as landfill bans and disposal fees.

The ***technical*** feasibility of exchanges could provide another barrier to execution. From the outset, tracking and characterizing materials flows requires a level of technical expertise within a company. In some cases research and development may be necessary before a particular synergy can be pursued. As new processes are added to a company's repertoire, the proper training must be performed to enhance employee capabilities.

Economic barriers can also stand in the way of successful synergies. Companies will do what is in their economic interest and if possible, through incremental improvements or through broader scale process redesign, they will eliminate waste in a cost-effective manner. Companies are less likely to pursue synergies if the potential savings are not clearly demonstrated.

A further economic consideration is the size, scope, and consistency of feedstock supplies if by-products are to be used as feed to another commercial process. This is of economic concern because of costs and risks associated with qualifying a new feed stream to existing process, or in developing new conversion technology to deal with a new feedstock. Companies may be actively working to improve yields to existing processes and would therefore reduce byproducts, which might lead to a decrease in the volume of a byproduct stream. Therefore a crucial objective in researching potentially useful byproducts is to identify streams that will exist in the future, are of sufficient volume to support process development, and can be effectively blended with existing process without impacting process or product reliability.

Synergies require sufficient ***communication*** among interested parties. Companies must freely exchange waste and by-product characteristics, resource requirements, conversion technologies, economic information, and other factors that affect project feasibility. Communication and trust are important when materials are being exchanged or infrastructure is being shared because of potential liabilities. Participating industries may use different terms to describe their processes, which can create confusion and inhibit collaboration. Strong social networks can facilitate the discovery and implementation of synergies [11].

The keys to BPS are collaboration, motivation, innovation and participation. All levels of an organization should be involved in identifying, evaluating and implementing the project to ensure that all potential barriers to success are identified and overcome. Successful networks include a diverse range of industries and organizations that allow for broadening of markets to find opportunities.

5 BENEFITS AND OPPORTUNITIES

BPS enables economic, environmental and social benefits. Manufacturing innovations may improve efficiency and productivity, boosting revenue. BPS can eliminate or reduce disposal and treatment costs, and cut the costs of energy, transportation and materials while improving internal processes. Under ideal conditions, the waste produces new revenue through connection to new markets.

The network and region as a whole benefit from these reductions in pollution, emission and waste streams. Overall reduced resource use can result in savings of energy, water, petroleum or other natural resources. Another benefit is the reduced carbon emissions resulting from the reuse of existing materials rather than use of new materials with carbon intensive extraction or production impacts. Companies may also discover opportunities to obtain materials locally rather than importing them.

Participating in BPS creates opportunities for regional and national leadership in sustainability. The relationships established by these networks lead to improved community perception and connections, enhance networking and partnership and opportunities to showcase sustainable practices and processes. Opportunities to address regulation issues arise to reduce barriers in materials exchange processes. Industrial areas may be made more attractive to incoming companies interested in clustering around synergistic opportunities. Another important social impact would be the creation of new jobs and businesses.

The strength of a BPS network stems from the development of accurate measuring protocols and diagnostic metrics. The need for quantifiable results in showing environmental benefits has increased in recent years due to concerns about CO_2 emissions and climate change [12]. Benefits are quantified by measuring the changes in consumption of natural resources and in emissions to air and water through increased cycling of materials and energy. Economic benefits are quantified by determining the extent to which companies cycling by-products can capture revenue streams or avoid disposal costs; those businesses receiving by-products benefit by avoiding transport fees or obtaining inputs at a discount. The final section of this paper presents an example of a BPS network in Chicago.

6 EXAMPLE: CHICAGO NETWORK

In the fall of 2005, the Department of Environment for the City of Chicago was looking for a proven, but exciting process for developing eco-industrial activities in the Chicago region. Coincidentally, the Chicago Manufacturing Center (CMC) had begun collaborating with the US BCSD to create a BPS process toward business resiliency. Through this partnership, with assistance from EPA Region V, the City of Chicago could leverage both groups' expertise to develop the type of network that the city had hoped to develop. The Chicago Waste to Profit network (CWTPN) was launched in October of 2006 by the mayor, Richard M. Daley. As many as 80 companies have become a part of this network and have discussed more than 100 synergies. Fifty of the projects have been implemented in

this partnership mentored by the city of Chicago, US BCSD and the CMC [13].

Through City of Chicago leadership, additional investments were provided through the State of Illinois' Dept of Commerce and Economic Opportunity Recycling Expansion and Modernization Program, and the National Institute of Standards and Technology's Manufacturing Extension Partnership. Company participants paid fees to be part of the network. Using the hybrid approach of *innovation networks* between fee-paying companies as well as smaller *community networks* the CWTPN has enabled involvement by smaller companies and entrepreneurial firms. The innovation network, based on the US BCSD BPS model, forms the core of the CWTPN, and is coordinated by a team providing communication, technical expertise, and facilitation. This network is designed for 10- to 25 organizations that have signed an agreement spelling out deliverables, confidentiality, intellectual property issues [14]. The great variety of companies involved in this network has allowed for a diversity of potential materials streams increasing the probability of synergistic exchanges including food waste, plastics, solvents, chemicals, paper, construction materials, soils, and metal.

An important structural element in the Chicago network typical of BPS projects is a series of working or affinity groups divided along types of potential synergies. These subcommittees of the larger network focus on individual opportunities within one type of by-product stream. For example, the organics group involves 12 companies and two city departments collaborating on 11 synergies with a current estimated total waste diversion from landfill of 4,400 tons. This group focuses on long term projects involving alternative fuels, composting, anaerobic digestion, and changing regulations to reflect changing resources. Another affinity group, the chemicals group focusing on transformation of hazardous waste into revenue streams involves 10 companies, five city departments collaborating on 14 synergies, with a current estimated total waste diversion from landfill of 1117.5 tons. Two other groups include the metals group and building and construction group. In the future, these affinity groups will expand to include water and energy sections [14].

The CWTPN has framed itself as a metrics-driven network from the beginning and focused on Chicago area manufacturing sectors in a ratio proportionately aligned with its prominence in the area. As of this publication, the CWTPN has completed its pilot year, and it has diverted approximately 22,118 tons of landfill bound waste, saved 4.5 million dollars in costs and new revenue creation, and reduced almost 50,000 tons of CO_2 emissions [15]. This network will continue to expand; taking on more companies in both the innovation and community networks and continue to implement product synergies while developing the capacity within firms to increase their sustainability.

7 CONCLUSIONS

As our world becomes more carbon-constrained, it will become increasingly important to find ways to reduce wastes by reusing by-product streams. The business opportunity provided by BPS presents the potential for important economic development through increased product revenues and jobs. In addition, product innovation can result from this inter-company conversation. As BPS networks develop, industry goals may shift from reducing waste generation towards producing zero waste and finally to producing 100 percent product, all while lowering emissions and reducing energy use. The gold at the end of the rainbow is product redesign stemming from by-product synergy and sustained networks that engage and benefit their communities.

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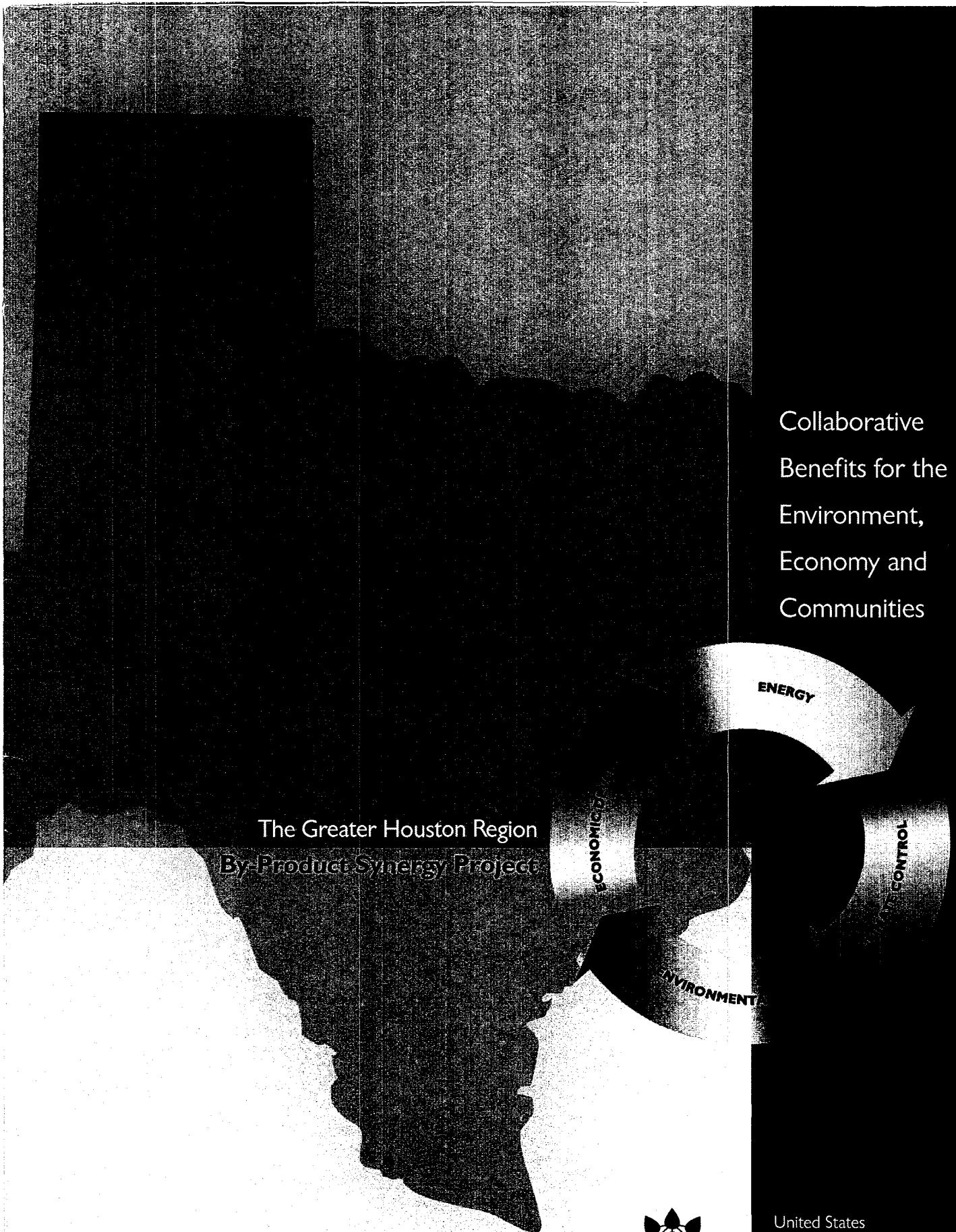
Collaborative Benefits for the Environment, Economy and Communities



The Greater Houston Region
By-Product Synergy Project

United States
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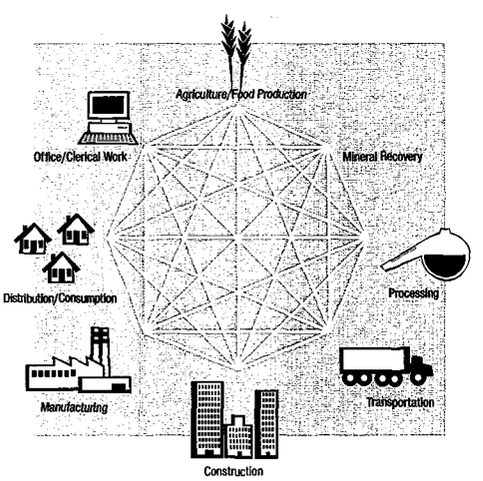
EPAHO044001208

The Greater Houston Region

What It Is

Under the leadership of the U. S. Business Council for Sustainable Development (US BCSD), By-Product Synergy (BPS) is the matching of under-valued waste or by-product streams from one facility with potential users at another facility to create new revenues or savings with potential social and environmental benefits. The resulting collaborative network creates new revenues, cost savings, energy conservation, reductions in the need for virgin-source materials, and reductions in waste and pollution, including climate-changing emissions. These are quantifiable benefits to the environment, economy and communities.



Examples of By-Product Synergies

- A cement manufacturer uses the slag from a neighboring steel mill in its production process, resulting in a 10% increase in production output and a 30-40% decrease in nitrogen oxide emissions.
- A major US chemical company identifies synergies between six of its own plants with an estimated annual cost savings of $15 million and total annual energy savings of 900 billion BTU.
- A fiberglass manufacturer connects with a firm that will use its 500 tons/year of off-spec material as well as discovering soy polymers and chicken feathers as more benign and less expensive raw materials.
- A brick manufacturer uses incinerated cow bone ash from meat processing plants, industrial ash, and water treatment residue to create a new product line of recycled "eco-bricks," diverting 16,000 tons of waste from landfills each year.

Goals

The Greater Houston By-Product Synergy project supports a variety of important goals for the region and for industry including:

- Reduced resource use – energy, water, petroleum, natural resources
- Reduced carbon emissions resulting from the reuse of existing materials rather than use of new materials with a carbon generating extraction/production stream
- Reduced waste to landfill and reduced processing and disposal costs of hazardous materials
- Innovations in manufacturing discovered and developed for efficiency and productivity
- Opportunities to address regulation issues and reduce barriers to materials exchange processes

Why It Is Needed

The BPS process breaks down the barriers to cross-industry communication, as well as the barriers between government and industry and between small and large companies, by fostering dialogue and working across groups to identify supply chain localization and waste minimization opportunities. Recognizing these advantages, and building on the success of BPS projects in other areas, the US BCSD has initiated a BPS project in the greater Houston region for 2009.

"With raw materials prices escalating as rapidly as they are, by-product synergy is a practical survival strategy for the years to come. In the US, manufacturers devalue millions of dollars of inventory each year—even the leanest manufacturing process does not eliminate the problems of yield loss or occasional off-specification product. Instead of total loss and disposal of these resources, by-product synergy solutions can identify new uses and can naturally lead to business savings in the six figure range or more."

Michael Gromacki, *Manufacturing Director*, Cook Composites and Polymers
Founding Member, Kansas City, Chicago Waste to Profit and By-Product Synergy NW BPS Projects

By-Product Synergy Project

How It Works

Greater Houston BPS:

Involves establishing a forum where companies, regulators and local governments explore reuse, recovery, remanufacturing, and recycling opportunities through collected information and facilitated interactions. Participants sign an agreement that spells out deliverables, confidentiality issues and intellectual property rights.

Greater Houston BPS US BCSD Role:

- Collects and analyzes data on existing operations and costs
- Trains participants to identify synergies and expand existing synergies
- Facilitates by-product synergy assessments among participants
- Provides implementation assistance for synergies
- Communicates and records results

Greater Houston BPS Helps Participants:

- Reduce costs for materials, energy, disposal and transportation
- Identify new market and product development opportunities
- Measure their environmental progress
- Become more sustainable and profitable

To learn more or to join the Greater Houston By-Product Synergy Project, please contact:

Ron Sandberg, Project Manager
The Greater Houston By-Product Synergy Project
713-622-1108; sandberg@usbcsd.org
www.usbcsd.org

Designed to Succeed

Greater Houston BPS Has Four Keys to Success:

- **Diversity:** Participants represent a wide variety of industries and organizations, thereby broadening the markets in which participants can find opportunities.
- **Communication:** BPS provides a safe forum to share ideas without fear of legal, regulatory or other threats. The process stimulates thinking beyond fence lines.
- **Partnerships:** By leveraging technical consultants, regulatory agencies, research organizations and funding sources to assist participants, barriers to implementing the synergies are greatly reduced.
- **Quantifiable Benefits:** All BPS programs carefully track associated environmental, economic and social benefits. This provides current and prospective participants, as well as funders and other interested parties, with a continuing incentive to maintain and expand the program.

The design of the Greater Houston BPS project is based upon the US BCSD process design which has been used to develop by-product synergy networks in several U.S. metropolitan areas. The United Kingdom's National Industrial Symbiosis Programme (NISP) will also share its by-product synergy experience and case studies to accelerate our progress. US BCSD coordinated projects are on-going or beginning in Chicago, Mobile, Kansas City, Puget Sound Region, Ohio, Central Texas, New Orleans, and New England.

Who's Involved

The greater Houston region has a diverse base of companies and other organizations. This region's BPS project includes small and large companies from a wide range of industry sectors, governmental agencies, research organizations and other entities. All participants share a commitment to finding innovative ways to generate cost savings, new jobs, quantifiable environmental and social benefits while maximizing resources and capitalizing on new market opportunities.

Founding Participants

ConocoPhillips, Shell

Project Partners

Center for Resilience - Eco-Flo and Eco-LCA, ISL (International Synergies Limited)

12 Month Membership Includes:

- Materials and opportunities assessment
- Data collection for impact tracking
- Site visit
- Preliminary synergy identification
- Working group meetings
- Analysis of progress and impact
- Expert assistance in process management, waste and hazardous materials reduction, and innovative business strategies
- Educational opportunities
- Complimentary membership in United States Business Council for Sustainable Development with associated benefits including company profile, logo and ad on US BCSD website
- Recognition and opportunities to showcase achievements

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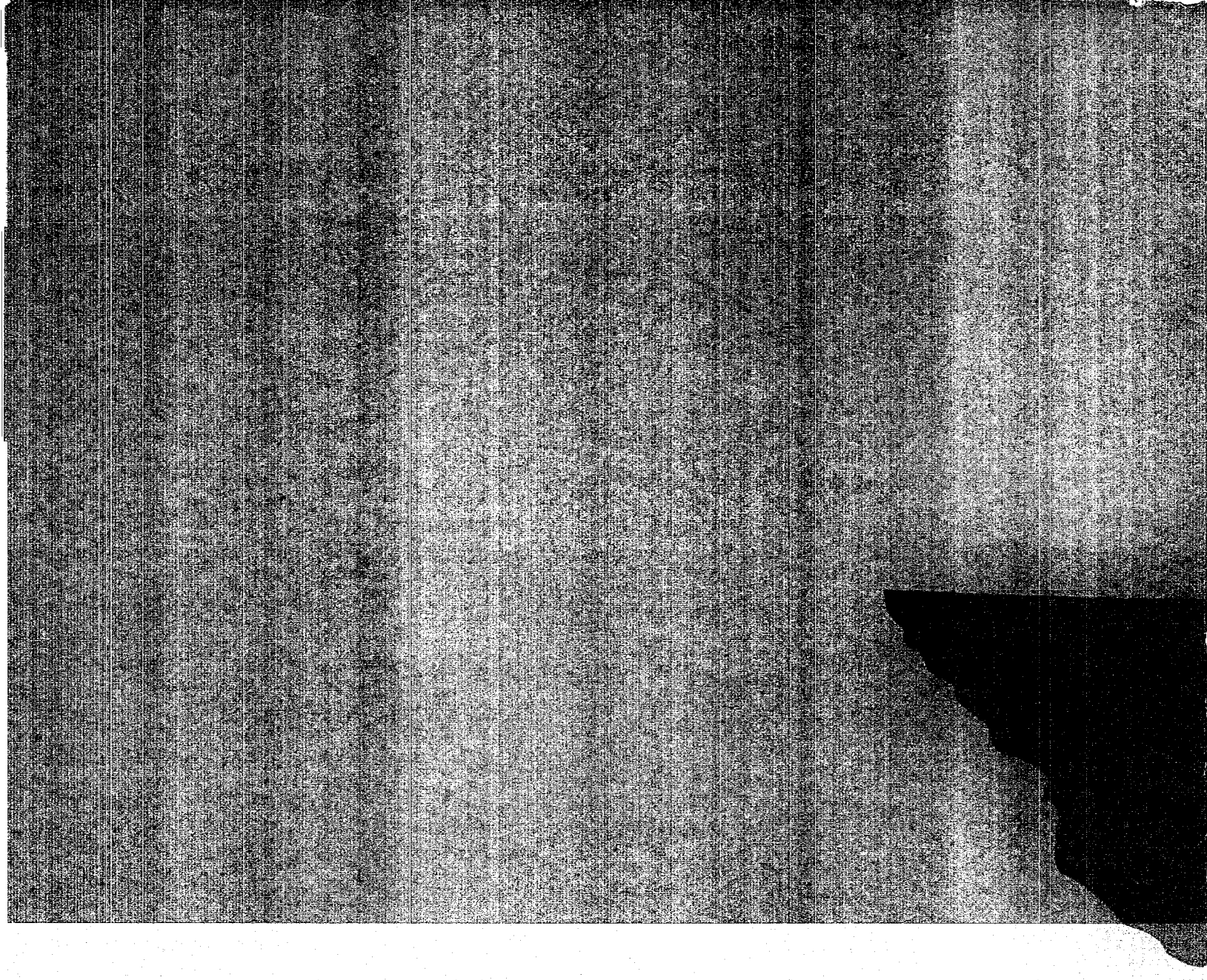

How to Join

For more information on the Greater Houston Region BPS project, contact:

Ron Sandberg
Project Manager
U.S. Business Council for Sustainable Development
2010 North Loop West, Suite 200
Houston, Texas 77018
T: 713-622-1108
F: 713-622-3462
sandberg@usbcsd.org
www.usbcsd.org

EPAHO044001211

BY-PRODUCT SYNERGY PROJECT PARTICIPANT AGREEMENT

This Agreement ("Agreement") dated as of _____, 2009 between _____, a _____ created under the laws of _____ ("Participant"), and the United States Business Council for Sustainable Development, a not-for-profit corporation created under the laws of Texas ("USBCSD" and collectively, the "Parties").

RECITALS

WHEREAS, *By-product Synergy* is the practice of matching under-valued by-product streams with potential users, helping to create new revenues or savings for the organizations involved while simultaneously addressing social and environmental impacts;

WHEREAS, the USBCSD enters into this Agreement in its capacity as the Project Coordinator for the *By-product Synergy* Project in the Greater Houston, Texas Region (the "BPS Project");

WHEREAS, the Foundation for Sustainable Development ("FSD") is a Texas non-profit 501(c)(3) organization with an office at 4425 South Mopac, Building 2, Suite 202, Austin, Texas 78735 and is a supporting organization as described in Section 509(a)(3); and the FSD was established to support the work of the US BCSD.

WHEREAS, the BPS Project will be implemented in and around the City of Houston, Texas (the "Project Area") beginning in March, 2009, with the possible expansion of the BPS Project into other areas following implementation of the BPS Project in the Project Area;

WHEREAS, the USBCSD has substantial experience in developing and implementing projects similar to the BPS Project and the Participant desires to participate in the BPS Project in order to take advantage of the potential benefits of the BPS Project to the extent possible, as set forth herein;

NOW THEREFORE, in consideration of the mutual agreements and covenants contained herein, the USBCSD and Participant agree as follows:

AGREEMENTS

1. Obligations of the Parties

1.1 The USBCSD shall be primarily responsible for facilitating the participation of the Participant in the BPS Project and coordinating the BPS Project tasks described in the Statement of Work set forth in Attachment A (the "Services"). The Services shall include, but not be limited to, organizing meetings with the BPS Project Team and Participant; collecting, managing, and analyzing data from Participant relevant to implementing the BPS Project; assisting in the establishment of baselines from which net cost savings and net incremental revenues can be measured; and providing guidance in order to promote the success of the BPS Project. The Parties agree that the Services as set forth herein may be modified by written agreement of the Parties in order to accommodate the funding, timeliness, and extent of the BPS Project. The Parties agree further that performance of the Services by the USBCSD, including any modification of the Services by written agreement of the Parties, does not guarantee that net cost savings and/or net incremental revenues will be realized by Participant.

1.2 Participant shall select one department or business unit to represent Participant in the BPS Project and provide such contact information to the USBCSD. Participant shall provide all appropriate information pertaining to Participant's operations in the Project Area as reasonably requested from time to time by USBCSD in order to facilitate the performance of the Services set forth in this Agreement. Participant reserves the exclusive right to decide questions of appropriateness and reasonableness. Such information may include, but

not be limited to, process data from participating business units, raw material and by-product quantities and chemical characteristics, process descriptions, and process flow diagrams depicting participating business unit manufacturing processes. All such information provided to USBCSD is subject to the confidentiality provisions in Section 3.1. Notwithstanding the performance of the Services by the USBCSD, Participant shall be responsible for internal matters concerning the BPS Project, including internal communications, meeting arrangements and logistics, attendance at meetings, and overall internal BPS Project guidance.

2. Project Cost and Revolving Fund

2.1 Subject to the limitations provided herein, to participate in the Project, Participant shall pay the USBCSD a yearly fee toward total BPS Project cost ("Yearly Fee"). The amount of the Yearly Fee shall be as set forth on Attachment B – Fee Schedule.

2.2 Except as provided in this Article 2, the USBCSD shall bear all necessary and normal expenses of providing the Services and any other obligations under this Agreement.

3. Confidentiality.

3.1 The USBCSD and its contractors and subcontractors shall abide by the following confidentiality provision: the USBCSD shall maintain the confidentiality of all confidential information provided by Participant and identified as confidential ("Participant Confidential Information") and will not use or disclose such Participant Confidential Information to others without the prior written consent of Participant except for the purposes contemplated herein or when such use or disclosure is required by order of a court or governmental agency. Prior to disclosing Participant Confidential Information to the Project Team and other companies participating in the BPS Project, such other participants shall be bound by confidentiality provisions substantially similar to those contained in this Section 3.1. Participant shall maintain the confidentiality of all information identified as confidential and provided to Participant by the USBCSD ("Project Confidential Information") and will not use or disclose such Project Confidential Information to others without the prior written consent of the USBCSD, except for the purposes contemplated herein or when such use or disclosure is required by order of a court or governmental agency. Information that is generally known to the public other than as a result of a breach of this section, or that has been disclosed to the USBCSD or Participant, as the case may be, on a non-confidential basis by third parties who have a right to do so shall not be deemed Participant Confidential Information or Project Confidential Information for purposes of this Section 3.1. The terms of this section shall survive and remain in effect following any termination of this Agreement for a period of five (5) years. The USBCSD shall be allowed to publish or grant rights to publish information regarding the BPS Project, provided that no Participant Confidential Information is disclosed or able to be discerned from the publication without the prior written consent of the Participant.

4. Terms and Termination.

4.1 The initial term of this Agreement shall extend from the date indicated above and expire five (5) years from such date (the "Initial Term"). Participant and the USBCSD may agree in writing to extend the Initial Term and renew this Agreement on an annual or other basis thereafter.

4.2 **Termination for Lack of Funding.** The USBCSD may terminate this Agreement at any time with thirty (30) days prior written notice if the USBCSD does not receive sufficient funding for the BPS Project from non-profit funding sources, the Participant, and other companies participating in the BPS Project; provided, however, that in order to prevent termination of this Agreement under this provision, the Services as set forth herein may be modified by written agreement of the Parties in order to accommodate the funding, timeliness, and extent of the Project.

4.3 **Termination for Default**

(a) Participant may terminate this Agreement for default, in whole or in part, if, after thirty (30) days from the USBCSD's receipt of Participant's written notice of such default from Participant, the USBCSD fails to comply with any of the terms of this Agreement, fails to make progress so as to

endanger performance of this Agreement, or fails to provide adequate assurance of future performance. In that event, Participant shall not be liable for any services or supplies not accepted.

(b) If this Agreement is terminated for default, Participant may require the USBCSD to deliver to Participant any supplies and materials, manufacturing materials, and manufacturing drawings that the USBCSD has specifically produced or acquired for the terminated portion of this Agreement and for which Participant has paid the USBCSD. Participant shall pay the agreed upon price for services performed and accepted in addition to completed supplies delivered and accepted. Participant and the USBCSD shall agree on the amount of payment for all other deliverables.

4.4 The USBCSD shall not be liable to Participant for delays in performance occasioned by causes beyond the USBCSD's or its supplier's or subcontractors' reasonable control and without its fault or negligence.

4.5 The rights and remedies of Participant in this clause are in addition to any other rights and remedies provided by law or under this Agreement.

4.6 This agreement may be terminated for convenience on thirty (30) days' written notice or if either party fails substantially to perform through no fault of the other and does not commence correction of such nonperformance within five (5) days of written notice and diligently complete the correction thereafter.

5. Compliance with Law.

5.1 USBCSD and Participant shall comply with all applicable federal, state, and local laws and ordinances and all pertinent orders, directives, rules, and regulations and such compliance shall be a material requirement of this Agreement; provided, however, that the USBCSD shall not be liable or assume any responsibility for, nor should the USBCSD's acts or omissions related to the BPS Project be deemed to excuse or otherwise exempt Participant from, compliance by Participant with all applicable federal, state, and local laws, regulations, ordinances, and directives of any federal, state, or local governmental agency.

5.2 The USBCSD shall include language comparable to Section 5.1 in all contracts and subcontracts involving the performance of Services pursuant to this Agreement.

6. Notices. Whenever under this Agreement one party is required or permitted to give notice to the other, such notice shall be in writing and delivered by hand, facsimile, overnight mail, or United States mail to the attention of:

To USBCSD:

United States Business Council for Sustainable Development
Attn: Executive Director
4425 South Mopac, Building 2, Suite 202
Austin, Texas 78735

To Participant:

7. Governing Law. This Agreement shall be construed in accordance with the law of the State of Texas. Any controversy under this Agreement shall be finally resolved by binding arbitration under the Commercial Arbitration Rules of the American Arbitration Association. The seat of arbitration shall be Houston, Texas, and the arbitration shall be conducted in the English language. Each party shall have the right to appoint one

arbitrator and the appointed arbitrators shall jointly appoint the third arbitrator. The award of the arbitrators shall be final and binding. The arbitrators are expressly empowered to award one or both parties costs and fees.

*8. **Successors and Assigns**.* All of the provisions hereof shall inure to the benefit of and be binding upon the respective successors and assigns of the parties hereto; provided, however, that neither party shall assign this Agreement without the prior written consent of the other party hereto.

*9. **Interpretation.*** The headings of articles, sections and other subdivisions of this Agreement have been inserted for convenience of reference only and shall in no way restrict or otherwise modify any of the terms or provisions hereof or affect in any way the meaning or interpretation of this Agreement. All provisions of this Agreement were negotiated by the parties hereto and this Agreement shall be deemed to have been drafted by each of the parties hereto.

*10. **Number of By-product Synergies Identified.*** The USBCSD does not guarantee the number or success of by-product synergies that are created or implemented as a result of the performance of the Services or the execution of the BPS Project.

*11. **By-product Synergy Implementation.*** The USBCSD, by itself, is not responsible for the actual implementation of by-product synergies that may result from the execution of the BPS Project. Final implementation of the identified by-product synergies will be at the sole discretion of Participant and the Project Team.

*12. **Limitation of Liability.*** Except for breach of confidentiality obligations hereunder, neither party herein shall be responsible for the other party's consequential damages, loss of profit or operations, or any such impact that results from the execution of the BPS Project or any other obligation under this Agreement, whether such liability arises in contract, tort, or any other cause of action.

*13. **Site Safety/Security.*** In the event that Services are provided on Participant property, the USBCSD agrees that any and all services provided on Participant property shall be performed in accordance with the terms and conditions of the applicable Participant's rules and procedures for service contractors provided such site or office rules and procedures are provided to the USBCSD. The USBCSD shall comply with any other plant site or office rules and procedures for the locations at which the USBCSD will provide services provided such site or office rules and procedures are provided to the USBCSD. In addition, the USBCSD shall maintain records of all recordable injuries or illnesses (as defined by any government entity) occurring to the USBCSD employees while performing services. The USBCSD shall provide copies of such records to Participant upon request.

*14. **Non-exclusivity.*** Participant reserves the right to perform any services not covered by this Agreement, issue purchase orders or addenda hereto, and may award contracts to others for such services. The USBCSD shall fully cooperate with Participant or with such other contractors and integrate the Services with the services of Participant and such other contractors in a commercially reasonable manner and as may be directed by Participant. The USBCSD shall not commit or permit any act which will interfere with the performance of services by Participant or by any other contractor.

*15. **Independent Contractor.*** The USBCSD is an independent contractor and shall assume all the rights, obligations and liabilities applicable to it as such independent contractor. Neither the USBCSD nor any of its employees, agents, or representatives shall be considered an employee or agent of Participant, nor shall any partnership, co-venture or joint-employer relationship be created by virtue of this Agreement or of its performance. All persons engaged by the USBCSD, either as employees, subcontractors, or agents to assist the USBCSD in the performance of this Agreement, will be of its own selection, for its own account, at its own expense and under its supervision. No prior course of dealing or performance between Participant and USBCSD shall be of any effect to modify in any respect the USBCSD's status under this Agreement as an independent contractor.

16. Amendments. This Agreement may be amended only by a written instrument executed by Participant and USBCSD.

17. Entire Agreement. This Agreement, with its attachments, embodies the complete, exclusive and final agreement between the parties with respect to Services and supersedes any and all other communication, written, oral or otherwise between the parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

UNITED STATES BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT

Name: Andrew Mangan
Title: Executive Director
Date: _____

_____
[PARTICIPANT]

By: _____
Name: _____
Title: _____
Date: _____

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Attachment B
Fee Schedule

1. The Yearly Fee shall be based on the gross revenues of the Participant in the previous fiscal year and, if applicable, the company's status as a US BCSD Founding Member or new full member.

2. **Members of the US BCSD** shall pay the following Yearly Fee to participate in the BPS Project, provided that the Founding Member has paid its most recent dues for continuing membership in the US BCSD:
    a. $2,500 if gross revenues exceeded $25,000,000;
    b. $1,250 if gross revenues were between $5,000,000 and $25,000,000;
    c. $500 if gross revenues were less than $5,000,000.

3. **Non-members** shall pay the following Yearly Fee to be a Participant in the BPS Project:
    a. $5,000 if gross revenues exceeded $25,000,000;
    b. $2,500 if gross revenues were between $5,000,000 and $25,000,000;
    c. $1000 if gross revenues were less than $5,000,000.

    As a Participant in the BPS Project, the company shall also be entitled to a one-year associate (non-voting) membership in the US BCSD.

4. The first Yearly Fee shall be due within thirty (30) days of the effective date of this Agreement. Subsequent Yearly Fees shall be due at 12-month intervals thereafter. Subsequent yearly fees shall be due at 12 month intervals after the first BPS project kickoff meeting referenced in Attachment A.

ATTACHMENT A –
STATEMENT OF WORK

Task 1. Finalize Scope and Project Team
A US BCSD By-Product Synergy project team has been organized that includes a project coordinator, project manager, project advisor and technical leader. A Steering Committee will be organized comprised of members of the Foundation for Sustainable Development, a BPS Project Team representative, a representative of the City of Houston, and representatives of key participating companies ("Participants"), governmental departments and other organizations. The BPS Project scope will be finalized after the number and diversity of Participants is established and funding is secured. A BPS Project web site will be launched by USBCSD for information dissemination about the BPS Project to the general public. A confidential website for access by Participants will be launched as part of the BPS Project implementation. Secure access information will be provided to Participants.

Task 2. Project Kickoff
A BPS Project kickoff meeting will be held to introduce the BPS Project to Participants, and others that might participate in the BPS Project but have not yet entered an agreement to do so. Discussions of the material flow interchange and potential synergies will commence at the kickoff meeting.

Task 3. Data Collection
Designated representatives from each Participant will be responsible for completing and submitting data collection templates on an agreed completion date. The data collection templates will catalogue inputs, products, by-products, co-products, wastes, and other materials that will be evaluated for synergies as part of the BPS Project. It is essential that Participants complete the data collection templates and submit them on the designated due date since the data are the building blocks to forming potential synergies. Members of the BPS Project Team will be available to make site visits to Participants' facilities to assist with the identification of relevant data and potential synergies.

Task 4. Data Analysis
The BPS Project Team will upload the data collection templates to the BPS Project's confidential web site for reference by Participants. The data provided by Participants will be in the format provided in the data collection template. Only the Project Team, Participants that have executed agreements with the USBCSD and those who are involved in the data analysis will be provided access to the web site due to the confidential nature of the information. A separate area of the US BCSD web site will be used for information dissemination about the BPS Project to the general public.

An independent review of the database will be conducted by the Project Team and select outside consultants, if necessary, all of whom will be required to sign confidentiality agreements. The objective of this analysis is to provide an external view of synergy ideas early in the BPS Project process to help guide Participants.

Task 5. Working Meetings
The discussions of material flow interchange and potential synergies that began in the kickoff meeting will continue in subsequent working meetings during which Participants will progressively share more details of one another's material flows and process by-products and other materials to identify and prioritize synergies.

The Project Manager and Project Advisor will co-facilitate these meetings, supported by the Technical Leaders who will assist in developing the content and facilitation tools relevant for productive discussions. The Project Manager will arrange logistics and ensure participation of team members and Participants in these meetings. The facilitators will set the tone for the working meetings, encouraging interactions and discussions. They will lay out the BPS Project schedule and milestones, introduce successive BPS steps using facilitation tools and techniques, and work with BPS Project working groups focused on specific synergy categories to formulate action plans and identify potential implementation barriers. The facilitators will emphasize the action-oriented nature of the BPS Project and the importance of adhering to milestones.

Once by-products have been catalogued from all Participants, they will be ranked according to importance for

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Participants. Those ranked as high priorities will garner the most attention in future working meetings. Working groups will be formed of Participants who share interest in similar by-products (e.g., gypsum), material group (e.g., aggregates), or synergy issue (e.g., transportation). The goal of the working groups is to further evaluate and prioritize synergies for opportunities that have the best chance for success. Synergy Project Templates will define the opportunity, due diligence, scope, timeframes, barriers and resource needs to implement the synergies. The Project Team will provide a Potential Synergy Report and continue to provide assistance in determining ways to overcome barriers to implementing priority synergies.

Task 6. Synergy Implementation and Evaluation

The Project Team will assist Participants in establishing baselines from which to measure economic, environmental, and societal synergy benefits and in monitoring and reporting the benefits received from implemented synergies. Participants will initiate synergy implementation following the actions identified in the Synergy Project Templates. Participants will ultimately be responsible for implementation of the synergies in which they are involved pursuant to agreements or other means as between relevant Participants with respect to specific synergies, including assurances that all federal, state and local environmental laws and regulations are addressed in those transactions. The Project Team will provide an initial Synergy Implementation Report highlighting results and opportunities specific to each Participant.

Task 7. Project Management

The Project Manager will be responsible for the overall management and reporting of the BPS Project. The Project Manager will ensure the BPS Project is conducted on-time, on-budget and on-schedule. The Project Manager will also lead communications with the Project Team and be responsible for approving monthly status reports summarizing performance. The Project Team will be advised throughout the process by the Steering Committee, which will also oversee BPS Project costs.

DELIVERABLES:

- *Meeting Minutes* – The Project Manager will prepare summary minutes for all BPS Project meetings and distribute to the Project Team and Participants.
- *Potential Synergy Report* – The Project Manager, Project Advisor and Technical Leaders will prepare the Potential Synergy Report after evaluation of Synergy Project Templates and distribute to the Project Team and Participants.
- *Synergy Implementation Report* – The Project Manager, Project Advisor and Technical Leaders will produce an Initial Synergy Implementation Report summarizing synergies chosen for implementation and distribute to the Project Team and Participants.
- *Year-End Report* – The Project Manager will prepare a year-end report detailing the BPS Project status and distribute to the Steering Committee, Project Team and Participants.

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The United States Business Council for Sustainable Development is the leading organization creating cross-industry relationships that solve environmental and social challenges while improving its members' bottom line.

Membership Benefits

The invitation-only membership structure of the Business Council gives members a seat at the table to share best sustainability practices within an established process that lends itself to openness among members not available in other networking settings. Membership also provides access to help from pioneers in sustainable development.

Member companies come from a wide range of sectors — from energy and chemical to construction and manufacturing. US Business Council for Sustainable Development focuses on the possibilities of collaboration among industries, not the differences. Business Council members work together on community projects surrounding three platforms critical to sustainability — Energy and Climate Change, Eco-system Services and Water Resource Management.

Energy and Climate Change — Energy efficiency is the least expensive way to address and affect climate change. US Business Council for Sustainable Development members pioneer formal processes to identify and implement solutions that help businesses become more energy efficient. Example: The Business Council worked with the City of Chicago to establish a network of businesses that in one year diverted more than 22,000 tons of landfill-bound waste, achieved $4.5 million in savings and new revenue, and reduced almost 50,000 tons of CO2 emissions.

Eco-System Services — The Business Council finds cost effective ways to conserve and restore natural resources. Example: Business Council members facilitated the reforestation of 100,000 acres of Lower Mississippi cropland — improving flood control, creating wildlife habitats and developing new income streams for landowners.

Water Resource Management — The Business Council is developing and testing processes to identify and implement successful cross-industry solutions to water contamination, water conservation, over-pumping and inadequate planning.

Conditions of Membership

Membership of the US BCSD is by invitation of the Executive Committee and is based on a demonstrated commitment to the principles of sustainable development and interest in working with others to achieve triple bottom line results. Member companies are expected to assign representatives who actively participate in US BCSD activities and meetings. The US BCSD meets bi-annually to decide the organization's priorities and to discuss its strategic direction. Attached is an activity survey and participation page to help you determine areas of interest.

Membership includes a $10,000 annual fee, which confers full voting privileges and enables members to participate in determining strategic direction of the organization. To receive more information about the US BCSD and its programs, please contact our office.

4425 South Mopac, Bldg. II, Suite 202; Austin, Texas 78735; Tel: (512) 892-6411

Membership Information for the United States Business Council for Sustainable Development

_____

Name of Member Company

Having accepted the US BCSD Conditions of Membership attached hereto, hereby applies to become a Member Company of the US BCSD to be represented on the Council of the US BCSD by:

_____

Name and title of Council Member

Alternate:

_____

Name and title of the Alternate

US BCSD member companies are expected to assign representatives who actively participate in US BCSD activities. Please indicate which project platform(s) and/or partnership activities you are interested in as a new member. This is intended to help connect you with areas of interest and is not a commitment beyond participation.

Platforms

- **X Ecosystem Services**
- **X Energy & Climate Change**
- **X Water Resource Management**
- **X Other: By-product Synergy**

Partnerships

- **☐ World BCSD**
- **☐ China BCSD**
- **X US EPA**
- **X Other: US DOD, US DOE, NIST/MEP**

PROJECT PLATFORMS & PARTNERSHIPS	**RANK:** Please rank your interest in activities listed with a 1 - 4. *1 = high interest* *4 = low interest* Use each number only once.	**COMPETENCIES:** Please provide information on your organization's competencies. Competencies are defined as: • your organization's **goals** for the activity (e.g., market development or eco-efficiency) • the **skills** you can bring (e.g., technology, process) • **geographic** regions with facilities that might engage in the project (e.g., Gulf Coast, California, Great Lakes). Please use as much space as your require.
Ecosystem Services		Goals: Skills: Geographic Region:
Energy & Climate Change		Goals: Skills: Geographic Region:
Water		Goals: Skills: Geographic Region:
China BCSD		Goals: Skills: Geographic Region:
World BCSD		Goals: Skills: Geographic Region:
OTHER		

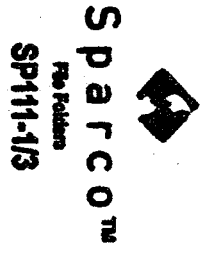
Conservation Capital, LLC
Value in Nature

Ron Sandberg
Principal

The Preserve · 2010 North Loop West · Suite 200
Houston, Texas 77018
T 713.622.1108 F 713.622.3462 C 713.254.0638
ron.sandberg@conservationcapital.com
www.conservationcapital.com

[redacted]
- Blastco
- Cleaning of tanks at LCRA

Joe Neary
713-303-5666



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(5)

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	
Assigned:	Unassigned:

Folder I.D.#	
Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:		N:		Fuel Surcharge:	Y:	N:
City of Houston:	Y:		N:		4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge

Customer Special Request/Requirement

CONFIDENTIAL

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

February 4, 2008

Mr. Joe Neary
Blastco

3 Tanks
2 million gal. ea.
90' dia. 24" side manways
built 1973

Dear Mr. Neary,

Thanks for your interest in CES Environmental Services, Inc. The following is a rate sheet for cleaning of fuel storage tanks for LCRA. CES cannot provide any firm estimates until the tanks have been opened, the sludge volumes and contaminants assessed, and logistics determined. Please note that pricing will be determined based on size of tank, material previously contained, sludge volumes, accessibility, availability of site utilities, site proximity to Houston, etc. The overall plan will include the removal of residual fuel (which CES would be willing to purchase), Removal of sludge from the tanks, and finally all tanks will be detergent washed and rinsed so that all inspections and maintenance can be performed.

Attached hereto, I have provided the costs for similar jobs CES has done in the past. Each quote/estimate has some of the parameters and size of the tank. The unit rates listed herein are still valid. As you know, this work was done on (8) large fuel storage tanks at Austin Energy (Decker Power Plant). Please note that pricing was determined based on size of tank, material previously contained, sludge volumes, accessibility of tanks, availability of site utilities, site proximity to Houston, etc.

Here is the pricing for work done at the Decker Power Plant. It was assumed that each tank contained nominal sludge volumes, good accessibility, access to site utilities, and good manhole accessiblility.

Tanks Number 11 and 12, 541,000 gallon tanks, containing LS#2 fuel/diesel:

- Environmental Supervisor at $35/hour (estimated 20 hours)
- Environmental Technicians at $28.00 per hour/man (estimated 20 hours/man)
- Personal Protective Equipment at $25.00 per day/man (estimated 4 men/2 days)
- Field Service truck and trailer at $150.00 per day (estimated 2 days)
- Breathing Air at $150.00 per day (estimated 2 days)
- Confined Space Entry Equipment at $100.00 per day (estimated 2 days)
- Per diem at $75.00 per day/man (estimated 2 days/4 men)
- Vacuum truck with operator at $450.00 per load (estimated 2 loads)
- Recycling of Rinse Water at $0.13 per gallon (estimated 11,000 gallons)
- DOT approved empty drums for Class I, Non-hazardous waste at $25.00 per drum (estimated 8 drums)
- Disposal of Class I, Non-hazardous rust scale and sludge at $55.00 per drum (estimated 8 drums)
- Miscellaneous job materials and equipment at $3,420 (see list below)
    - Air conditioner/ventilation system
    - Large generator

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

- All hoses
- 3 Frac tanks
- Spinners
- Storage container
- Air compressor
- Manlift
- Lights
- Frac Tank washouts
- ADS Flex hose
- Sampling and Analytical fees
- Miscellaneous transportation services

- **Total estimated cost per tank: $9,250.00**

Tanks Number 13, 14, 15 and 16, each tank is 2,032,000 gallon capacity containing LS#2 Fuel Oil:

- Environmental Supervisor at $35.00 per hour (estimated 28 hours)
- Environmental Technicians at $28.00 per hour/man (estimated 28 hours/man)
- Personal Protective Equipment at $25.00 per day/man (estimated 4 men/3 days)
- Field Service truck and trailer at $150.00 per day (estimated 3 days)
- Breathing Air at $150.00 per day (estimated 3 days)
- Confined Space Entry Equipment at $100.00 per day (estimated 3 days)
- Per diem at $75.00 per day/man (estimated 3 days/4 men)
- Vacuum truck with operator at $450.00 per load (estimated 3 loads)
- Recycling of Rinse Water at $0.13 per gallon (estimated 16,500 gallons)
- Air machine with operator to remove rust scale and sludge at $110.00 per hour (estimated 8 hours)
- Disposal of Class I, Non-hazardous rust scale and sludge at $80.00 per yard (estimated 10 yards)
- Washout of air machine at $250.00
- Miscellaneous job materials and equipment at $6,555 (see list below)
  - Air conditioner/ventilation system
  - Large generator
  - All hoses
  - 3 Frac tanks
  - Spinners
  - Storage container
  - Air compressor
  - Manlift
  - Lights
  - Frac Tank washouts
  - ADS Flex hose
  - Sampling and Analytical fees
  - Miscellaneous transportation services
- **Total estimated cost per tank: $17,712.00**

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Tanks Number 18 and 19, each tank 7,195,000 gallons containing LS#2 Fuel Oil:

- Environmental Supervisor at $35.00 per hour (estimated 55 hours)
- Environmental Technicians at $28.00 per hour/man (estimated 55 hours/man)
- Personal Protective Equipment at $25.00 per day/man (estimated 5 men/2 days)
- Field Service truck and trailer at $150.00 per day (estimated 5 days)
- Breathing Air at $150.00 per day (estimated 5 days)
- Confined Space Entry Equipment at $100.00 per day (estimated 5 days)
- Per diem at $75.00 per day/man (estimated 5 days/4 men)
- Vacuum truck with operator at $450.00 per load (estimated 6 loads)
- Recycling of Rinse Water at $0.13 per gallon (estimated 33,000 gallons)
- Air machine with operator to remove rust scale and sludge at $110.00 per hour (estimated 20 hours)
- Deliver of vacuum boxes at $300.00 per box (estimated 1 boxes)
- Roll-off truck with operator at $500.00 per load (estimated 1 loads)
- Disposal of Class I, Non-hazardous rust scale and sludge at $80.00 per yard (estimated 15 yards)
- Vacuum box washout at $275.00 per box (estimated 1 boxes)
- Miscellaneous job materials and equipment at $11,970.00 (see list below)
  - Air conditioner/ventilation system
  - Large generator
  - All hoses
  - 3 Frac tanks
  - Spinners
  - Storage container
  - Air compressor
  - Manlift
  - Lights
  - Frac Tank washouts
  - ADS Flex hose
  - Sampling and Analytical fees
  - Miscellaneous transportation services
- **Total estimated cost per tank: $30,700.00**

If you have any questions or need additional information, please feel free to contact me at (713) 826-1329. Thanks again for your interest in CES Environmental Services, Inc.

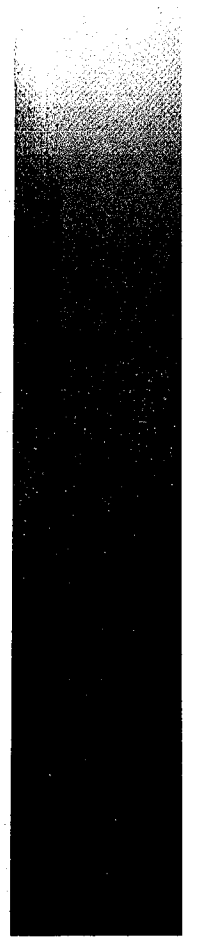
***Note:*

- *Fuel surcharges will be charged according to the National Average Diesel Fuel Price with the U.S. Department of Energy.*
- *Rates are inclusive of TCEQ Industrial Waste Fees.*

Sincerely,

Matt Bowman
CES Environmental Services

Enterprise Products (West Texas)
Cleaning Sludge from Caustic Tanks



EPAHO04001231

8/4/09
WBS
E-3
6

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	
Assigned:	Unassigned:

Folder I.D.#	

Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:	N:	Fuel Surcharge:	Y:	N:
City of Houston:	Y:	N:	4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO044001233

Matt Bowman

From: Jennifer Rust
Sent: Friday, May 16, 2008 9:08 AM
To: gflipse@eprod.com
Cc: Matt Bowman
Subject: Tank Cleaning Quote
Attachments: image001.jpg

Good Morning Mr. Flipsey

Thank you for considering us for all you environmental needs!

The unit pricing & scope of work for the cleaning of the Waste Caustic Tank & Bi-product tank at Enterprise Products located in Mt. Belleview is below.

Day 1
Set up & pull sample from line to determine % of acid needed & if there is a bad odor

Day 2
Check PH & remove liquid into vacuum box, wash tanks & pull sample for analysis.

Air Machine w/ Operator	$115 / hour	Estimated Time - 8 hours
Field Service Truck	$150 / day	Estimated Time - 2 days
Supervisor	$40 / hour	Estimated Time – 16 hours
Technician / Helper	$28 / hour	Estimated Time – 32 hours
6" ADS Flex Hose	$2 / foot	Estimated Usage – 100 feet
Standard PPE	$75/day/man	Estimated Usage – 3 men, 2 Days
Vacuum Box Rental	$50 / day	Estimated Time – 5 days
Local Box Delivery & Pick up	$200/each way	Estimated Usage – 2
Box Wash Out	$200 / each	Estimated Usage – 1
Neutralization Acid	$200 / DM	Estimated Usage – 3
Scrubber (if needed)	$750	Estimated Usage - 1
Transportation of box to US Ecology in Robstown, TX pending analysis	$69 / hour	Estimated Time – 8 hours

Analysis & Disposal Cost is pending sample

Again thank you for considering CES Environmental Services, Inc.!

Thank You,

EPAHO044001234

- KNUT for fuel oil at Green HUNTER -

EPAHO04001235

9/4/09
WBS
K-3 (2)

KMTEX

CES Residual Fuel Oil Analysis

By: Micki Kennedy, Chemist, KMTEX **06-23-09**

ASTM D5135: Styrene by GC analysis	1200ppm Styrene
ASTM D287 API gravity, 60 degree correction	3.22
ASTM D93 Flash Point, PMCC	238 F
ASTM D6304 Karl Fisher Water Analysis for Fuels and Oils	0.4680 % H2O
ASTM D4052 Specific gravity converted to #/gallon	8.749 #/gallon

Micki Kennedy
06-23-09

2450 S. Gulfway Dr. • Port Arthur, Texas 77641
Mailing Address: P.O. Box 1421 • Port Arthur, Texas 77640
409/985-4200 • Fax 985-6350

Matt Bowman

From: Knut Scharning [knutsolo@sbcglobal.net]
Sent: Tuesday, June 16, 2009 4:58 PM
To: Matt Bowman
Subject: Residual Fuel oil with Styrene Monomer in it

Matt

Let me know if you can deal with this

The asphalt guys did not want it because of the SM smell

Located in Houston

METHOD
ICP Sodium, MDL=I 3699 ppm

GC/MS STYRENE 180 ppm

Residual Fuel oil Volume 728,553.84 GALLONS

METHOD	TEST	RESULT		
ASTM D 287	API Gravity,60F	2.0	g	
ASTM D 445	Viscosity, 50oC	39.69	CST	
ASTMD 4294	Sulfur content	0.04I7	Wt-%	
ASTMD93 (B)	Flashpoint, PMCC (b)	250	gF	
ASTMD 95	Water by Distillation	0.10	Yol-Yo	
ASTMD 482	Ash	1.0800	wt-%	
ASTM D 287	API Gravity,60F	2.0	g	

BRGDS
Gulf Stream Tanker Chartering, Llc.

EPAHO04001238

Qatar Gas (Streams 7 & 9)
Caustic Degreasing Wastewater

EPAHO044001239

.55/gallon for 1st project only
or
.41/gallon for both projects

~~2,877,000 Million Dollars~~

5,250,000 gallon

.53/gal. (1) $2,782,000 based on 1st Volume

.27/gal. (2) $1,425,000 based on 2nd Volume

so

(1)+(2) = $2,151,000 per Job
If contracted for
both Jobs

9/4/09
WS
K-3
(8)

Budgetary Estimate for Onsite Treatment: Cleaning and Degreasing Wastewater Generated by QatarGas (Streams 7 and 9)

Project Information and Background:

These have been designated as streams 7 and 9. Approximate volumes for this material are expected to be about 20,000 cubic meters (the volume will be twice this much when the piping for the additional train comes online). This waste will be derived from the pre-operational degreasing and cleaning of very large carbon steel piping systems. The process will involve the use of alkaline surfactants/soaps/detergents to remove hydrocarbons followed by a rinsing step. The wastewater will then be neutralized. Most of the waste will be generated during the months of March and April 2008. The waste is expected to contain sand and sediment, iron, as well as small quantities of emulsified oils, inorganic and organic salts.

Project Approach:

CES/AKD assume that this material will be stored in the storm water pond (currently being used to store streams 1 and 8). The pond currently has approximately 400 cubic meters of contaminated boiler cleaning water. CES/AKD to provide all management manpower and equipment treat up to approximately 110,000 to 120,000 us gallons per day in order to accommodate the work which will be done over a six week period. CES/AKD plan to use an on-site approach to treat the wastewater to irrigation discharge standards. The wastewater would be pumped directly from the pond into a few storage tanks to both remove floating oils and adjust the pH to just below. Then the water would be sent into two large filter presses to remove all suspended solids down to less than 1 micron in size. This would be achieved by pre-coating the presses with diatomaceous earth. The second phase would involve the use of membrane filtration (R.O., Nano, or Ultra filtration as required) to remove all salts, metals, and organic contaminants. The treated water would then be stored in 2 separate frac tanks prior to discharge. Treated water would be analyzed as required prior to discharge. All process solid/sludge residues and membrane concentrates will be subsequently disposed by CES/AKD.
Attached hereto, CES/AKD have provided process layout/drawing and process flow

500 m3/day

Project Assumptions:

Treated water can be pumped directly (via lay down hose) to a nearby drainage system. Alternately, the wastewater could be trucked away to be used for dust suppression or irrigation. Any removal by truck to be for QatarGas account.

QatarGas to provide sufficient area to set up treatment and storage systems near the storm water pond.

QatarGas to obtain all permits required for operation, treatment, and discharge. It is important that analytical requirements for treated waters do not unreasonably stall or otherwise interrupt the discharge process.

.

QatarGas would provide utilities such as power, water, and air.

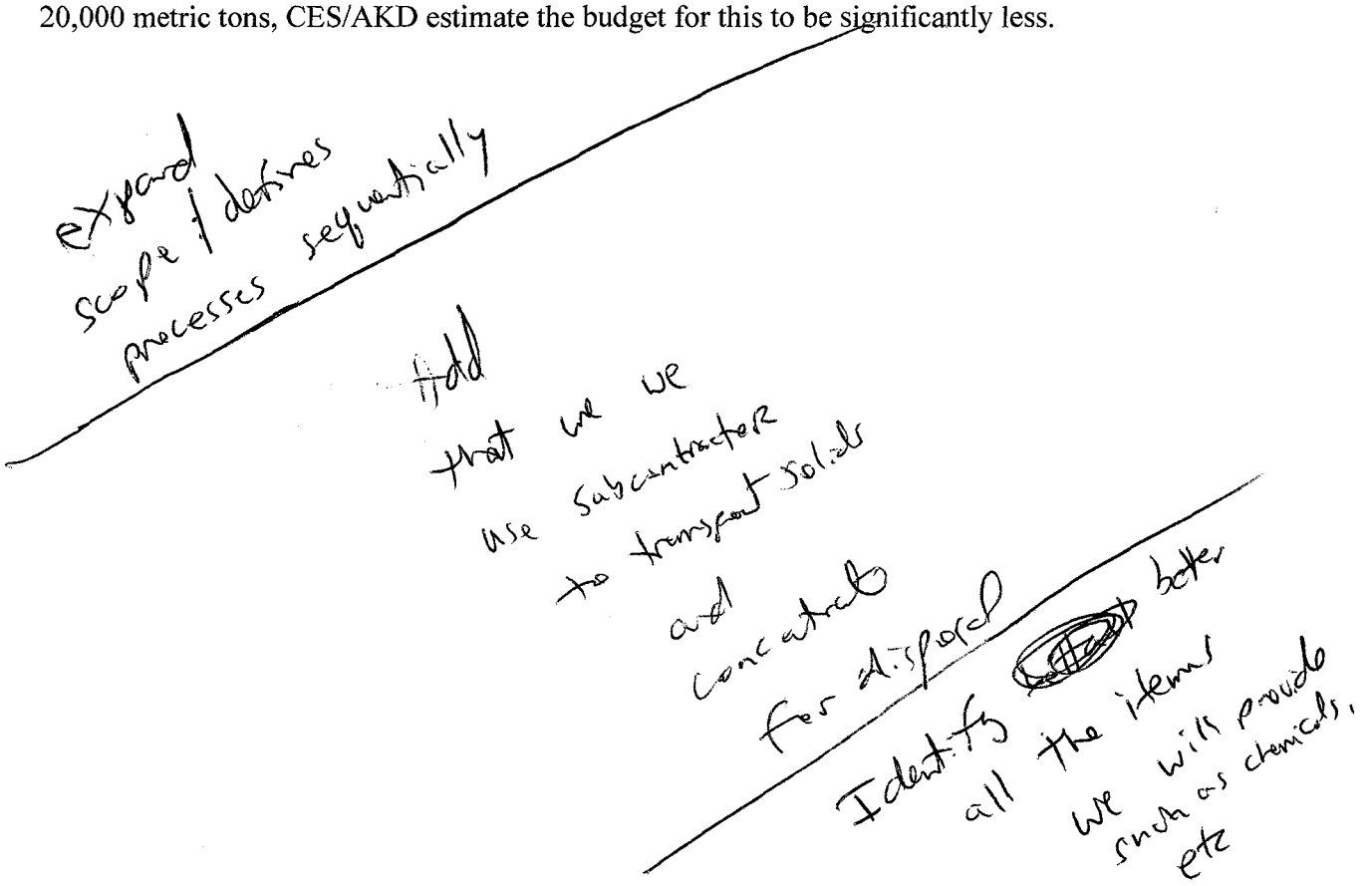
QatarGas to provide loading and unloading of heavy equipment, materials, and wastes. QatarGas also to provide the required semi-skilled industrial labor force to assist in the project.

Fees:

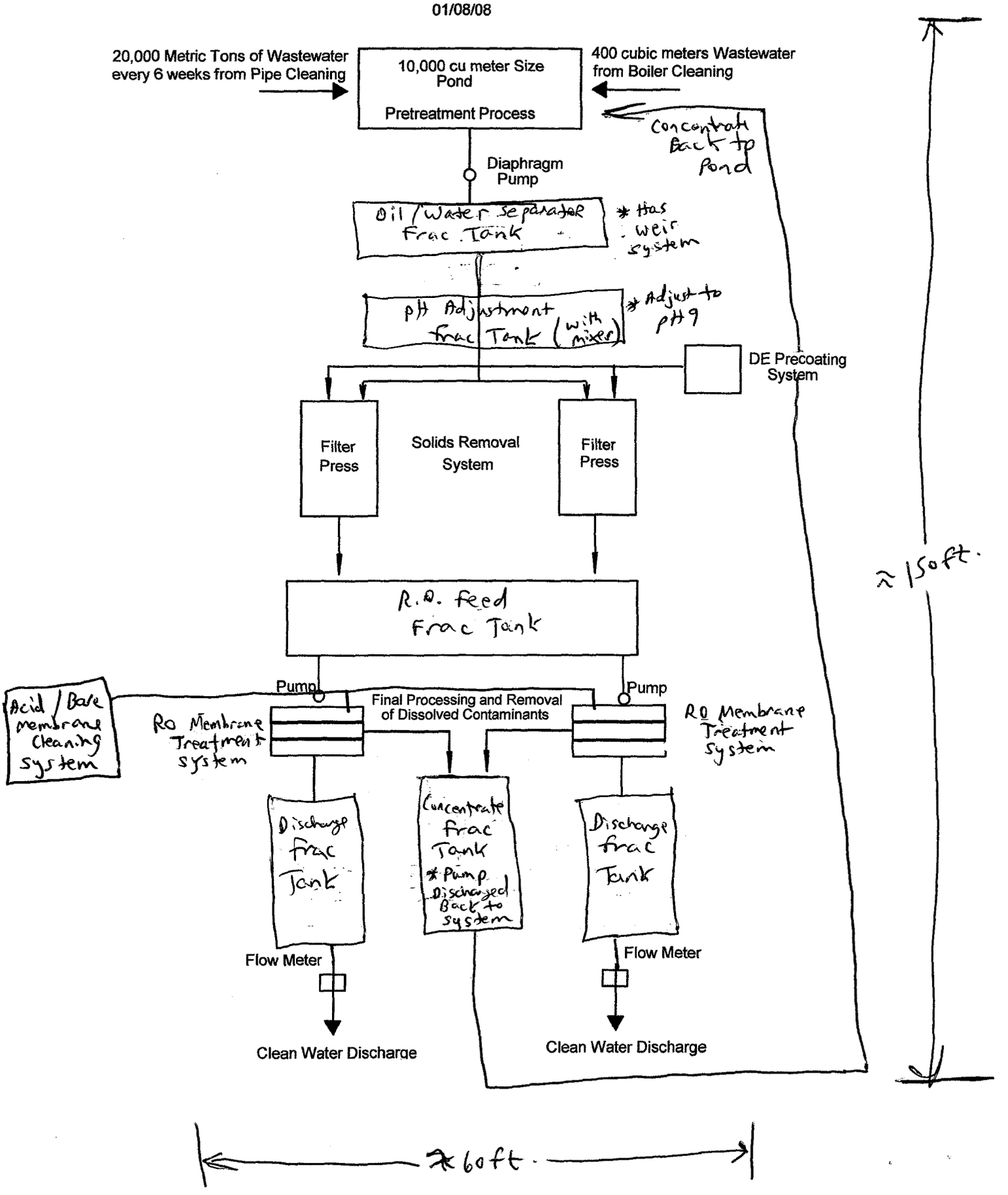
Based on approximately 5 million gallons of wastewater to process, CES/AKD will charge a lump sum rate of US $.58/gallon for the above listed services.

Future Benefits:

CES/AKD do not intend to return or demobilize any of the equipment that will be used for the project. Should QatarGas opt to contract CES/AKD to treat the second batch of 20,000 metric tons, CES/AKD estimate the budget for this to be significantly less.



CES Environmental Services, Inc.
Process Flow Diagram
Wastewater Treating Project
01/08/08



pH should be as close to 9 without going over the level using NaOH

Questions for CES

1. What is required footprint for equipment?
2. What are required utilities for equipment?
3. Boiler cleaning stream has been discharged to storm pond. Can we still utilize pond as an influent reservoir for other streams, or will additional storage be required for influent?
4. What treatment equipment is to be provided?
5. Are used filters, cartridges, sludge etc. to be disposed/recycled by CES? Will any of this be considered hazardous waste?
6. Is effluent sampling/analysis to be provided by CES? Will a temporary lab be provided?
7. In proposal, CES states that treatment equipment will not be demobilized. Qatar Gas does not want the equipment to stay onsite after the project is complete.

Answers for CES

1. RLC would prefer that effluent water be utilized beneficially before anything is discharged to sea.
2. CTJV can use effluent to water roads, or other construction purposes. Excess effluent can be discharged to sea under temporary RLC permit.
3. RLC may require testing in smaller batches than 60,000 gallons.
4. Effluent requirements attached.

TABLE 2-C: Quality Criteria for Treated Wastewater Used for Landscaping

PARAMETER	SYMBOL	UNITS	MAXIMUM ALLOWABLE	
			Landscaping	Food Crops [1]
Total Dissolved Solids	TDS	mg/l	1750	1750
Total Suspended Solids	TSS	mg/l	50	50
pH	pH	pH units	6-9	6.5-8.5
Floating Particles / Oil		mg/m2	Nil	Nil
1- Metallic species [3]				
Aluminium	Al	mg/l	15	5
Arsenic	As	mg/l	0.1	0.1
Barium	Ba	mg/l	2	2
Boron	B	mg/l	1.5	1.5
Cadmium	Cd	mg/l	0.05	0.01
Chromium, total	Cr	mg/l	0.2	0.01
Cobalt	Co	mg/l	0.5	0.05
Copper	Cu	mg/l	0.5	0.2
Iron	Fe	mg/l	1	1
Lead	Pb	mg/l	0.2	0.1
Manganese	Mn	mg/l	0.05	0.05

Mercury	Hg	mg/l	0.001	0.001
Nickel	Ni	mg/l	0.5	0.2
Zinc	Zn	mg/l	0.5	0.5
Sodium Absorption Ratio	SAR	mg/l	10	10
2- Non-Metallic Species [3]				
Ammonia	NH4+	mg/l	5[2]	15
Chlorine Residual	Cl	mg/l	0.5[4]	0.1
Cyanide	CN-	mg/l	0.2	0.05
Dissolved Oxygen	DO	mg/l	-	-
Fluoride	F-	mg/l	15	15
Phosphate	PO4-3	mg/l	30[2]	30
Sulphate	SO4-2	mg/l	400	400
Sulfide	S-2	mg/l	0.1	0.1
Biochemical Oxygen Demand	BOD5	mg/l	50	30
Total Kjeldahl Nitrogen (as N)	TKN	mg/l	75	35
Chemical Oxygen Demand	COD	mg/l	250	150
3- Organic Species				
Oil & Grease (Hexane Extractable)		mg/l	10	10
Phenols		mg/l	0.5	0.5
Total Organic Carbon	TOC	mg/l	150	75
Biological Test				
Total Coliform		MPN/100ml	23	0

NOTE: 1. The given food crops limits are agreed with the SCENR, MMAA and Ministry of Health (Preventive Health Dept.) as per the miniute of the meeting held on 27/01/2004.

2. The State of Qatar Environmental Standards limit

3. Depending on the nature of the process the selected heavy metals and its monitoring frequency will be determined in coordination with QP/RLC and on case-by-case basis.

4. This limit or SCENR limit shall apply whichever more stringent.

* The concentration of any identifiable chlorinated hydrocarbon or pesticide shall not exceed 10% of the 96 h LC50 value for the commercial shrimp (Penaeus Semisulcatus).

* The criteria value, limits or levels not specifically addressed will be decided on case by case basis. Where clarification and / or variance / exemption is required SCENR will be contacted.

Revision 1 - April, 2005
Sheet Amended May 07, 2005

180

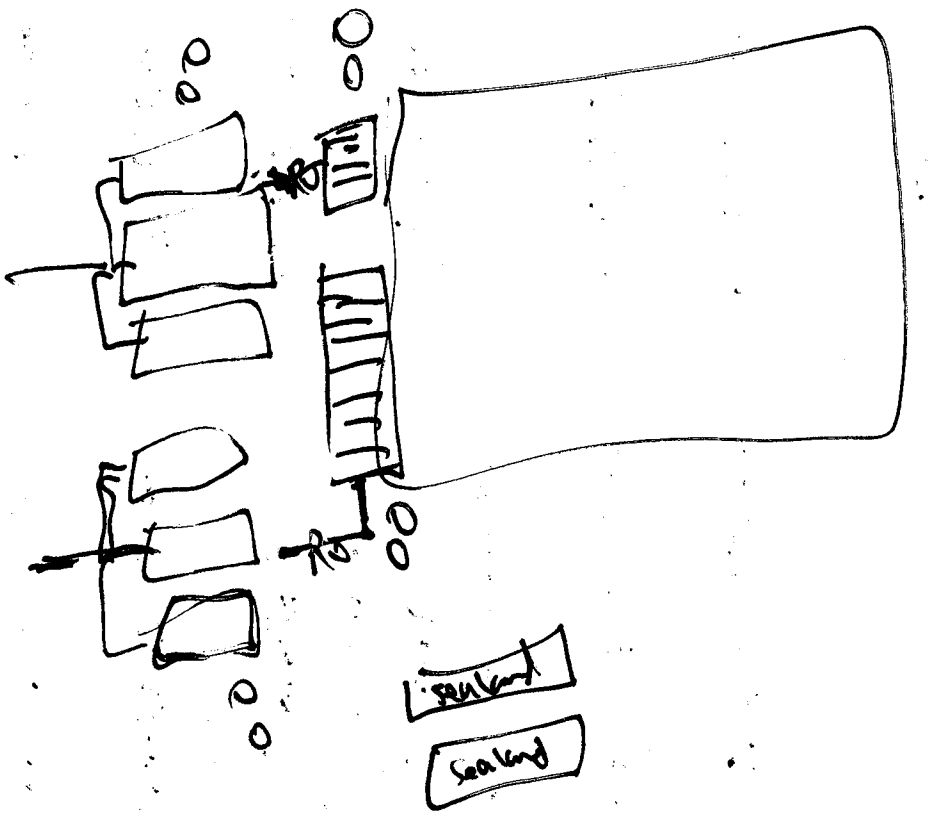
5,260,000 gallons
20,000 Metric tons

- Cost to buy and build all the necessary equipment = $1,150,000
- Shipping Equipment to Qatar
  5 fuel Tanks @ 25,000 each. = $100,000
  2 Sea Land containers @ 5,000 each = $10,000
  Other = $25,000
  Port fees = $75,000
- Transportation of Eq. to site = $50,000
- Mobilization of Men (6) & Demob. = $60,000
- Rental of Trucks in Qatar & Gas, etc. = $25,000
- Lodging for 2 months & food for 6 men = $60,000
- Wages (salary) for 6 men = $250,000
  (2-3 man shifts @ 12 hr. ea.)
- Waste Transp. & Disposal = $600,000
  (See back of page)
- Misc. & Profit (15% of above) = $372,000

$2,877,000

Budgetary Estimate Between

$2,877,000 / 1.425 Million for Second Round



hoses (shitload) - $50,000
2 sea land container - $5,000
2 presses - $200,000 extra membranes $150,000
6 frac Tanks - $168,000
2 Big R.O. Systems - $250,000
2 R.O. Cleaning Systems - $50,000
2 precoat systems for press - 50,000
8 Pumps - $30,000

EPAHO044001248

Gentlemen,

Again, it was definitely a pleasure meeting with you concerning next year's glycol logistics. More importantly, we appreciate the immediate opportunity to bid on the two treatment/disposal projects which have either already kicked off or will begin in the next few months. I just wanted to recap our discussions, detail the assumptions, and list the questions that still need to be addressed.

Concerning the project already in progress:
This material has been designated as streams 1 and 8. Approximate volumes for this material are expected to be about 1,500 to 2,500 cubic meters. This material comes predominantly from the pre-operational cleaning of boiler systems. The process typically involves a degreasing step using a surfactant/soap/detergent followed by a rinse, a citric acid stripping step to remove excess iron followed by a rinse, and a passivation step using sodium nitrate/nitrite. The remainder of the volume will be generated from a very similar process in efforts to clean a carbon steel tank/piping system. Most of this material is expected to be generated by the end of January, with some smaller volumes to follow in late March or early April 2008. The material is currently being stored in a near by storm water pond. The material is expected to have a high COD/TOC and contain iron as well as other organic and inorganic salts and small quantities of hydrocarbons.

CES/AKD assume that the storm water pond will be used to store the material until which time the storm water pond is needed for the storage of wastes from streams 7 and 9. CES/AKD would propose to provide (for QatarGas use) 3 on-site frac tanks to store this chemical cleaning waste once the pond is required for storage of wastewaters from streams 7 and 9 (Beginning in early to mid March). Our approach would be to provide all the logistics (except the loading at QatarGas) using iso containers to load and store the material. The iso containers would be picked up (on chasis or flat bed) and taken to UAE for shipment to CES in the United States for treatment. The most economical approach would be to use the iso containers already on-site (being used for storage of Selexol). CES would pick up the containers from the Port of LaPorte and transport them to our site in Houston. The containers would be emptied, cleaned at CES, and returned to the Leasing company to be taken off lease. If these containers cannot be used, CES/AKD can provide iso containers. The only question that CES/AKD still needs to know is if the Iso containers storing the Selexol would be available for use. Additionally, CES will require a sample of the waste to be shipped to CES as soon as possible so that the material can be properly analyzed and profiled.

Concerning the upcoming pipe degreasing project:
These have been designated as streams 7 and 9. Approximate volumes for this material are expected to be 18,000 to 20,000 cubic meters (the volume will be twice this much when the piping for the additional train comes online). This waste will be derived from the pre-operational degreasing and cleaning of very large carbon steel piping systems. The process will involve the use of alkaline surfactants/soaps/detergents to remove hydrocarbons followed by a rinsing step. The wastewater will then be neutralized. Most of the waste will be generated during the months of March and April 2008. The waste is expected to contain sand and sediment, iron, as well as small quantities of emulsified oils, inorganic and organic salts.

CES/AKD assume that this material will be stored in the storm water pond (currently being used to store streams 1 and 8). CES/AKD must be prepared to treat up to approximately 120,000 us gallons per day in order to accommodate the work which will

be done over a six week period. CES/AKD plan to use an on-site approach to treat the wastewater to discharge standards (to be used for irrigation or dust suppression). The wastewater would be pumped directly to CES filtration and treatment systems. The treated water would be stored in 6, onsite frac tanks (manifolded as two sets of 3 frac tanks each). Treated water would be analyzed in 60,000 gallon batches prior to being discharged. CES/AKD assume that it can pump the treated water directly (via lay down hose) to a nearby drainage system. CES/AKD assume there is sufficient area to set up treatment and storage systems near the storm water pond. CES/AKD assume that all permits for operation, treatment, and discharge can be obtained by QatarGas. CES/AKD will need to ascertain the chemical constituents and analytical methods to be used in testing prior to discharging the treated water.

CES/AKD will provide budgetary estimates before the end of this week (no later than Thursday, December 20th). For the project already in progress, CES/AKD could start shipping this material as soon as an agreement is in place (and continue shipping the material as it is generated). We do, however, need to know if the Selexol containers can be utilized as soon as possible. For the larger project, CES/AKD would need to be given some direction quickly as time is definitely of the essence. We look forward to your response.

Regards,

Matt Bowman
President – CES Environmental Services, Inc.

Budgetary Estimate by CES/AKD for Onsite Treatment of Cleaning and Degreasing Wastewater Generated by QatarGas (Streams 7 and 9)

Project Information and Background:

These have been designated as streams 7 and 9. Approximate volumes for this material are expected to be about 20,000 cubic meters (the volume will be twice this much when the piping for the additional train comes online). This waste will be derived from the pre-operational degreasing and cleaning of very large carbon steel piping systems. The process will involve the use of alkaline surfactants/soaps/detergents to remove hydrocarbons followed by a rinsing step. The wastewater will then be neutralized. Most of the waste will be generated during the months of March and April 2008. The waste is expected to contain sand and sediment, iron, as well as small quantities of emulsified oils, inorganic and organic salts.

Project Approach:

CES/AKD assume that this material will be stored in the storm water pond (currently being used to store streams 1 and 8). CES/AKD to provide all manpower and equipment treat up to approximately 120,000 us gallons per day in order to accommodate the work which will be done over a six week period. CES/AKD plan to use an on-site approach to treat the wastewater to discharge standards (to be used for irrigation or dust suppression). The wastewater would be pumped directly from the pond into two large filter presses to remove all suspened solids down to less than 1 micron in size. The second phase would involve the use of membrane filtration (R.O., Nano, or Ultra filtration as required) to remove all salts, metals, and organic contaminants. The treated water would then be stored in 6, onsite frac tanks (manifolded as two sets of 3 frac tanks each). Treated water would be analyzed in 60,000 gallon batches prior to being discharged. CES/AKD will need to ascertain the chemical constituents and analytical methods to be used in testing prior to discharging the treated water. All process solid/sludge residues and membrane concentrates will be subsequently disposed by CES/AKD.

CES/AKD will provide a detailed process layout/drawing and process flow upon request by QatarGas.

Project Assumptions:

CES/AKD assume that treated water can be pumped directly (via lay down hose) to a nearby drainage system. Alternately, the wastewater could be trucked away to be used for dust suppression or irrigation.

CES/AKD assume there is sufficient area to set up treatment and storage systems near the storm water pond.

CES/AKD assume that all permits for operation, treatment, and discharge can be obtained by QatarGas.

CES/AKD assume that QatarGas would provide utilities such as power, water, and air.

Budgetary Estimates:

CES/AKD estimate total project costs to be approximately 3 million US Dollars. The costs to QatarGas can be finalized and made firm (on a per unit basis) upon written request by QatarGas.

Future Benefits:

CES/AKD do not intend to return or demobilize any of the equipment that will be used for the project. Should QatarGas opt to contract CES/AKD to treat the second batch of 20,000 metric tons, CES/AKD estimate the budget for this to be about half the cost (i.e. about 1.5 million US dollars).

CTJV

P.O.Box22483 Ras Laffan Site Office, Ras Laffan, Qatar
Tel:+974-474-1260 Fax:+974-474-1128

Mr. Lee Yow Yeen
Onshore Project Manager
Qatar Liquefied Gas Company Ltd.(II)
Ras Laffan

Total No. of Sheet:
Date:November 22, 2007
Ref. No.:**QGX-L-CS/QR-01661**
QGII LNG ONSHORE FACILITIES PROJECT
Qatar Liquefied Gas Company Limited (II)
Job No.: -
Issued For:
- Request for your reply by Nov. 29, 2007

Subject: **PMC Wastewater Disposal Plan**

Dear Sir,

Following several streamlined meetings with Company on Wastewater Disposal of PMC massive water supposed to be generated in couple of upcoming PMC activities expected to start soon, our final draft plan with the predicted stream data in tabulated form is attached hereto.

We hope this is satisfactory to you then you may proceed with a final step to obtain RLIC approval in this regard.

We very much appreciate Company's initiative leading any assessment on the CTJV proposal, documentation as well as meeting arrangement with all the people involved in.

We are looking forward to have a good consequence from Company meeting with RLIC authority.

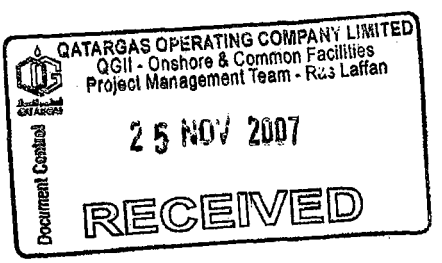
Sincerely yours,

S. Ikeda
Project Director
QGX Project

PMC-SM

Attachments: 1) Final Waste Water Disposal Plan in Letter
2) Waste Water Disposal Plan 24-Oct-07 Update

copy:PD, DPD, SSM, PM, DSM-R, DSM-A, CTM, FEM, PMC-M, PMC-ASI-UOO



PMC Waste Water Plan

1. Wastewater Disposal Plan

The wastewater disposal plan for pre-mechanical completion (PMC) activities at the Qatargas II (QG2) Project has been developed based on the attached summary table which provides details on the types, volumes, schedule and mode of disposal of the various wastewater streams.

2. Overview

Currently a total of 9 Wastewater (WW) streams are expected to be generated during PMC and Startup activities. These WW streams will be treated onsite and monitored to ensure compliance with RLC/SCENR landscaping standards. This wastewater disposal plan consists of the temporary disposal of these treated PMC/Startup WW streams in the land disposal area currently allocated by RLC to CTJV for disposal of treated sewage effluent (TSE), from the waste water treatment plant (WWTP) serving the QG2 Camp sand sewage from the LNG plant under construction. CTJV plans to minimize the amount of wastewater to be disposed of into the TSE disposal.

This waste water disposal plan is a temporary disposal solution for PMC/Startup wastewater until the startup of the QG2 WW re-injection wells. Project activities have progressed to the point that the generation of the PMC/Startup WW streams is scheduled to commence in November 2007.

This WW disposal plan relies primarily on the use of the TSE area for disposal, with contingencies for WW that does not meet RLC landscaping standards. Prior to disposal, representative WW samples will be collected and analyzed for compliance with the landscaping standards.

3. Wastewater Stream Disposal

As outlined in the attached waste stream spreadsheet, all streams have the potential to be disposed of in the TSE temporary disposal area. Based on prior experience however, WW from Streams 1 and 7 may be high in COD and will be disposed of in a manner separate from the other streams. These streams will be aerated and transported to the Qatargas 1 on-plot industrial WWTP for disposal. Streams 2-6 and 8-9 will be neutralized as necessary and a sample will be tested to confirm compliance with limits in Table 2-C: Quality Criteria for Treated Wastewater Used for Landscaping, as contained in the RLC Environmental Regulations, Rev 1, 2005 The WW will be held until analytical results are complete. If the sample meets the criteria, the waste stream will be transported via truck to the TSE disposal area. The WW disposal will be managed by CTJV such that the disposal may not cause any other physical problem in the cells.

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4. Contingency for Off-Spec wastewater

A contingency plan for waste water from Stream 1 & 7 will be to truck it to the Qatargas1 on-plot industrial WWTP oily water retention pond as per daily ullage (space available). The requirements for this water will be that COD must be less than 150 ppm, the WW must be neutralized, and a sample analysis will be attached as per Qatargas 1 liquids transfer procedures with each batch.

The WW from Stream 1 (boiler chemical cleaning) and Stream 7 (degreasing water) can potentially have high COD and iron concentrations that are above the irrigation standards. Stream 1 will generate approximately 450 m^3 on a monthly basis. WW from these two streams will be stored in temporary tank (GSP-Capacity 500 m^3) where each batch from the stream will be sampled and analyzed. If the results are acceptable the WW will be disposed to TSE. If results are not satisfactory, the WW will be decanted, neutralized, filtered and undergo the process of aeration for reducing COD. At this point the water will be reanalyzed and if results are acceptable the water will be transported by truck to the TSE disposal area.

WW from other streams that do not meet the RLC landscaping standards will be routed to the storm water pond within the QG2 site. This water will be held at the pond and treated until it meets landscaping requirements or until the waste water injection wells are complete and the wells are ready to receive wastewater. No wastewater will be discharged to the sea from the storm water pond.

5. Communication/Testing

RLC will be notified in advance of any treated wastewater to be sent to the TSE area.

Testing frequency is on a per batch basis, before and/or following treatment. The batch is deemed ready for disposal to the TSE area if the test results confirm compliance with all the landscaping parameters listed in the RLC Environmental Regulations. If some parameters are not met, a request for a possible exception will be made prior to disposal.

Test results will be reported by CTJV to:

1. QG2 PMT Environmental Engineer, David Smith; dsmith@qatargas.com.qa telephone 557 0905
2. QG2 Venture Environmental Engineering Lead, Dr. Ali Onder; aonder@qatargas.com.qa, telephone 462 7229
3. RLC Environmental department, Dr. Mohammed Beldawi e-mail: albeldawi@qp.com.qa telephone 556 9924 and Mr Kadambi Ramadorai; ramadorai@qp.com.qa telephone 597 3563

		UTILITIES						PROCESS		
	Streams	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5	Stream 6	Stream 7	Stream 8	Stream 9
		Chemical cleaning	Boiler Blowdown	Condensate Polishers	Cooling Tower Blowdown	Fresh cooling water system	Flushing Fire-fighting network	Degreasing	HRSG	SRU
	Continuous Flowrate (m3/hr)	Degrease/Rinse/Citroclean/rinse	2	Waste to neutralization Pit	2			Degreasing/Rinsing	Degreasing/Rinsing/Chemical Cleaning	Degreasing/Rinsing
	Batches Quantities (m3)*	450		307		700	800			
Some of the main Quality criteria (environmental regulation) *"Environmental Regulations for Ras Laffan Industrial city Revision 2005"*	Remarks	(76 m3 total volume of Boiler) (4 times)		Feed with desalinated water only (160 m3/hr)for start-up. So one polishers vessel at a time is running. Effluent disposal during 3h30, Single Regeneration every 72 hr	Blowdown rate according to the water analyzes can be reduced to 2	First filling rinse, Second filling with chemicals will not be drained		aMDEA ; 2,000m3x4times Selexol; 1,400m3x4times Flexsorb; 1,200x4times	24-HG9201; 42m3x3times 24-HG9201; 42m3x3times	SRU;250m3x3times TGT; 70m3x3times Incine;200m3x3times
	Disposal area	Disposal in temporary tank (GSP-Capacity 500 m3) and then pump by truck when analysis are OK to TSE plot	To the chemical Pit then Via temporary line to the neutralization pit No.1 then by truck to TSE plot	To the neutralization pit No.2 then empty by Trucks and disposed to TSE plot	To the neutralization pits, then pump by trucks to TSE plot	Empty via truck after analysis OK then to TSE plot	Send in the A8703 then pump up by trucks to TSE plot	Neutralize at temp' tanks and subsequently send to retantion pond, and by truck to designated evaporation pond	Neutralize at temp' tanks and subsequently send to retantion pond, and by truck to designated evaporation pond	Neutralize at temp' tanks and subsequently send to retantion pond, and by truck to designated evaporation pond
	Anlysis	Analysis will be carryed out by QG operating team jointly with CTJV environmental team. Laboratory results will be sent to QGII PMT David Smith								
6-9	pH	7-9	7 - 8*	6.5-8-5	7.6-8.5	6.5-8	6.5-8	7-9.5	7-9.5	7-9.5
1750	TDS (mg/L)	To be measured after cleaning	<100	<500	<1000			To be measured after cleaning	To be measured after cleaning	To be measured after cleaning
30	Phosphate (mg/L)	0.0477	<3	<20	<4			To be measured after cleaning	To be measured after cleaning	To be measured after cleaning
400	Sulfate (mg/L)	0	0	9(30**)	<200			<10	<10	<10
50	BOD (mg/L)	To be measured after cleaning	<10	<10	<10			To be measured after cleaning	To be measured after cleaning	To be measured after cleaning
250	COD (mg/L)	To be measured after cleaning	<10	<10	<10			To be measured after cleaning	To be measured after cleaning	To be measured after cleaning
	Conductivity µS/cm @25°C	<100	<200	<0.5	<100					
1	Total Fe (mg/L)	<1*	0.5	1	0.5	Desalinated water with debris and iron dust	Desalinated water with debris and iron dust	To be measured after cleaning*	To be measured after cleaning*	To be measured after cleaning*
	Ca2+ (mg/L)	0	0	9 (6**)	70					
	Mg2+ (mg/L)	0	0	25 (17**)	10					
5	NH4+ (mg/L)	0.5	<3	0 (50**)	0			0	0	0
	Na+ (mg/L)	<160	0	2200 - Salt	<20			<10	<10	<10
0.5	Cu2+ (mg/L)	0	0	1	0			0	0	0
	Cl- (mg/L)	<160	0	3000(3500**)- Salt	<20			<160	<160	<160
	CO32- (mg/L)	<50	<50	15 (60*)	80					
		*Iron concentration will be >1000ppm on this stream, then decanted, neutralized, treated in the temporary tank and filtered before being pump by trucks	*pH 10 on the Outlet of the boiler, neutralized in the pit,	** With polishing of condensate				*Iron concentration is > 1000ppm. Iron concentration will be decreased by decantation in the strom pond. Filtration will be available if need to be pump out	*Iron concentration is > 1000ppm. Iron concentration will be decreased by decantation in the strom pond. Filtration will be available if need to be pump out	*Iron concentration is > 1000ppm. Iron concentration will be decreased by decantation in the strom pond. Filtration will be available if need to be pump out

Waste Water quantities (m3)

Months	Weeks	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5	Stream 6	Stream 7	Stream 8	Stream 9
October	41									
	42									
	43									
	44				100					
November	45				350					
	46	450		307	350					
	47			307	350					
	48			307	350					
December	49	450		614	350					
	50			614	350					
	51			614	350					
	52	450		614	350					
January* 2008	1		250	614	350					
	2		350	614	350					
	3	450	350	614	350					
	4		600	614	350					
	5									
February	6									
	7									
	8									
	9									600
March	10									750
	11							2000		200
	12							4600		
	13							4600		
April	14							4600	125	
	15							2600	125	
	16									
	17									

*From the third week of January, all the water from Utility area will be sent to the waste water treamtement area (87)

1200

Before 4/1 [11,200]

1550

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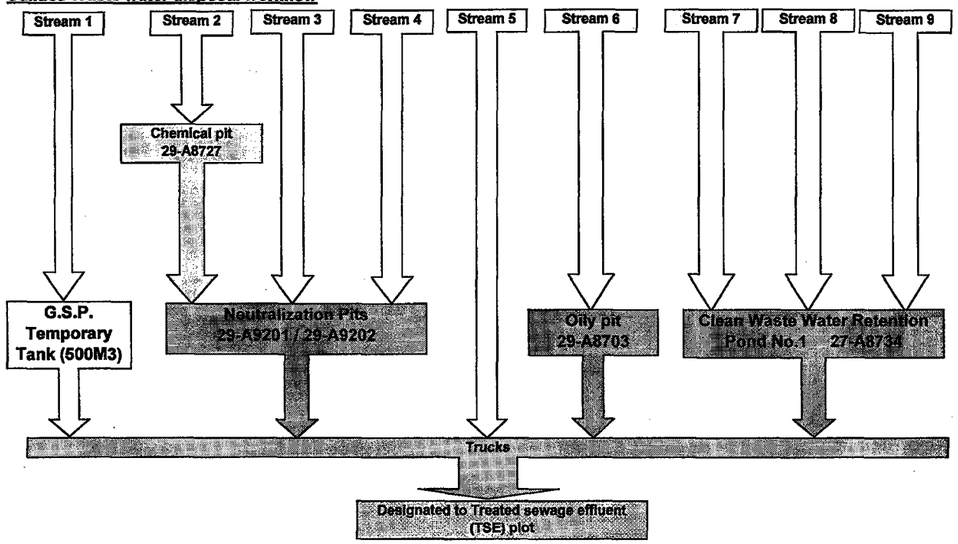
Water Storage and treatment Facilities			
Neutralization Pits		Operating Volume	Total Volume
	29A9201	384	600
	29A9202	384	600
Oily pit	29A8703	60	200

Utilities Waste water disposal workflow



Comments:

1_ All the streams will be neutralized and analysis check before being pump by truck and send to the Designated TSE plot. Pit will be cleaned before being in normal operation by desalinated water

2_All the analysis will be carrying out by QG1 laboratory. All the results will be sent to PMT, David Smith and CTJV Camp Manager
Monitoring of each stream will be done once per week or on a per batch basis.
All RLIC landscaping irrigation parameters as per *"Environmental Regulations for Ras Laffan Industrial city Revision 2005"* Table 2-C, will need to be monitored
Compliance with RLC landscaping irrigation standards for all parameters is critical prior to disposal as monitoring results will be submitted to SCENR/RLC in accordance with QGII Environmental permit.

3_The waste water will be neutralized tanks to the acid and causitc dosing packages. Blower will also be used to insure a good mixing and dilution of particules.

4_Stream 1 to 6 are produced by the Utilities. Stream 6 to 9 are from Process

5_Based on the last planning the operability of the Waste water treatment area (area 87) will be on the third week of January 2008

6_The analysis quality measurements used as reference on the A column are based on the "Environmental Regulations for Ras Laffan Industrial city Revision 2005"

7_All the water will be transport and dispose to the Designated TSE Plot

8_Like others streams the Utilities waste water will be stored and checked inside the neutralization pit before being pump and dispose in the evaporation basin

9_Streams 7, 8 and 9 will be sent to Storm Pond (27-A8734). If more volume is required, the water will be, after checking the analysis transfer to the eveporation Basin area

10_If waste water quality is not matching for some time the specifications, this water will be sent to QG1 waste water treatment, as temporary solution

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2.0 Water Environment

2.1 General

The water quality criteria have been developed/adopted to protect the long term resources of marine life and water supply in Ras Laffan Industrial City. These criteria have been established to minimise the impact on ground and Gulf water quality, the Gulf ecosystem and the local fisheries.

General guidelines are as follows:

- Industrial and municipal wastewater shall be segregated to increase the potential for use of each stream. All treated wastewater shall be used for landscaping. Discharge into the sea is not allowed except as permitted under section 2.1.5;
- Entities are encouraged to have adequate capacity for storage of process wastewater on site on short term basis; such storage should be in an impermeable tank or lagoon;
- Industrial wastewater stream shall be pre-treated (if exceeds the relevant discharge criteria) to an acceptable level before discharge; and
- Direct discharge of untreated or partially treated water, if exceeds the relevant criteria values, (including polluted ballast and ship wastewater, hazardous materials, and contaminated storm water) is prohibited.
- Rregional Organisation for the Protection of Marine Environment (ROPME) protocols shall apply

2.1.1 General Discharge Quality Criteria

The receiving water shall be adequate to maintain marine life, fisheries, human health and other amenities. All receiving waters shall be free from substances attributable to wastewater or other discharges that:

- Settle or form objectionable deposits;
- Floats as debris, scum, oil or other matter to form nuisance;
- Produce objectionable colour, odour or turbidity;
- Result in impact on the adjacent open Gulf waters in violation of Gulf water quality criteria.

2.1.3 Seawater Cooling Intake

To minimise the impact of the withdrawal of harbour water for cooling purposes, biological material that is screened and filtered should not be returned to the sea except for alive aquatic organisms.

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2.1.4 Storm Water Runoff

The impact of storm water runoff may be significant because the dry period proceeding precipitation is usually long, potentially resulting in accumulation of pollutants in the collection system. The first-flush from this system could have an unacceptable impact on the receiving water body (recommended monitoring parameters are listed in Table 2-F). General guidelines are as follows:

- Entities shall have adequate ability to monitor potentially contaminated storm water and skim free oil;
- Contaminated storm waters which run off from areas surrounding process units and from areas around shipping points shall be directed through appropriate treatment facilities; and
- All discharge points shall be equipped with shut-off mechanism.

2.1.5 Water Point Source Discharges

Waters used as cooling water for once through non-contact cooling or desalinization unit brine or cooling tower blowdown may be discharged to cooling water outfall provided that the chemical characteristics of the water are not altered above the background characteristics except for temperature, dissolved solids and residual chlorine (Table 2-B). Prior approval from QP/RLC is required for the use of additives, corrosion inhibitors and or any other chemical. It requires submission of MSDS, concentration at discharge point and assessment of environmental impacts. Direct discharge of industrial wastewater to the cooling canal or Gulf is not allowed unless prior written approval from QP/RLC is obtained.

2.1.6 Groundwater Quality

The objectives of groundwater quality monitoring include the determination of background water quality characteristics and determination of potential sources of contamination and contaminants. Entities are required to install a sufficient number of groundwater monitoring wells (at least one well at each property corner, within their facility) and monitor the quality of the groundwater and provide QP/RLC with the following information as a minimum:

- Location maps, location coordinates, and cross section detailing the geologic structures, geologic settings (litholog), direction of groundwater movement, and background quality of groundwater in aquifer/s; and
- Quarterly groundwater quality monitoring data (recommended parameters are listed in Table 2-D).

2.1.7 Landscaping Practices

The intent of these criteria is to establish acceptable levels of constituents of reclaimed water and to prescribe means for assurance reliability in the production and use of reclaimed water. This will ensure that the use of reclaimed water for the specified purpose does not impose undue risks to health.

Landscaping practices must ensure that treated wastewater used for irrigation purposes is not injurious to the public health or vegetation (recommended monitoring parameters for vegetation are listed in Table 2-G). The following conditions shall be observed:

- Treatment plant effluent shall conform to the point source discharge criteria (Table 2-C) or as agreed with QP/RLC;
- Distribution system designed for landscaping shall be well marked;
- Water utilised for irrigation shall be applied to landscaping vegetation only, and shall not be used for food crops or forage production;
- Application of irrigation water shall not result in the contamination of other water bodies contamination of soils, groundwater resources etc. (recommended monitoring parameters are given in Tables 2-G and 2-E).

All GTL (Gas to Liquid) projects shall treat wastewater to meet the criteria for food crops specified in Table 2-C.

2.1.8 Marine -Related Discharges

With the establishment of Ras Laffan Port, there will be a resultant impact in the area from ships calling at the port. To minimise the impact that these ships will have on the surrounding marine environment, the marine discharge guidelines include:

- The discharge of untreated contaminated shipboard wastes and refuse from vessels into coastal waters is not permitted;
- Contaminated ballast water should not be discharged into coastal waters. The wastewater discharges from marine vessels should conform to the criteria specified in Table 2-A and discharge of ballast sludges into the Gulf is not allowed. Clean segregated ballast water meeting the criteria presented in Table 2-A may be discharged into the Gulf waters;
- Slop oils or machinery drippings shall be collected and discharged to appropriate onshore Entities and therefore are not to be discharged into coastal waters. Catch pans shall be installed at all valve and hose connections; and
- Floating booms and cleanup equipment shall be available to contain, collect and clean oil spills from these vessels at all times.

2.1.9 Septic Disposal Systems

It is prohibited to construct or operate septic disposal systems within Ras Laffan Industrial City and the closure of the existing septic disposal systems requires an approval from QP/RLC.

2.1.10 Holding & Storage Tank Sites

Below-grade holding tank storage sites shall be lined with provisions for leak monitoring in order to prevent seepage of holding substance/s into the soil and/or groundwater. Placement of below-grade gasoline and diesel fuel tanks requires prior written approval from QP/RLC and are generally discouraged. Transfer and loading points for all chemical or hydrocarbon tanks shall have appropriate

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spill containment basins or curbs. New Fibreglass tanks shall be placed on a concrete pad/slab with walls (block work) and plaster/sealant inside or an equivalent technically acceptable system subject to prior approval of Qatar Petroleum, Ras Laffan City. This is to ensure that any leakage/spillage shall not contaminate the groundwater/soil. Holding tanks will be emptied on regular basis. Tanks shall be inspected on a daily basis to avoid overflow or spillages. Entities are required to ensure that all effluent holding and other storage tanks are designed and constructed to comply with these requirements.

2.2 Environmental Reporting & Monitoring

2.2.1 Introduction

This section establishes reporting, testing, monitoring and analyses requirements for sources of water pollution located or proposing to locate at Ras Laffan Industrial City. The objective of these requirements is to enable QP/RLC to assess water quality impacts.

2.2.2 Discharge Monitoring

Entities producing process wastewater are required (unless exempted):

- To continuously monitor the flow, temperature, and wastewater parameters characteristic to their operation; and
- To develop a monitoring protocol for wastewater parameters characteristic to their operation.

2.3 Water Injection for Disposal

Subject to prior written approval from QP/RLC, Entities whose projects process sour, highly alkaline or formation-produced water may utilize underground injection for primary disposal of these wastewaters in lieu of extended waste treatment processes. Disposal shall be into the Yamama / Sulaiy Formations underlying Ras Laffan. Reservoir modelling and injection well planning shall be coordinated with QP/RLC to analyse pressure inference between other water disposal projects in RLC. Wastewater and disposal zone formation water compatibility shall be assessed prior to initiating injection. All casing and tubing strings (except the structural 30 or 20 inch casing) shall be designed for maximum injection pressure or surface . All wellheads, valves, well tubulars, packers and down-hole tools shall be rated for sour service. At least one continuous casing string shall cover the Um Ar Raduma Formation and shallow groundwater formations. All casing shall be cemented fully to the surface. Cement integrity shall be verified with cement bond and evaluation tool cased hole-logging techniques. Voids and poor bonding shall be remedied. Injection well pumps and filtration shall be designed with adequate on-line spares to assure very high availability (100%). All critical equipment shall have 100% spares prior to start-up and during operation. Emergency plans shall be prepared for credible emergency scenarios and integrated with other RLC emergency plans. Provision shall be made to monitor injection volumes, injection pressures and casing anulus pressures. Entities must obtain a permit from QP/RLC to inject their wastewater stream and must comply with the permit conditions. Endusers shall submit their injection facility design and operational plan with 100% injection facility reliability, equipment & system criticality analyses to QP/RLC for approval.

TABLE 2-A: BALLAST WATER DISCHARGE CRITERIA [a]

Variable	Units	Maximum Allowable
Ammonia, Total (as N)	mg/l	3.0
Biochemical Oxygen demand (5 day) [c]	mg/l	75
Chemical Oxygen Demand	mg/l	470
Floatable Oil and Grease	mg/l	NIL
pH	pH units	6-9[b]
Suspended solids	mg/l	35
Total Oil (Hexane Extractable)	mg/l	15
Total Organic Carbon	mg/l	150

NOTES :

a) There are no restrictions on discharges of clean segregated ballast water which meet these criteria.

b) Inclusive range not to be exceeded.

c) Empirically estimated value

Table: 2-B Desalination Water/Blowdown Discharges

Parameters	Unit	Maximum Value/limit
pH	pH Units	6-9
Residual Chlorine differential	ppm	None or less
TSS differential	ppm	None or less
Oil and Grease differential	ppm	None or less
TDS	ppm	To be determined on a case by case basis during the EIA process in consultation with the SCENR.

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TABLE 2-C: **Quality Criteria for Treated Wastewater Used for Landscaping**

PARAMETER	SYMBOL	UNITS	MAXIMUM ALLOWABLE	
			Landscaping	Food Crops[1]
Total Dissolved Solids	TDS	mg/l	1750	1750
Total Suspended Solids	TSS	mg/l	50	50
pH	pH	pH units	6-9	6.5-8.5
Floating Particles / Oil		mg/m^2	Nil	Nil
1- Metallic species [3]				
Aluminium	Al	mg/l	15	5
Arsenic	As	mg/l	0.1	0.1
Barium	Ba	mg/l	2	2
Boron	B	mg/l	1.5	1.5
Cadmium	Cd	mg/l	0.05	0.01
Chromium, total	Cr	mg/l	0.2	0.01
Cobalt	Co	mg/l	0.5	0.05
Copper	Cu	mg/l	0.5	0.2
Iron	Fe	mg/l	1	1
Lead	Pb	mg/l	0.2	0.1
Manganese	Mn	mg/l	0.05	0.05
Mercury	Hg	mg/l	0.001	0.001
Nickel	Ni	mg/l	0.5	0.2
Zinc	Zn	mg/l	0.5	0.5
Sodium Absorption Ratio	SAR	mg/l	10	10
2- Non-Metallic Species				
Ammonia	NH_4^+	mg/l	5[2]	15
Chlorine Residual	Cl	mg/l	0.5[4]	0.1
Cyanide	CN^-	mg/l	0.2	0.05
Dissolved Oxygen	DO	mg/l	-	-
Fluoride	F^-	mg/l	15	15
Phosphate	PO_4^{-3}	mg/l	30[2]	30
Sulphate	SO_4^{-2}	mg/l	400	400
Sulfide	S^{-2}	mg/l	0.1	0.1
Biochemical Oxygen Demand	BOD_5	mg/l	50	30
Total Kjeldahl Nitrogen (as N)	TKN	mg/l	75	35
Chemical Oxygen Demand	COD	mg/l	250	150
3- Organic Species				
Oil & Grease (Hexane Extractable)		mg/l	10	10
Phenols		mg/l	0.5	0.5
Total Organic Carbon	TOC	mg/l	150	75
Biological Test				
Total Coliform		MPN/100ml	23	0

NOTE:

1. *The given food crops limits are agreed with the SCENR, MMAA and Ministry of Health (Preventive Health Dept.) as per the miniute of the meeting held on 27/01/2004.*
2. *The State of Qatar Environmental Standards limit*
3. *Depending on the nature of the process the selected heavy metals and its monitoring frequency will be determined in coordination with QP/RLC and on case-by-case basis.*
4. *This limit or SCENR limit shall apply whichever more stringent.*

* The concentration of any identifiable chlorinated hydrocarbon or pesticide shall not exceed 10% of the 96 h LC_{50} value for the commercial shrimp *(Penaeus Semisulcatus).*

* *The criteria value, limits or levels not specifically addressed will be decided on case by case basis. Where clarification and / or variance / exemption is required SCENR will be contacted.*

5. TABLE 2-D
RECOMMENDED GROUNDWATER QUALITY MONITORING PARAMETERS

PARAMETER	PARAMETER
Temperature	Arsenic
pH	Barium
Specific Conductance	Chromium (Hexavalent)
Ammonia -- Total Nitrogen	Lead
Nitrate-Nitrogen	Mercury
Total Phosphorus	Selenium
Chlorides	Silver
Total dissolved Solids	Copper
Total Petroleum Hydrocarbon	Sodium
Sulphate	Nickel
Coliforms, if applicable	Zinc
Cobalt	Boron
Iron	Manganese

TABLE 2-E
RECOMMENDED PARAMETERS FOR SOIL ANALYSIS

Parameter	Parameter
pH	Copper
Cation Exchange Capacity	Lead
Total Nitrogen	Nickel
Total Phosphorus	Zinc
Total Potassium	Chromium
Total Organic Carbon	Mercury
Petroleum Hydrocarbon	Cobalt
Sodium Absorption Ratio	Boron
Cadmium	Arsenic

TABLE 2-F
RECOMMENDED PARAMETERS FOR STORM WATER RUNOFF MONITORING

Parameter	Parameter
pH	Arsenic
Specific Conductance	Cadmium
Total Suspended Solids	Chromium
Chloride	Copper
Total Nitrogen	Mercury
Total Phosphorus	Lead
Chemical Oxygen Demand	Cobalt
Oil (Hexane Extractable)	

TABLE 2-G
RECOMMENDED PARAMETERS FOR VEGETATION MONITORING

Parameter	Parameter
Boron	Molybdenum
Cobalt	Nickel
Cadmium	Zinc
Copper	Mercury

NOTE : Additional parameters may be necessary depending on the materials applied to the soil and specific types of vegetation.

Qatar marks Arab Environment Day

QNA

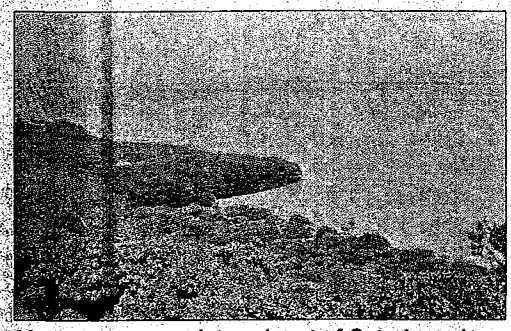
DOHA Qatar on Monday marked the Arab Environment Day and this year's theme was 'For a safe use of chemicals'.

Qatar is one of the most environment-conscious countries and has formulated a number of pro-environment conservation legislations. Qatar's care for environment reached its pinnacle in 2000, when the Emir His Highness Sheikh Hamad bin Khalifa al Thani issued an Emiri decree setting up the Supreme Council for the Environment and Natural Reserves (SCENR).

Keeping in line with the environment conservation initiatives of His Highness the Emir, a specialised chamber to hear and decide on the crimes against natural resources and environment was set up in April 2002.

Presided over by the Heir Apparent His Highness Sheikh Tamim bin Hamad al Thani, the Council has a legal entity with an independent budget that is set under the State's general budget. It undertakes all environment protection responsibilities including the augmentation and protection of endangered wildlife species and their natural habitat, the formulation of the general policies aiming to protect the environment and realise sustainable development, developing plans of action to implement endorsed policies, monitoring environment and wildlife-related protection measures and practices, preparing the necessary draft laws, regulations and decisions on the protection of the environment and establishing a national environment data base and other environment protection activities.

The Supreme Council for the Environment and Natural Sanctuaries organises nationwide functions to control the desertification problem as Qatar lies in the arid region, where rainfall does not exceed 200 mm per annum.



Mangroves are an integral part of Qatar's ecology.

The council strictly prohibits trading in or trafficking of endangered species of fauna or flora. Hunting and fishing are also rigorously regulated. Hunters are under the obligation not to damage gardens, farms or the vegetation. They are not allowed to use explosives nor to interfere or tamper with the life of wild birds, marine turtles, baby animals, wild eggs or nests by damaging, moving or selling them or taking possession thereof. Such practices are strictly and exclusively permitted for scientific research purposes, provided that an authorised permission is granted from the concerned authorities.

Qatar does not allow hazardous waste materials to enter the country, as it does not have the necessary facilities to ensure safe dumping. However, sending these materials abroad is allowed within the restrictions outlined by the provisions of Basel convention, which Qatar has signed on August 9, 1995.

18 - 10 - 2007 Gulf Times.

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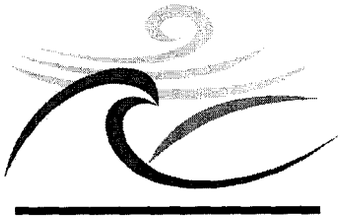

إدارة الشـــؤون الفنيـــة
TECHNICAL AFFAIRS DEPT.
(الملحق رقم 2 / 4)

المجلس الأعلى للبيئة والمحميات الطبيعية
SUPREME COUNCIL FOR THE ENVIRONMENT & NATURAL RESERVES

استمارة طلب الحصول على تصريح التشغيل
(Application form for Operating Permit Authorization)

ملاحظة لمقدمي الطلبات
NOTE TO APPLICANTS

1. على مقدم هذا الطلب ملأ وتعبئة المعلومات المطلوبة فيه بأحرف مطبوعة ويقدم معها المعلومات التكميلية ذات العلاقة إلى الأمانة العامة.
2. يحتمل عدم مطابقة جميع أجزاء استمارة الطلب على كل نشاط ، ولكن بالرغم من ذلك على مقدم الطلب استكمال الطلب قدر الإمكان وتقديم جميع المعلومات المطلوبة وفي حالة عدم المطابقة يجب ذكر سبب عدم المطابقة بوضوح.
3. عند استخدام ملاحق ووثائق فنية أخرى يجب الإشارة اليها، وسوف يقوم المجلس بالنظر في جميع المعلومات المتوفرة عند دراسة الطلب.
4. يحتوي هذا الطلب على جزئين : معلومات أولية ومعلومات أخرى اضافية ، حيث يخضع الطلب بعد اكتماله للتدقيق والدراسة ، وإذا كنت ترغب بأن تحفظ المعلومات سرية ، يرجى إلحاق كتاب يبين فيه الأسباب بالتفصيل.
5. في حالة عدم استيفاء كل المعلومات المطلوبة في الطلب فإن المجلس غير مسئول عن أي تأخير قد يحدث في عملية دراسة الطلب أوالنظر فيه.

1. This Application for a Consent-to-Operate (operating permit) shall be completed in block letters and submitted with relevant supplemental information to: General Secretariat.
2. All sections in the permit Application may not be relevant to every activity. However, the Applicant should look through the complete form and provide all relevant information. All questions must be answered. If any question is considered 'not applicable' (N/A) the reason should be stated in full.
3. Where attached sheets and other technical documents are utilised, indicate appropriate cross-references. SCENR will take all available information into account in reviewing the Application. Unclear, incomplete, or improperly filled out Applications will be returned to the Applicant.
4. This Application consists of two parts: Background Information, and Further Information. The completed Application may be subject to further verification and review. However, if you wish any information in your application to remain confidential please enclose a statement with your completed application stating the reasons in full.
5. The Supreme Council for the Environment & Natural Reserves is not responsible for delays arising from submission of incomplete information.

EPAHO044001267

1- BACKGROUND INFORMATIOM — 1- معلومات أولية

رقم الطلب Application (if applicable)		Application Date (mm/dd/yy)	تاريخ الطلب (يوم /شهر /سنة)
نوع الطلب Type of Application	New جديد/ تجديد Renewal ☐	Modification تعديل / ☐	Transfer تحويل / ☐
بدء التشغيل المقترح/الفعلي (شهر / ســـنة) Installation was or will be commissioned give (month and year)			
اسم المنشأة /المشروع Company/ Installation Name			
نقطة الاتصال Contact Person			
الصندوق البريدي Postal Address			
الهاتف Telephone		الجوال / Cell:	
البريد الإلكتروني Email		فاكس / Fax:	
نوع النشاط Type of Activity			
عدد الموظفين Number of Employees			
رأس المال (للمنشأة الجديدة فقط) Capital Cost (new installations only)			
تاريخ إصدار التصريح البيئي License Issue Date			
الجهة المرخصة Licensing Authority			
موافقة تامة Unconditional Approval			
موافقة مشروطة بتنفيذ بعض الإجراءات والقواعد Conditional Approval			
الموقف من تنفيذ الإجراءات المؤجلة Situation as for Executing Postponed Procedures			
ترخيص المنشأة/المشروع Installation Permit/Project	التاريخ: Date:	الرقم: Ref.:	
رقم الموافقة الخاصة بتخزين المواد الخطرة Storage Permit Number for Hazardous Materials			
الموافقات الأخرى المطلوبة للمرفق List any other Approvals in Respect of Installation	منحت *Granted*	في طورالإجراء *Being processed*	
	•	•	
	•	•	

EPAHO044001268

2. Further Information

2. معلومات أخرى

2.1 Raw materials used per day:

2.1 المواد الخام المستخدمة في اليوم الواحد

S. No الرقم	Raw Material المواد الخام	Quantity (kg / day) الكمية (كجم /يوم)
(i)		
(ii)		
(iii)		
(iv)		
(v)		

2.2 قائمة المنتجات الرئيسية والمنتجات الثانوية المصنعة يوميًا:

2.2 List of products and by-products manufactured per day.

S. No الرقم	المنتجات الرئيسية / المنتجات الثانوية Product / By-product	الكمية (كجم /يوم) Quantity (kg / day)
(i)		
(ii)		
(iii)		
(iv)		
(v)		
(vi)		

EPAHO044001269

3. Water Pollution

3. تلوث المياه

3-1 بيان طريقة معالجة مخلفات المياه الناتجة عن العمليات الصناعية المختلفة مع الرسومات الموضحة للمصادر المختلفة التي ينتج عنها تلوث المياه، و كشف بكمية المياه المستخدمة بالتفصيل (يرجى إرفاق كتاب توضيحي).

3-2 بيان طريقة وأسلوب التخلص من المخلفات الناتجة يوميًا عن جميع المرافق (الآدمية، الصناعية، التبريد، والعمليات البحرية).

3.1. Explain the methods of treatment of industrial wastewater arising from different processes along with flow diagrams showing different sources of generation of wastes with a mass balance of water utilized (Please attach a write up).

3.2 Explain the method and mode of disposal of wastewater arising daily from domestic, industrial, cooling and offshore activities.

S. No الرقم	الأنشطة Activities	الكمية (متر مكعب) Quantity (m^3)	طريقة التخلص Mode of disposal
(i)	آدمية Domestic		
(ii)	Industrial صناعية		
(iii)	تبريد Cooling		
(iv)	Offshore العمليات البحرية		

EPAHO044001270

4. Air Pollution

4. تلوث الهواء

4.1 Atmospheric emission from each stack

4.1 الانبعاثات الغازية من المداخن

(1)	**Total number of stacks in the premises*** العدد الإجمالي للمداخن في المنشأة					
(i)	**Stack No.** رقم المدخنة	**1**	**2**	**3**	**4**	**5**
(ii)	**Stack height (m)** ارتفاع المدخنة(م)					
(iii)	قطر دائرة المدخنة (م) **Stack diameter (m)**					
(iv)	كمية الغاز المنبعث (م3/ساعة) **Gas Quantity (m^3/hr)**					
(v)	درجة حرارة الغاز (درجة مئوية) **Gas temperature (°C)**					
(vi)	سرعة انطلاق الغاز (م / ثانية) **Exit velocity (m/sec)**					
(vii)	نوع نظام المراقبة (مستمر / متنقل يدوي) **Type of monitoring system (continuous/portable)**					
(viii)	معدل انبعاث الملوث (مجم/ثانية) **Pollution emission rate(mg/s)** ثاني أكسيد الكبريت آكاسيد النتروجين SO_2 **NOx** أول أكسيد الكربون **CO** هيدروكربون **HC (Hydrocarbons)** الأجسام والمواد الدقيقة **PM (Particulates matter)** أخرى **Others**					

* جميع المداخن يجب أن يتوفر بها فتحة مناسبة لتوصيل جهاز رصد المداخن.

*** Each stack should be provided with suitable portholes for stack monitoring**

4.2 Fuel consumption per day

4-2 استهلاك الوقود يوميًا

EPAHO044001271

		الغاز الطبيعي Natural Gas	نفط Oil
(i)	الاستهلاك اليومي بالطن أو بالمتر المكعب Daily consumption in tons or m^3		
(ii)	Sulphur content % نسبة الكبريت %		

5. Solid Waste الصلبة .5

S. No الرقم	المصادر / الأنشطة Sources/Activities	الكمية (كجم/م3) Quantity(kg/m^3)	طبيعية المخلفات خطرة / غير خطرة (Nature of waste Hazardous/Non-Hazardous)	طريقة التخلص Mode of disposal
1.				
2.				
3.				
4.				

6. التكنولوجيا والتقنيات المقترح استخدامها لمنع أو التقليل من المخلفات الناتجة من المنـــشأة أو المشروع
(المرفق).

6. Proposed technology and other techniques for preventing or minimising discharges and wastes from the installation

7. Storage: التخزين: .7

7-1 وسائل تخزين المواد الخام وكفاءتها:

7.1 Means of storing raw material and their efficiency:

7-2 وسائل تخزين المنتجات الأساسية وكفاءتها:

EPAHO044001272

7.2 Means of storing primary products and their efficiency:

7-3 وسائل تخزين المنتجات الثانوية وكفاءتها:

7.3 Means of storing secondary products and their efficiency:

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8. Transportation: 8. النقل:

8-1 طرق نقل المواد الخام وكفاءتها:

8.1 Ways of transporting raw material and their efficiency:

8-2 طرق نقل المنتجات الأساسية وكفاءتها:

8.2 Ways of transporting primary products and their efficiency:

8-3 طرق نقل المنتجات الثانوية وكفاءتها:

8.3 Ways of transporting secondary products and their efficiency:

EPAHO044001273

VALIDATION BY APPLICANT تعهـد مقـدم الطلـب	
I hereby certify that the information provided is true, complete, and correct: **أقر بموجب هذا بأن هذه المعلومات كاملة وصحيحة**	
Name: الاسم:	التاريخ: ***Date:***
الوظيفة: ***Position:***	
Address :	العنوان:
Fax : فاكس :	هاتف: ***Telephone :***
Signature with التوقيع والختم ***Stamp***	
FOR OFFICIAL SCENR USE ONLY للاستعمال الرسمي من قبل المجلس الأعلى للبيئة والمحميات الطبيعية فقط	
: المستلم: Received by	التاريخ: Date:

EPAHO044001274

Forwarded :	لعمل اللازم بواسطة: for Action to

Note:
Use special pages if necessary, completing the initial substances, product, information on chimneys and water and air pollution

Attachments:

1- A detailed description of information on the products and the initial substances used and the methods of manufacturing.
2- The information on the used quantities and the storing methods.
3- A report on the disposed water analysis (if any)
4- Tests results of hard waste components (if any)
5- A detailed layout for production units and locations of gas emission form chimneys and flames
6- The latest report of the gases emitted from the chimneys in the establishment (if any)

EPAHO044001275

Praxair Inc (Praxair Inc=TX City Grant Ave)
Stainless Steel Tote Rental
BP

DC

Assigned

EPAHO04500001

Ongoing
TOTE
Rental

~~Start~~ 5/3

Customer Special Requests/Requirements

~~FAX Invoice to UAS 776-879-7567~~
~~for Credit Card Approval (NO PO#)~~
PO# 30255596 for 2008

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

	Item	CES Cost	Customer Charge
	TRANS - CES		325.00
	TOTE RENTAL		$6./day/TOTE
5-3-07	Deliver TOTE		325.00
	TOTE Rental 5/3 - 5/31 29 days		174.00
	35241		499.00
June 07	TOTE Rental 6/1 - 6/30 (1) 30 days		180.00
July	TOTE Rental 7/1 - 7/31 (1) 31 days		186.00
			366.00
	INVOICE # 37160		
Aug	Tote Rental 8/1 - 8/31 31 days		186.00
Sept	Tote Rental 9/1 - 9/30 30 days		180.00
Oct	Tote Rental 10/1 - 10/31 31 days		186.00
Nov	Tote Rental 11/1 - 11/30 30 days		180.00
Dec	Tote Rental 12/1 - 12/31 31 days		186.00
Jan	Tote Rental 1/1 - 1/31 31 days		186.00
	Trans 1/29/08 del. 2/pkl		~~325.00~~
	Invoice # 42421		~~1129.00~~ 1104.00
Feb 09	Tote Rental 1-28-09 (2) 28 days		336.00
March 09	Tote Rental 1-31-09 (2) 31 days		372.00
	1% compliance	7.08	7.08
		7.08	715.08
			(708.00)

EPAHO045000003

CES Environmental Services, Inc.

CONFIDENTIAL **Profit & Loss Sheet** CONFIDENTIAL

Billing/AP Information	
Name:	Praxair Inc
Contact:	Vas Papavassiliou
Address:	~~P.O. Box 1758~~
	~~Texas City, TX 77590~~ TONAWANDA
Phone:	716-879-7139
Fax:	716-879-75~~87~~67

Salesperson:	Dana Carter
Assigned:	X Unassigned:

Folder I.D.#	Praxair Inc (Praxair Inc - TX City Grant Ave) Stainless Steel Tote Rental

Job Contact:	Vas Papavassiliou		
Phone:	716-879-7139		
Fax:	716-879-7597		

P.O Required:	Y:	X	N:		Fuel Surcharge:	Y:	N: X
City of Houston:	Y:		N:	X	4-hour Minimum:	Y:	N: X

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Transporatation	CES			$325.00
Tote Rental - Stainless Steel Tote	CES			$6.00/day

Customer Special Request/Requirement

INVOICE TOTE RENTAL MONTHLY

FAX VAS AN INVOICE AND HE WILL PAY BY CREDIT CARD

No PO# needed if paying by credit card

CONFIDENTIAL

EPAHO045000004

Customer Special Requests/Requirements
~~FAX INVOICE to VAS 716-899-7597~~
~~NO PO# if PAY by Check/Cash~~
PO# 30255596 for 2008

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

Item	CES Cost	Customer Charge
TRANS - CES		325.00
TOTE RENTAL		$6./day/TOTE

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
4/6/2009	55498

Bill To: Praxair, Inc.
Attn: Pauline Brister
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
	Net 30	BP Texas City

Quantity	Description	Manifest #	Rate	Amount
	Rental of Stainless Steel Totes @ $6.00 per tote / per day			
28	February 1 thru 28/09 (2 totes)		12.00	336.00
31	March 1 thru 31/09 (2 totes)		12.00	372.00
	1% Compliance Fee		7.08	7.08

We appreciate your business!

Subtotal	$715.08
Sales Tax (8.0%)	$0.00
Total	$715.08

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
1/31/2008	42421

Bill To: Praxair, Inc.
Invoice Auditing Dept.
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
3025596	Net 30	BP Texas City

Quantity	Description	Manifest #	Rate	Amount
31	Tote Rental 8/1/07 - 8/31/07 @ $6.00 per day/per tote		6.00	186.00
30	Tote Rental 9/1/07 - 9/30/07 @ $6.00 per day/per tote		6.00	180.00
31	Tote Rental 10/1/07 - 10/31/07 @ $6.00 per day/per tote		6.00	186.00
30	Tote Rental 11/1/07 - 11/30/07 @ $6.00 per day/per tote		6.00	180.00
31	Tote Rental 12/1/07 - 12/31/07 @ $6.00 per day/per tote		6.00	186.00
31	Tote Rental 1/1/08 - 1/31/08 @ $6.00 per day/per tote		6.00	186.00
	CES Job # 57453			

We appreciate your business!

Subtotal	$1,104.00
Sales Tax (8.0%)	$0.00
Total	$1,104.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

1/2 _____ delivery

p/u 1 tote

deliver 2 55 tote

Name: CES Environmental Services, Inc.

Print: DAVID GRAPPE Signature: David Grappe Date: 1-29-08

Name: CES Environmental Services, Inc.

Print: Robert Henry Signature: R. Henry Date: 1/29/08

Receiving Facility: Pharaoh Texas City

Print: _____ Signature: _____ Date: _____

FILL ALL BLANKS

bp TEXAS CITY, TEXAS	**MATERIAL / PROPERTY REMOVAL PERMIT**
(Pass Bearer) Print Name:	(Circle One) PROPERTY BELONGS TO: Company Contractor Employee Vendor
(Pass Bearer) SSN #	
Date Pass Issued:	(Circle One) Work Materials Loaned Scrap/Given Repair Returned Material
Reason for Removal:	
Origin of Material:	If loaned, date to be returned:

NOTICE: The bearer of this pass has permission to leave the refinery THIS DATE ONLY with the material(s), merchandise, scrap or tools listed below, *subject to inspection by bp SECURITY.*

NOTE TO EMPLOYEE REMOVING MATERIAL/EQUIPMENT FOR PERSONAL USE:

1. Employee accepts this material/equipment on an "as is" basis and Company provides no warranty of any kind, either expressed or implied.
2. Employee is responsible for damage to or loss of material/equipment and its return.
3. Employee acknowledges that he has been trained in the safe use of the materials/equipment.
4. Employee expressly assumes responsibility for, as of the date of this permit, all risk of loss, damage to property, injury or death to anyone arising directly out of or in connection with any ownership, possession, handling, use or failure of the material/equipment listed herein and agrees to indemnify and hold **bp**, its' officers, directors and employees, harmless (including reimbursement of attorneys fees and other costs of defense) from any and all claims, actions or causes of action of any kind whatsoever, by any person whosoever for any act of negligence and/or gross negligence on the part of **bp**, its directors, officers or employees.

Pass Bearer's Signature:	Date:	PROPER **bp** SUPERVISION ONLY, Authorized by: (name)

NOTES: (1) LOANED MATERIAL/bp EMPLOYEES - Bearer of this pass and property is responsible until loaned property is returned. If lost or not returned by the date listed above, the cost may be deducted from your check. Keep your copy/receipt for proof of property return.
(2) CONTRACTORS - Possession of **bp** tools and/or materials **without a valid removal permit** could result in Pass Bearer being barred from refinery.

Employee Signature (Loan)	*Date to be returned:*	Date returned:	Return accepted by:

This section for **bp** Security Only. Property checked by:

Date: Time: Gate: Officer:

677706609 (1/01)

EPAHO045000009

GES Environmental Services, Inc.

Transportation Work Order

Date:

Manifest #:

Signature: Dodi Grappe

Leave Customer:	2:15		
Arrive at Customer:	3:30		
Begin Loading:	3:59		
Finish Loading:	4:20		
Leave Customer:	4:30	Arrive at GES Yard:	5:45

Customer ID:

Ending Odometer: 42841

Gross Weight: 42755

Net Weight: 86

Driver:

Had to watch training video before loading.

EPAHO045000010

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
7/31/2007	37160

COPY

Vas Papavassiliou

Bill To: Praxair
Attn: ~~Robert Long~~
P O Box 1758
Texas City, TX 77592

Sent to Tonawanda

blanket PO#

Changed address 8-13-07

P.O. No.	Terms	Project
PO#30255596	Net 30	

Quantity	Description	Manifest #	Rate	Amount
30	June 2007 Tote Rental from 06/01/07 through 06/30/07 @ $6.00 per day / per tote		6.00	180.00
31	July 2007 Tote Rental from 07/01/07 through 07/31/07 @ $6.00 per day / per tote		6.00	186.00

Thank you! We appreciate your business.

Subtotal	$366.00
Sales Tax (8.25%)	$0.00
Total	$366.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
7/31/2007	37160

COPY

Bill To: Praxair
Attn: Robert Long
P O Box 1758
Texas City, TX 77592

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
30	June 2007 Tote Rental from 06/01/07 through 06/30/07 @ $6.00 per day / per tote		6.00	180.00
31	July 2007 Tote Rental from 07/01/07 through 07/31/07 @ $6.00 per day / per tote		6.00	186.00

Thank you! We appreciate your business.

Subtotal	$366.00
Sales Tax (8.25%)	$0.00
Total	$366.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
5/30/2007	35241

Bill To: Praxair
Attn: Vas Papavassiliou
P O Box 1758
Texas City, TX 77592

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	5/3/07 Delivery of 1 Tote		325.00	325.00
29	Rental of Stainless Steel Tote from 5/3 - 5/31/07 @ $6.00 per day		6.00	174.00
	CES job #40821			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$499.00
Sales Tax (8.25%)	$0.00
Total	$499.00

CES Environmental Services, Inc.

Bill Of Lading # : 40821

Folder ID :	Natural Gas Condesate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

~~Praxair-Texas City –~~ CES
~~1720 Grant Ave.~~ 4901 Griggs Rd
~~Texas City, TX 77590~~ Houston, TX 77021

11a) 1694
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its *usual* place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. *This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract* between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Praxair Texas City

CARRIER :
CES Environmental Service, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5400 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TP	125 LBS	P	Recyclable hydrocarbon and water mixture (natural gas condesate)

Shipper : Praxair-Texas City
Per : V. PAPAVASSILIOU **Signature :** [signature] **Date :** 5/3/07

Carrier CES Environmental Service, Inc.
Per : Joseph Hernandez **Signature :** [signature] **Date :** 5/3/07

Receiving Facility _____
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

Transportation Work Ticket

Folder ID : Natural Gas Conditioning/Supply Totes

Date : 5/2/2007 Manifest # :

Client : Ticket : [illegible]

Phone : [illegible] Consignee :

Transporter : CES Environmental Services, Inc.

Signature : x Paparassila Signature :

Leave CES Yard :	12:00 pm	Arrive At Destination :	
Arrive At Customer :	1:15 pm	Begin Unloading :	
Begin Loading :	1:35 pm	Finish Unloading :	
Finish Loading :	1:40 pm	Leave Destination :	
Leave Customer :	2:00 pm	Arrive At CES Yard :	

Customer PO #: Total Hours : [illegible]

Gross Weight : Ending Odometer :

Tare Weight : Beginning Odometer : 57237

Net Weight : Total Miles :

Driver : [illegible] Tractor # : 103 Tote # :

Signature : [signature] Trailer # : Box # :

DELIVERED ~~STAINLES~~ STAINLES TOTE AS DIRECTED.

EPAHO045000015

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Natural Gas Condesate/Empty Totes

Customer : Praxair-Texas City
Address : 1720 Grant Ave
City,State,Zip : Texas City TX , 77590
CES Contact : Dana Carter (713) 748 - 9804

Driver : **Hernandez, Joe**
Helper :
Date : 5/3/2007 Time : 2nd
Truck # 102 Trailer #

Job Description :

Deliver 1 tote SEE Loren for Tote

Note:
- Go into Gate #16 (inside BP Amoco Refinery)
  Contact: Raquel Cervantes 409-643-5610

ID #: 40821

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT: ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

EPAHO045000017

FAX

To: 30255596-CES Environmental
Company: CES Environmental
Fax: 713-676-1676
Phone:

From: Praxair, Inc
Fax:
Phone:
E-mail:

NOTES:

Date and time of transmission: Tuesday, June 19, 2007 6:05:08 AM
Number of pages including this cover sheet: 05

PRAXAIR Blanket

PURCHASE ORDER NO. 30255596 UP

Project/Business Unit U80708300100
Branch/Plant U815000

Purchase Order No. must appear on all Packages. Invoices and B/L pertaining to this Purchase Order

MAIL INVOICE TO:
Invoice Auditing Department
Praxair, Inc
P.O. Box 808, Tonawanda, NY 14151-0808

Ship To: Praxair Inc
BP Site
1720 Grant Avenue Gate 16
Texas City TX 77590

Supplier: CES Environmental
4904 Griggs Rd.
Houston TX 77021

PH: 713-676-1460 FX: 713-676-1676

ATTN: SUPPLIER INVOICE AMOUNT SHALL NOT EXCEED TOTAL VALUE OF PURCHASE ORDER AS STATED BELOW.
BUYER HEREBY ORDERS UPON THE TERMS HEREIN CONTAINED, INCLUDING THE ADDITIONAL TERMS ON THE REVERSE SIDE HEREOF

Order Date: 06/18/2007 Terms of Sale: . PH: 716-879-2064 Currency Code: USD
Required Ship Date: 06/18/2007 Refer Commercial Question to: Lake, Betsy E FX: 716-879-2344 Payments Terms: Net 60 Days
Order Taken By: Delivery Instructions: Please see shipping instructions attached. Ship Via:

Line Num	Praxair Internal Item Number / Description	Quantity Ordered	Tran UoM	Purc UoM	Unit Price	Extended Price	Promised Ship Date	Tax
1	PX Item Number 10023922 Services - Environmental *Type:Waste Disposal *Description:Non-Hazardous	1.000	EA	EA	3,000.0000	3,000.00	06/18/2007	

Stainless steel Tote rental and delivery.

PRAXAIR

PURCHASE ORDER NO. 30255596 UP

Project/Business Unit U80708300100
Branch/Plant U815000

Purchase Order No. must appear on all Packages. Invoices and B/L pertaining to this Purchase Order

MAIL INVOICE TO:
Invoice Auditing Department
Praxair, Inc
P.O. Box 808, Tonawanda, NY 14151-0808

Ship To: Praxair Inc
BP Site
1720 Grant Avenue Gate 16
Texas City TX 77590

Supplier: CES Environmental
4904 Griggs Rd.
Houston TX 77021

PH: 713-676-1460 FX: 713-676-1676

ATTN: SUPPLIER INVOICE AMOUNT SHALL NOT EXCEED TOTAL VALUE OF PURCHASE ORDER AS STATED BELOW.
BUYER HEREBY ORDERS UPON THE TERMS HEREIN CONTAINED, INCLUDING THE ADDITIONAL TERMS ON THE REVERSE SIDE HEREOF

Order Date: 06/18/2007	Terms of Sale:		PH: 716-879-2064	Currency Code: USD
Required Ship Date: 06/18/2007	*Refer Commercial Question to:* Lake, Betsy E		FX: 716-879-2344	Payments Terms: Net 60 Days
Order Taken By:	Delivery Instructions: Please see shipping instructions attached.			Ship Via:

Last Page of Purchase Order

Tax Rate	Sales Tax	.00	**Total Order**	**3,000.00**

Tax Information
Texas: Do Not Bill Taxes, Texas Direct Pay Permit No. 1-06-1249050-7
West Virginia: Do Not Bill Taxes, West Virginia Direct Pay Permit No. 91-1-046392

Purchasing Agent: _____

Acknowledged and Accepted

Definite Shipping Date _____ Shipment will be made from _____

Signed for Seller _____ Date _____

Please Sign and Return Promptly to: THE PURCHASING DEPT. AT THE ABOVE ADDRESS

ACCEPTANCE; TITLE AND RISK OF LOSS: Except as otherwise expressly provided in this order, acceptance of any of the goods and or services shall not occur until Buyer has been given a reasonable opportunity to inspect and test such goods and services after arrival at destination or after completion of installation or completion of the services, if Seller is obligated to install the goods or perform any services. Buyer may reject any non-conformance or defective goods F.O.B. the location at which Buyer discovers the non-conformance or defect in the goods or services, if Seller fails to promptly correct said non-conformance or defect after being given the opportunity to do so. Seller shall pay the cost of inspecting and testing of goods rejected and all transportation charges thereon. Except as otherwise mutually agreed in writing, delivery will occur, and title and risk of loss will transfer, when: (i) with respect to goods not incorporated into services, goods are accepted and are placed in operation or into Buyer's storage facility; and (ii) with respect to product incorporated into services, the completed services have been accepted by Buyer.

EXCESS QUANTITY; TERMINATION; CHANGES: (a) Goods shipped in excess of quantity designated in this order may be returned at Seller's expense. Buyer shall have no obligation to Seller to purchase any minimum amount of goods or services; (b) Buyer may, by written notice to Seller, terminate its purchase of any quantity of products or services (i) for convenience, (ii) if Seller fails to complete or deliver any part thereof when required, and (iii) if Seller is in breach of any material term of this order, immediately prior to the delivery thereof. If terminating for convenience, Buyer will pay Seller termination charges equal to the cost of materials and labor incurred (and not otherwise mitigated) on ordered products or services prior to the date of Buyer's termination notice; provided Seller takes all steps reasonably necessary to mitigate such costs. Seller will notify Buyer of the actual termination charges within thirty (30) days after termination. If termination is due to a failure of completion or delivery or breach of any material term of the order, no termination charges will apply and Buyer may procure substitute products or services and Seller will be liable to Buyer for any excess costs incurred by Buyer.

TRANSPORTATION CHARGES: Except as otherwise mutually agreed to in writing, (a) where transportation charges are separately charged to Buyer by Seller, such charges shall in no event exceed the lowest legal freight charges via the carrier or routing specified herein, in effect on the date of shipment, and (b) where transportation charges are allowed to Buyer by Seller, such allowance shall not be less than the actual freight charges paid by Buyer or, where Buyer performs the transportation, such allowance shall be in an amount equal to the freight charges which would have been assessed for a like movement via common carrier.

DELIVERY: The goods shall be properly packaged for shipment. Each package shall be numbered and labeled with Buyer's order number, stock number, contents, and weight, and shall contain an itemized packing slip. No charges will be allowed for packing, crating, freight express or cartage unless specified on the face hereof. Seller will promptly notify Buyer in writing if Seller anticipates difficulty in complying with any required delivery date. Time is of the essence hereof. If any goods are not delivered within the time specified in this order, or within a reasonable time if no time is specified, Buyer may either (i) refuse to accept such goods and terminate this order, or (ii) cause Seller to ship the goods by the most expeditious means of transportation whereupon any additional transportation charges in excess of those which would apply for the usual means of transportation shall be for the account of Seller, or (iii) Buyer may procure replacement products or services and Seller will be responsible for all costs incurred by Buyer as a result of such late deliveries.

INVOICES: Unless otherwise requested by Buyer, invoices shall (a) be rendered separately for each delivery; (b) cover not more than one order (c) be rendered with order number noted thereon.

PRICING; PAYMENT: (a) Unless otherwise provided elsewhere in the order, prices are: (i) stated in U.S. dollars; (ii) not subject to increase for the duration of the order; and (iii) DDP (INCOTERMS 2000) at a facility specified by Buyer. No extra charges of any kind will be allowed unless specifically agreed to by Buyer in writing; (b) Unless prohibited by law, Seller will separately indicate on its invoices any taxes imposed on the sale or delivery of products or services. Any claim for payment for any goods or services ordered pursuant to this order must be made within one year of when such goods or services are delivered to Buyer, otherwise such claim shall be waived; (c) Unless otherwise provided elsewhere in the order, terms of payment shall be net 60 days from the later of (i) the date of Buyer's receipt of a correctly stated invoice; or (ii) receipt of goods or services, as applicable; (d) Seller warrants that it is selling at the lowest prices and upon the most favorable terms (including, without limitation, volume, quality and/or payment terms) that it offers any buyer for goods or services of the same or similar quality to that provided for in this order; (e) Buyer will be responsible for all sales, use, and similar taxes (excluding taxes based on or measured by the net income, net worth or gross receipts of Seller) imposed as a result of the sale of products or services. With notice to Seller, Buyer may pay such taxes directly to the taxing authority where allowed by law. Seller shall remit all taxes paid by Buyer to the appropriate taxing authority. Upon Buyer's request, Seller will provide written evidence that Seller is properly licensed to collect the taxes paid by Buyer.

WARRANTY: (a) Seller warrants that the goods shall (i) conform to the description and specifications contained in or referred to in this order; (ii) be free from all defects in material, workmanship and all defects due to design; (iii) will comply with the requirements of this order; and (iv) be of merchantable quality and fit and suitable for the purpose intended by Buyer; (b) Seller further represents and warrants that (i) the goods and all parts thereof will consist of new (not used or recycled) material, and (ii) Buyer shall acquire good and marketable title to the goods, free and clear of all liens, claims and encumbrances; (c) The above warranties will be in effect for a period of the longer of (1) twelve (12) months from the date such goods are used or placed in operation or (2) the standard warranty period provided by Seller for such goods. If any products fail to conform to the above warranties, Seller, at Buyer's option, will: (i) with respect to goods and products, replace or repair the nonconforming products; (ii) refund the purchase price of the nonconforming products and any related costs incurred by Buyer. Any replacement products also will be subject to the above warranties and warranty period. The warranty period for repaired products will be extended for the period of the original warranty period as set forth above. If Seller does not replace or repair, as applicable, within a reasonable time after notice, Buyer may do so at Seller's expense.

PATENTS: Except as hereinafter limited, Seller shall defend, indemnify and hold harmless Buyer from and against claims, damages, judgments, expenses and loss arising from infringement or alleged infringement of any patent by any of the goods delivered hereunder, and Seller shall defend or settle at its own expense any suit or proceeding brought against Buyer for such infringement.

INSURANCE: Seller shall, at its expense, procure and maintain Workmen's Compensation insurance to the extent required by law and Seller's Bodily Injury Liability and Property Damage Liability insurance (including Contractual Liability, covering the indemnities set forth herein) in amounts approved by Buyer. Seller shall furnish to Buyer written certificates establishing that the above insurance has been procured and is being maintained, which certificates shall provide that a written notice of cancellation shall be given to Buyer at least thirty (30) days prior to the effective date of such cancellation.

INDEMNITY: Seller shall defend, indemnify, and hold harmless Buyer from and against any and all claims, losses, damages, expenses and liabilities, including attorneys' fees (collectively "Claims"), arising from or in connection with Seller's performance pursuant to this order, including without limitation any Claims arising from the failure of the goods to conform to specifications, or from personal injuries or property damage proximately caused by defects in design or manufacture of the goods or by Seller's failure to provide adequate warnings or instructions with respect to the goods. Seller shall also defend, indemnify and hold harmless Buyer, any party on whose property the goods are installed, and their employees, agents, contractors and subcontractors from and against all Claims for bodily injury, sickness and/or disease, including death at any time sustained by any employee of Seller, or of a contractor or subcontractor of Seller, while in, on or about the property of Buyer or the site of installation of the goods, if or where such injury, sickness, disease and/or death was in any way connected with (i) any work under the WARRANTY paragraph of this order, (ii) any services performed by Seller for Buyer with respect to this order or with respect to any of the goods sold to Seller pursuant to this order or otherwise, (iii) any other terms of this order or (iv) the performance of or failure to perform said work or services, unless such injury, sickness, disease and/or death is the result of the sole negligence of Buyer, contractor or subcontractor of Buyer, or any of Buyer's employees or agents.

FORCE MAJEURE: Neither party hereto shall be liable to the other for default or delay in performing its obligations hereunder if caused by an occurrence beyond the reasonable control of the party so defaulting or delaying. If a force majeure event compels Seller to allocate deliveries of products or services, Seller will make such allocation in a manner that ensures Buyer at least the same proportion of the Seller's total output as was purchased by Buyer prior to the force majeure. Seller will use best efforts to source products or other items, at Seller's expense, from its own or its affiliates' global operations or the market in order to meet Buyer's required delivery dates.

DRAWINGS AND OTHER ITEMS: Unless otherwise expressly provided in this order, all drawings, blueprints, dies, patterns, tools, printing plates and other items used in connection with the manufacture of the goods hereunder, which are prepared or constructed by Seller pursuant to the terms of this order, shall be the property of Buyer, and upon completion of deliveries of the goods hereunder, or upon termination of this order, shall be delivered to Buyer.

COMPLIANCE WITH LAWS: Seller shall comply with all laws, ordinances, permits and governmental rules and regulations applicable to Seller and the goods and services provided by the Seller, including but not limited to those laws, ordinances, rules and regulations with respect to or under the Occupational Safety Health Act of 1970, or any other statute, rule, or regulation of any governmental authority or agency concerning safety, health, welfare and conduct of employees. Seller hereby agrees that any services will be provided in compliance with the Fair Labor Standards Act, as amended, and agrees to so certify on its invoices. Seller shall also comply with all applicable equal employment opportunity (EEO), affirmative action (AA), and employee notice laws and requirements including but not limited to those set forth in 41 C.F.R. Part 60-1.4(a) (EEO/AA for women and minorities), 41 C.F.R. Part 60-250.5(a) (EEO/AA for covered veterans), 41 C.F.R. Part 60-741.5(a) (EEO/AA for individuals with disabilities), and 29 C.F.R. Part 470 (employee notice clause requirements). Seller shall comply with and shall indemnify and hold harmless Buyer from and against all damages or penalties arising out of Seller's failure to comply with all laws, ordinances, and government rules, regulations and orders applicable to this order.

ASSIGNMENT: Any assignment of this order without the prior written consent of Buyer shall be void.

NON-WAIVER: No waiver by either party of any breach of any of the terms of this order to be performed by the other party shall be construed as a waiver of any subsequent breach, whether of the same or of any other term of this order.

REMEDIES AND SET-OFF: The rights and remedies of Buyer set forth in this order are not exclusive and are in addition to all other rights and remedies of Buyer. Buyer may set off any amount owing at any time from Seller to Buyer or any of its affiliated companies against any amount payable at any time by Buyer to Seller under this order.

GOVERNING LAW AND JURISDICTION: The validity, interpretation, and performance of this order shall be governed by and construed and enforced in accordance with the law of the State of Connecticut without giving effect to the principles of conflicts of law. This order shall not be governed by the U.N. Convention on Contracts for the International Sale of Goods. The Buyer and Seller consent and submit exclusively to the jurisdiction of the state or federal courts of the State of Connecticut.

NO GRATUITY; FCPA: Neither party will offer or give any gratuity to induce any person or entity to enter into, execute or perform any term or condition of this order or any other agreement between the parties.

SECRECY: As used in this order, "Confidential Information" shall mean and include all of the information, know-how and data, whether technical or non-technical, which is in any way, heretofore or hereafter, disclosed to Seller by or on behalf of Buyer in the course of, or in connection with this order or in connection with proposals or negotiations for the order. Except as provided below and except as otherwise agreed to in writing by Buyer, Seller shall use its best efforts to keep confidential and to prevent the disclosure of Confidential Information except on a confidential basis, to such of its employees and subcontractors who need such Confidential Information in order to enable Seller to properly perform under this order and who sign secrecy agreements obligating them at least to the same extent as Seller is obligated under this provision, and Seller shall not use or permit to be used Confidential Information for anyone other than Buyer.

NOTICES: All notices will be in writing and deemed given on the date the notice is hand delivered, mailed or electronically transmitted to the receiving party at such party's address set forth on the face of this order. Either party may change its address upon notice to the other party.

PUBLICITY: No information relative to this order shall be released by Seller and Seller shall not use the name, tradename, trademarks, service marks or logos of Buyer, either before or after completion of the order, for publication through newspapers, radio, television or other media, or for advertising purposes without the prior written consent of Buyer.

MISCELLANEOUS: If this order constitutes an offer, Seller's acceptance of this order is hereby expressly limited to the terms of this order and shipment of any part of the goods covered hereunder shall be deemed to constitute such acceptance. If this order constitutes an acceptance of an offer, such acceptance is expressly made conditional on Seller's assent to the terms of this order, and shipment of any part of the goods covered hereunder shall be deemed to constitute such assent. This order constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof, and there are no oral understandings, representations or warranties affecting it. Neither course of performance nor course of dealing nor usage of trade shall be used to interpret, construe, qualify, explain or supplement any of the terms of this order. This order shall not be amended except in writing signed by the parties hereto.

PRAXAIR, INC - CARRIER ROUTING INSTRUCTION

NOTE: PREPAID FREIGHT IS NOT AUTHORIZED AND WILL NOT BE REIMBURSED. ANY ADDITIONAL FREIGHT CHARGES RESULTING FROM SELLER'S FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL BE DEDUCTED BY BUYER FROM SELLER'S INVOICE.

If 'Ship To' Address Is Not Stated, Call Praxair For Details. See 'Refer Commercial Questions To' Box On Purchase Order. In The Absence of Written Carrier Routing Instructions, The Following Instructions Must Be Used:

SMALL PARCEL: Base the carrier choice on the information below for shipments within these size and weight limits (0-150 lbs. and combined length and girth up to 130 inches).

Within the USA or cross border with Canada: Use **UPS** with 'Third Party Billing' to Praxair's account number 81W302. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number. The list below shows the available services in order of preference. **Use air service only when absolutely necessary**.

1. Ground
2. 3 Day Select
3. 2nd Day Air
4. 2nd Day Air AM
5. Next Day Air Saver
6. Next Day Air

IMPORTS TO THE USA: Use **DHL Express** with 'Third Party Billing' to Praxair's account number 963105996. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number.

EXPORTS FROM THE USA: Use **DHL Express** with 'Third Party Billing' to Praxair's account number 754730626. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number.

AIR FREIGHT: Use the following Praxair, Inc. carriers (listed in order of preference) for shipments requiring air freight transportation that **can not** travel via **SMALL PARCEL** service. Use 'Third Party Billing' to Praxair's account number. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number. **Use air service only when absolutely necessary**.

1. UPS Supply Chain Services (formerly Menlo World Wide); must use for **hazardous** shipments; Praxair account number: 002123792; Phone: 800-443-6379.
2. Seko Air Freight-(Formerly USF Worldwide); Praxair account number: Prax14150; Phone: 800-344-7356.

LESS THAN TRUCKLOAD (LTL): Use for shipments weighing less than 10,000 lbs requiring a closed van. Select the correct carrier based on the Regions defined below for Origin and Destination. **NOTE**: Use **UPS Hundred Weight** rather than **LTL** for multiple piece shipments with total weight between 150 and 499 lbs meeting UPS size and packaging limits (see page 2 for mileage limits and restrictions). Billing for all shipments is 'Collect'.

ALL Zone A hazadous poison inhalation shipments must be transported via ABF Freight; Phone: 800-344-7356

Origin & Destination Regions
Region 1 = CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, NE, NH, NJ, NY, OH, PA, RI, VT, WI, WV
Region 2 = AL, AR, DC, FL, GA, LA, MS, NC, OK, SC, TN, TX, VA
Region 3 = CO, NM, OR, UT, WA
Region 4 = Canada
Region 5 = ID, ND, MT, SD, WY
Region 6 = AZ, CA, NV

Con-Way Freight: 800-755-2728
All shipments within Region 1.
All shipment within Region 2.
All shipments with origin or destination in Region 5 (UPS Freight does not directly service Region 5).
All shipments weighing 400 lbs or less traveling between Region 1 and Region 2 (or 2 and 1).
All shipments weighing 300 lbs or less traveling between Region 2 and Region 3 (or 3 and 2).
All shipments weighing 300 lbs or less traveling between Region 2 and Region 6 (or 6 and 2).
All shipments between Region 4 and Region 1 (or 1 and 4).

UPS Freight (formerly Overnite): 800-333-7400
All shipments within Region 3.
Shipments weighing more than 400 lbs traveling between Region 1 and Region 2 (or 2 and 1).
All shipments weighing more than 300 lbs traveling between Region 2 and Region 3 (or 3 and 2).
All shipments weighing more than 300 lbs traveling between Region 2 and Region 6 (or 6 and 2).
All shipments between Region 1 and Region 3 (or 3 and 1).
All shipments between Region 1 and Region 6 (or 6 and 1).
All shipments between Region 3 and Region 6 (or 6 and 3).
All shipments between Region 4 and Region 2 (or 2 and 4).
All shipments between Region 4 and Region 3 (or 3 and 4).
All shipments between Region 4 and Region 6 (or 6 and 4).

USF Reddaway: 888-420-8960
All shipments within Region 6.

UPS Hundred Weight
Shipments must meet the following criteria to qualify for this service. If shipment does not qualify, ship via **LTL**.

No single package weighs more than 150 lb.
All packages destined for the same consignee.
All freight must be in cardboard boxes with no pallets.
No hazardous materials allowed.
Max single package length = 108 inches; max single package size combining length and girth = 130 inches.
Service is not available to international destinations (Canada, Mexico, etc.).

If shipment qualifies, this information defines the mileage limits for using this service based on total shipment weight. If the shipment mileage exceeds these limits, ship via **LTL**.

150 to 200 lbs - up to 1200 miles or UPS Zones 2, 3, 4 & 5
201 to 300 lbs - up to 725 miles or UPS Zones 2, 3, & 4
301 to 350 lbs - up to 725 miles or UPS Zones 2, 3, & 4
351 to 375 lbs - up to 725 miles or UPS Zones 2, 3, & 4
376 to 425 lbs - up to 400 miles or UPS Zones 2 & 3
426 to 450 lbs - up to 400 miles or UPS Zones 2 & 3
451 to 499 lbs - up to 225 miles or UPS Zone 2

For partial truckload or volume shipments (10,000 lbs +) eligible for dry van transportation, refer to **Other** instructions as below. Shipments requiring flatbed services, please refer to **FLATBED** instructions.

OTHER: For Partial Truckload(10,000 lbs+), Truckload Van, Air Ride or safety handling issues: contact Mark Niederpruem at 716-879-2181 or via email Mark_Niederpruem@Praxair.com.

FLATBED: **At Least Five-Seven (5-7) Days Prior To Ship Date** , Contact Plant Site Logistics at 800-733-2459 x383 with the following information:

1. Shipping Weight And Overall Dimensions
2. Praxair Purchase Order Number
3. Pick Up/Delivery Address with Ready Date

The Following Must Be Included On The Bill Of Lading Provided To The Carrier:

1. Reference Praxair's Purchase Order Number
2. Third Party Billing Address, PO Box 808, Tonawanda NY 14151-0808

SURFACE EXPEDITE: Use the following Praxair, Inc. carriers (listed in order of preference) for shipments requiring day definite delivery and/or shortest transit time. **Use this service only when absolutely necessary**.

1. Yellow Exact Express; day definite delivery via shared or dedicated truck; Phone: 800-610-6500.
2. FedEx Custom Critical; day definite delivery via dedicated truck; Phone: 800-762-3787.

IMPORT/EXPORT: DHL Danzas is Praxair's global service provider for *International Freight Forwarding, and sole import broker* for goods entering the United States. Contact **Cynthia Creed**, at 716-879-3123 or via email cynthia_creed@praxair.com.

Praxair Inc (Praxair Inc - Sterling Chemicals Plant)

Used Oil

DC

assigned

EPAHO04500023

Email
frank_p_guerra
@ Praxair.com
for credit card
approval

Customer Special Requests/Requirements

Charge Credit card

for approval - email - frank-p-guerra@prayair.com

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

Item	CES Cost	Customer Charge
4/23 TRANS Pick up fee		100.00
31.5% FSC		31.50
recycle - CES 50L 62632 - 500		—
INVOICE# 45118		131.50
E-MAILED 5/6/08		

Customer Special Requests/Requirements

~~[illegible]~~ Frank - Email
frank_p_guerra@Ptrain.com
Charge - Credit Card
Mail to PO Box 3777
TX City TX 77590

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item	CES Cost	Customer Charge
8/28	Trans. pick-up fee		100.00
	20% FSC		20.00
	Recycle - CES BOL 47544. 500		n/c
	Invoice # 37979		120.00
	*Special (Black Oil) 500G @ .06 = $15.00		
12/17	Trans pick up fee		100.00
	24% FSC		24.00
	Recycle CES 54790 500g		N/A
	Invoice # 41118 Trans $1.86		124.00
	* special Blk oil 500G @ .06 = $15.00		
1/24	Trans. pick up fee		100.00
	24% FSC		24.00
	Recycle - CES BOL 57387. 800 gals		N/A
	Invoice # 42061		124.00
	Trans $1.86		
	*Special Blk oil 500G @ .06 = 24.00		
3-11-08	Purchase used Oil 500 Gal	-0-	100.00
	FSC 26.5%		26.50
			126.50
	Trans 1.90		
	* Special Blk Oil 500g. @ .07 = 17.50		

Customer Special Requests/Requirements

FAX to: 409-943-9275 ~~Rocky~~ Frank

Charge CREDIT CARD Mail to PO Box 3777
TX City, TX 77590

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item	CES Cost	Customer Charge
10-30-06	TRANS - P/u		100.00
	16% FSC		16.00
	Recycle - Used Oil BOL29480		N/C
	DC 2½ - 2.40		116.00
2-13-07	TRANS - P/u		100.00
	16% FSC		16.00
	Recycle - CES Used Oil BOL35770 1000 G.		N/C
	Invoice # 32318		
			116.00
	Trans DC 2½ - 2.40		
	Oil DC - 5.00		
✓ 5/1/07	TRANS - P/u		100.00
	18% FSC		18.00
	Recycle - CES Motor Oil BOL40591 650 GAL		N/C
	DC 2.95		
	DC 39.00		118.00
✓ 6-7-07	TRANS - P/u		100.00
	18% FSC		18.00
	Recycle - CES Motor Oil BOL42670 800g.		N/C
	DC 2.95		118.00
	DC 48.00		
7/10	TRANS - P/u		100.00
	20% FSC		20.00
	Recycle - CES BOL 44341 - 400 GAL		N/C
			120.00
	Invoice # 36563		
	Dana - special 340 GAL		
	Comm - $20.40		

EPAHO045000027

CES Environmental Services, Inc.
Profit/Loss Sheet

Billing Information:

Name: Praxair
Contact: Rocky
Address: PO Box 3777
703 6th St. South
Texas City, TX 77590
Phone:
Fax:

Salesperson: Matt DANA

Job Contact: Rocky
Phone: 409-943-9296
Fax:

A/P Contact:
Phone:
Fax:

P.O. Required: Y N
4% City of Houston Fee: Y (N)
Fuel Surcharge: (Y) N
4-hr Minimum: Y N (N/A)

Job Estimate

Item	Vendor	CES Cost	Customer Charge
Pick-up of motor oil	CES	0	$100 + Fuel S.C.
Recycling of oil (If Greater than 500 gal.)	CES	0	0

Customer Special Requests/Requirements

UPDATE FOLDERS IMMEDIATELY WITH ANY CHANGES

Confidential

EPAHO045000028

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
5/2/2008	45118

COPY

Bill To: Praxair
Attn: Accounts Payable
P.O. Box 3777
Texas City, TX 77590

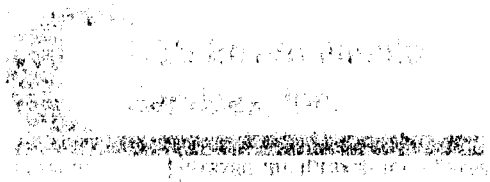
P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	04/23/08			
1	Transportation services by CES @ $100.00 pick-up fee		100.00	100.00
	31.5% Fuel Surcharge		31.50	31.50
500	Recycling of Hydrocarbon and water mixture @ No Charge	BOL 62632	0.00	0.00
	CES Job #62632			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$131.50
Sales Tax (8.25%)	$0.00
Total	$131.50



CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel: (713) 676-1460
Fax: (713) 676-1676

Transportation Work Ticket

Holder ID : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant)
Used Oil

Date : 4/23/2008

Manifest # :

Client : Praxair (Texas City-Sterling Chemical Plant)

Ticket : 62632

Phone : 4099439296

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature

Signature

Leave CES Yard :	8:00Am	Arrive At Destination	
Arrive At Customer :	10:00Am	Begin Unloading :	
Begin Loading :		Finish Unloading :	
Finish Loading :		Leave Destination :	
Leave Customer :	12:00PM	Arrive At CES Yard :	100pm

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	
Tare Weight :		Begining Odometer :	
Net Weight :		Total Miles :	

Driver : Resendez Luis

Tractor # : 105

Tote # :

Signature :

Trailer # :

Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000031

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
4/14/2008	44349

Bill To: Praxair
Attn: Accounts Payable
P.O. Box 3777
Texas City, TX 77590

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	3/11/08			
1	Transportation services by CES @ $100.00 pick up fee		100.00	100.00
	26.5% Fuel Surcharge		26.50	26.50
500	Recycling of hydrocarbon and water mixture @ No Charge	BOL 60194	0.00	0.00
	CES job #60194			

PAID
CK.NO. VISA
DATE 4-18-08

We appreciate your business!

Subtotal	$126.50
Sales Tax (8.25%)	$0.00
Total	$126.50

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Inbound Load Report

Job Number : 60194

Type of Material: Used Oil

Job Date: 3/11/2008

Bill of Lading #: 60194

Customer: Praxair (Texas City-Sterling Chemical Plant)

Gross Weight:

Tare Weight: **OR** **Total Gallons Shipped:** 500

Net Weight:

Shipping Information

Carrier: CES Environmental Services, Inc.

Truck Number: 104

Trailer Number:

CES Laboratory Use Only

Specific Gravity:	.93
Pounds per Gallon:	7.75
Temperature:	
Total Gross Gallons:	500
% Water	
% Solids	
Total Net Gallons:	500

(minus water and solids)

Misc Notes:

Sample Analyst:

(signature)

Sample Analyst: Sam Brown **Date:** 3/28/2008

CES Environmental Services, Inc.

Bill Of Lading #:

Date:

(As Agent For): (Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant))

(Issued On)

Original - Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM:

Praxair - Texas City-Sterling Chemical Plant)
Fifth Street South
Texas City, TX 77590
(409) 947-9226

(713) 920-
(713)
(713)
(713)

This property, described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which the carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is agreed as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions not prohibited by law, whether printed or written, herein contained including those on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

No carrier (except the carrier delivering to the destination) shall be liable for loss or damage occurring while the property is not in its possession, and each carrier (except the carrier delivering to the destination) shall be liable only for the amount of damage sustained on the property delivered by it, but no carrier shall be liable for loss or damage unless made in writing and received by it within nine months after delivery of the property (or in the case of failure to make delivery, within nine months after a reasonable time for delivery has elapsed).

CONSIGNED TO:
CES Environmental Services, Inc.
4804 Griggs Rd
Houston, TX 77021

CARRIER:
CES Environmental Services, Inc
4804 Griggs Rd.
Houston, TX 77021

The property described below is properly classified, described, packaged, marked and labeled, and in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this shipment moves between two ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B). The Consignee is responsible for the disposal of this waste. The vehicle owner shall sign the Hazardous Waste Manifest.

Handling Unit: No.	Handling Unit: Type	Total Quantity	Unit (Wt/Vol)	Description of Materials, Special Marks, and Exceptions
				Received in Hydrocarbon at Ambient Temp

Shipper: Praxair (Texas City-Sterling Chemical Plant)

Per: Signature: Date:

Carrier: CES Environmental Services, Inc

Per: Signature: Date:

Receiving Facility: CES Environmental Services, Inc

Per: Signature: Date:

EPAHO045000034

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Used Oil

Date : 3/11/2008

Manifest # :

Client : Praxair (Texas City-Sterling Chemical Plant)

Ticket : 60194

Phone : 4099439296

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X [signature]

Signature

Leave CES Yard :	8:00	Arrive At Destination	11:00
Arrive At Customer :	9:10	Begin Unloading :	
Begin Loading :	9:25	Finish Unloading :	
Finish Loading :	10:30	Leave Destination :	
Leave Customer :	10:45	Arrive At CES Yard :	11:00

Customer PO #:

Total Hours:

CES Unload: ☒

Gross Weight :		Ending Odometer :	167842
Tare Weight :		Begining Odometer :	167759
Net Weight :		Total Miles :	83

Driver : Woodard, Irvin

Tractor # : 104

Tote # :

Signature : [signature]

Trailer # :

Box # : NEED TO CLE

Job Comments/Equipment : 630-800- Loading Equipment For Job. Removed oily MATERIAL FROM Customer's Storage TANK AS Directed by FRANK

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000035

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
1/30/2008	42061

COPY

Bill To: Praxair
Attn: Accounts Payable
P.O. Box 3777
Texas City, TX 77590

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	01/26/08			
1	Transportation services by CES @ $100.00 pick-up fee		100.00	100.00
	24% Fuel Surcharge		24.00	24.00
800	Recycling of hydrocarbon and water mixture @ No Charge	BOL 57387	0.00	0.00
	CES job #57387			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$124.00
Sales Tax (8.25%)	$0.00
Total	$124.00

CES Environmental Services, Inc.

Bill Of Lading # : 57382

Profile # : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant)
Used Oil

Original - Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair (Texas City-Sterling Chemical Plant)
2530 Bay St. South
Texas City, TX 77590
(409) 943-9296

(PO) (Job #)
(Rel)
(Lic)
(Lic)

The property described below, in apparent good order, except as noted (contents and condition of packages unknown), marked, consigned, and destined as indicated below, which the undersigned carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a request for service, but not itself a contract of carriage. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable carrier's rail, water, truck, and carrier's intermodal tariff.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____. No shipper shall ship by truck any package weighing more than 150 pounds without written consent of shipper. The agreed or declared value of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill and shown on the original bill of lading. Billed for party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4604 Griggs Rd.
Houston, TX 77021

CARRIER :

CES Environmental Services, Inc.
4604 Griggs Rd
Houston, TX 77021

This is to certify that the product listed below was properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this shipment involves hazardous waste, I hereby certify that the information that this Bill of Lading shall state is correct and that I am the generator of this waste.

If this is a hazardous waste shipment, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

I hereby certify that all information required by Federal Highway Administration regulations 49 CFR 172 and 173 for describing the hazardous waste contained in the material listed on this Bill of Lading is correct and complete.

Handling Instructions: No.	Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
	203	P		Recyclable Hydrocarbon and Water mixture

Shipper : Praxair (Texas City-Sterling Chemical Plant)
Per : _____ Signature : _____ Date : _____

Carrier : CES Environmental Services, Inc.
Per : T. Hernandez Signature : _____ Date : 1-26-18

Receiving Facility : CES Environmental Services, Inc.
Per : _____ Signature : _____ Date : 1-26-18

White (Returned to Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Goldenrod (Generator Copy)

EPAHO045000037

M

CES Environmental Services, Inc.

4904 Briggs Road
Houston, TX 77021
Tel (713) 676-1460
Fax (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Used Oil

Date : 1/26/2008

Manifest # :

Client : Praxair (Texas City-Sterling Chemical Plant)

Ticket : 57387

Phone : 4099439296

Consignee : CES Environmental Services, Inc

Transporter : CES Environmental Services, Inc.

Signature X RB

Signature

Leave CES Yard :	8:00 AM	Arrive At Destination	
Arrive At Customer :	9:00 AM	Begin Unloading :	
Begin Loading :	9:15 AM	Finish Unloading :	
Finish Loading :	10:00 AM	Leave Destination :	
Leave Customer :	10:30	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload. ☐

Gross Weight :		Ending Odometer :	227475
Tare Weight :		Begining Odometer :	227395
Net Weight :		Total Miles :	80

Driver : Hernandez, Joe

Tractor # : 104

Tote # :

Signature : J. HERNANDEZ

Trailer # :

Box # : NEED TO CLE

Job Comments/Equipment : REMOVED OIL (USED) AS DIRECTED FROM CUSTOMER

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / FTA) Golden Rod Customer

EPAHO045000038

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
12/27/2007	41118

Bill To: Praxair
Attn: Accounts Payable
703 6th St. South
Texas City, TX 77590

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	12/17/07			
1	Transportation services by CES @ $100.00 trip fee		100.00	100.00
	24% Fuel Surcharge		24.00	24.00
500	Recycling of hydrocarbon and water mixture @ no charge	BOL 54790	0.00	0.00
	CES Job # 54790			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$124.00
Sales Tax (8.25%)	$0.00
Total	$124.00

CES Environmental Services, Inc.

Bill Of Lading # : 54790

Folder ID :	Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Used Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair (Texas City-Sterling Chemical Plant)
703 6th St. South
Texas City , TX 77590
(409) 943-9296

11a) 1903
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary

For payment. Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate. All information required by Federal Highway Administration regulations at 49 CFR 390.5(T) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	500	G	Recyclable hydrocarbon and water mixture

Shipper : Praxair (Texas City-Sterling Chemical Plant)

Per : Frank Guerra Signature : Date : 12-17-2007

Carrier CES Environmental Services, Inc.

Per : Andres SOTO Signature : Andres Soto Date : 12-17-07

Receiving Facility CES Environmental Services, Inc.

Per : Godfrey Signature : Date : 12-17-07

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000040

CES Environmental Services, Inc.

4804 Griggs Road
Houston, TX 77021
Tel: (713) 678-1460
Fax: (713) 678-1678

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Used Oil

Date : 12/17/2007 **Manifest # :**

Client : Praxair (Texas City-Sterling Chemical Plant) **Ticket :** 54790

Phone : 4099439296 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :		Arrive At Destination	
Arrive At Customer :	1:35 PM	Begin Unloading :	
Begin Loading :	1:45 PM	Finish Unloading :	
Finish Loading :	2:45 PM	Leave Destination :	
Leave Customer :	2:50 PM	Arrive At CES Yard :	3:45 PM

Customer PO #:	Total Hours:	CES Unload: ☐

Gross Weight :		Ending Odometer :	1621843
Tare Weight :		Begining Odometer :	1620991
Net Weight :		Total Miles :	85

Driver : Soto, Andre **Tractor # :** 104 **Tote # :**

Signature : Andres Soto **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000041

Praxair Inc (Praxair-Texas City-
Sterling Chemical)
Propylene Glycol

DC Assigned

EPAHO04500042

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear Bruce Webb

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3235

Expiration Date 3/25/2011

Generator: Praxair (Texas City-Sterling Chemical Plant)
Address: 703 6th St. South
Texas City, TX 77590

Waste Information

Name of Waste: Propylene Glycol
TCEQ Waste Code #: 00602191
Container Type:
Detailed Description of Process Generating Waste:
removal of glycol from equipment prior to demolition
Color: water white **Odor:** glycol **pH:** 3-11
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

OL

SECTION 1: Generator Information

Company: Praxair (Texas City- Sterling Chemical Plant)
Address: 703 6th South
City: Texas City **State:** TX **Zip:** 77590
Contact: Rocky McWhorter **Title:**
Phone Number: 409-943-9296 **Fax Number:**
24/hr Phone Number:
US EPA ID No: na
State ID No: na **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Propylene Glycol
Detailed Description of Process Generating Waste: removal of glycol from equipment prior to demolition

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: water white **Odor:** glycol

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☑ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 1000 gal

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please fill out the UHC Form

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: 00602191

Proper US DOT Shipping Name: Non-RCRA/Non-DOT Regulated Propylene Glycol

Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		3-11		na	mg/l	na	mg/l	0	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
na	mg/l	na	mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
propylene Glycol	95-100	%
water	0-5	%

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Bruce L. Weeks **Date:** 3-23-09

Printed Name/Title: Bruce L Weeks - Praxair, Inc Safety Specialist 3-23-09

CES USE ONLY (DO NOT WRITE IN THIS SPACE)		
Compliance Officer:		
Date: 3-24-09	☑ Approved	☐ Rejected
Approval Number:	HOU-3235	

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$160/tote + $70/hr trans

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

none

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

class I liquids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

March 16, 2009

Praxair Inc
Attn: Bruce Webb
703 6th Street South
Texas City, TX 77590

RE: Pricing for transportation and disposal of propylene glycol

Dear Mr. Webb,

CES Environmental Services, Inc. appreciates the opportunity to present to you our proposal for the transportation and disposal of propylene glycol from your operations. Please find below our proposed scope of service and associated pricing for your consideration.

Scope of Service

- CES will assist the generator in creating a profile for the glycol.
- Upon profile approval, CES will schedule a driver and trailer to pick up the totes of glycol.
- The glycol will be disposed of at CES under permit.
- CES will provide all proper shipping documents.

Estimated Costs

▪ Transportation Services:	$ 70.00/hour
▪ Disposal of Class 1 Non hazardous Propylene Glycol:	$ 160.00/tote

Conditions/Assumptions:

1. A profile must be approved prior to scheduling any disposal. Profile must be given at least 72 hours for approval.
2. There is a 4 hour minimum on all transportation services.
3. Cancelations must be given 24 hours in advance. If 24 hours notice is not given, a fee will be charged.
4. Transportation rate does not include any applicable fuel surcharges as per the U.S. Department of Energy National Diesel Average. Fuel surcharges are evaluated on a monthly basis. The current rate for March 2009 is 9%

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

5. Energy surcharge will be charged according to the national average utility pricing index on all disposal services. At the time of this quote, the energy surcharge is 0%. Rate is subject to change on a monthly basis.
6. A 1% Compliance surcharge will be charged in order to stay compliant with federal and state government requirements. This surcharge is applied against the entire invoice (including other surcharges and direct fees).

Thank you again for the opportunity and your interest in CES Environmental Services, Inc. If you have any questions or need additional assistance, feel free to contact me at (713) 748-9804.

Sincerely,
Dana R. Carter
Account Manager

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1, using the International Chemical Safety Cards of the Global Harmonizing System.
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this MSDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: PROPYLENE GLYCOL
COMPANY IDENTITY: SOLVCHEM INC.
COMPANY ADDRESS: 4704 SHANK ROAD
COMPANY CITY: PEARLAND, TX 77588-0490
COMPANY PHONE: 1-281-485-5377
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 95-100% PROPYLENE GLYCOL (57-55-6)
Number in parentheses is CAS #, number in brackets is European EC #.

PRGL01

SECTION 3. HAZARDS IDENTIFICATION

EXPOSURE PREVENTION: STRICT HYGIENE!

RISK STATEMENTS:
Not Applicable.

SAFETY STATEMENTS:

S2	Keep out of the reach of children.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 4. FIRST AID MEASURES

EYE CONTACT:
For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:
In case of contact with skin immediately remove contaminated clothing.
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING:
Rinse mouth. GET MEDICAL ATTENTION IMMEDIATELY.Do NOT give liquids to an unconscious or convulsing person.

PRGL01

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES
NO open flames. Above flash point, use a closed system, ventilation,

EXTINGUISHING MEDIA
Use dry powder, alcohol-resistant foam, water spray, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield,bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES
SLIGHTLY COMBUSTIBLE!
Keep container tightly closed.
Isolate from oxidizers, heat, & open flame.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.
Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES:
Keep unprotected personnel away.
Wear appropriate personal protective equipment given in Section 8.

CONTAINMENT AND CLEAN-UP MEASURES:
Stop spill at source. Dike and contain.
Wash away remainder with plenty of water.

Praxair Inc (Praxair Inc - Deer Park) -
- Gasoline Removal

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	Praxair INC.
Contact:	Keyonna
Address:	175 East Park Drive
	Tonawanda, NY 14151
Phone:	(716)879-2574
Fax:	(716)879-3345

Salesperson:	Dana Carter		
Assigned:	X	Unassigned:	

Folder I.D.#	Praxair INC (Praxair.inc DeerPark) Gasoline Removal

Job Contact:	Kiranmai Valluri		
Phone:	281-954-1867		
Fax:			

P.O Required:	Y:	X	N:		Fuel Surcharge:	Y:	X	N:
City of Houston:	Y:		N:	X	4-hour Minimum:	Y:	X	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Field Service Supervisor	CES			$40.00/HR
Utility Truck	CES			$150.00/day
Diaphragm Pump/Air Compressor	CES			$150.00/day
PPE (per man/day)	CES			$30.00
Tote rental	CES			$50.00/tote
Recycling of Gasoline	CES			$95.00/tote

Customer Special Request/Requirement

CONFIDENTIAL

CES Environmental Services, Inc.

Bill Of Lading # : 88719

Folder ID :	Praxair (Praxair - Deer Park) Gasoline Removal

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair (Deer Park)
622 Tidal Road
Deer Park , TX 77536
(281) 478-1563

11a) HOU-3420
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	200 BBL		Gasoline,3 , UN1203, PG-II

Shipper : Praxair (Deer Park)
Per X DAVID ASKEW **Signature :** [signature] **Date :** 07-13-09

Carrier CES Environmental Services, Inc.
Per : DAVID WOODARD **Signature :** [signature] **Date :** 07-13-09

Receiving Facility CES Environmental Services, Inc.
Per : AL LONGORIA **Signature :** [signature] **Date :** 7-13-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000057

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Praxair - Deer Park) Gasoline Removal

Date : 7/13/2009 **Manifest # :**

Client : Praxair (Deer Park) **Ticket :** 88719

Phone : 2814781563 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	1015	**Arrive At Destination**	
Arrive At Customer :	1040	**Begin Unloading :**	
Begin Loading :	1045	**Finish Unloading :**	
Finish Loading :	1110	**Leave Destination :**	
Leave Customer :	1115	**Arrive At CES Yard :**	1040

Customer PO #:

Total Hours:

CES Unload: ☒

Gross Weight :		**Ending Odometer :**	197056
Tare Weight :		**Begining Odometer :**	197017
Net Weight :		**Total Miles :**	39

Driver : Woodard, Irvin **Tractor # :** 104 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment : Removed 200 Gallons of Gasoline From Customers underground Storage Tank As Directed

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000058

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Praxair - Deer Park) Gasoline Removal

Date : 7/13/2009 **Manifest # :**

Client : Praxair (Deer Park) **Ticket :** 88719

Phone : 2814781563 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X **Signature**

Leave CES Yard :	1015	**Arrive At Destination**	
Arrive At Customer :	1040	**Begin Unloading :**	
Begin Loading :	1045	**Finish Unloading :**	
Finish Loading :	11 10	**Leave Destination :**	
Leave Customer :	11:15	**Arrive At CES Yard :**	10:40

Customer PO #:

Total Hours:

CES Unload: ☒

Gross Weight :		**Ending Odometer :**	197056
Tare Weight :		**Begining Odometer :**	197017
Net Weight :		**Total Miles :**	39

Driver : Woodard, Irvin **Tractor # :** 104 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment : Removed 200 Gallons of Gasoline From Customers underground Storage Tank As Directed

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000059

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Praxair (Praxair - Deer Park) Gasoline Removal

Customer : Praxair (Deer Park)
Address : 622 Tidal Road
City,State,Zip : Deer Park TX , 77536
CES Contact : () -

Driver : Woodard, Irvin
Helper :
Date : 7/13/2009 Time : 2nd
Truck # 104 Trailer #

Job Description :

1. Go to Rraxiar and pump out gasoline from underground tank.

Field Service Supervisor
Utility Truck
Diaphragm Pump/Air Compressor
PPE (per man)
2 Totes
1" pipe

2. Return to CES and offload.

Site Contact is Mike Mustion (281)924-6796

ID #: 88719

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **7/9/2009**

Dear

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3420

Expiration Date 7/9/2011

Generator: Praxair (Deer Park)
Address: 622 Tidal Road
Deer Park, TX 77536

Waste Information

Name of Waste: Gasoline
TCEQ Waste Code #: Recycale
Container Type:
Detailed Description of Process Generating Waste:
Unused gasoline from underground storage tank
Color: Brown **Odor:** Gasoline **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Recycle Houston

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Praxair Inc
Address: 622 Tidal Road
City: Deer Park **State:** TX **Zip:** 77536
Contact: Kiranmai Valluri **Title:**
Phone Number: 281-954-1867 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXD008073421
State ID No: 30296 **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Praxair Inc
Address: 175 East Park Drive
City: Tonawanda **State:** NY **Zip:** 14151
Contact: Keyonna Willis **Title:** Accounts Processing
Phone Number: 716-879-2574 **Fax Number:** 716-879-3345

SECTION 3: General Description of the Waste

Name of Waste: Gasoline
Detailed Description of Process Generating Waste:

unused gasoline from underground storage tank

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: brown **Odor:** gasoline

Specific Gravity (water=1): 0.85 **Density:** 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 300 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: Recycle

Proper US DOT Shipping Name: Gasoline, 3, UN1203, PG-II

Class: 3 **UN/NA:** UN1203 **PG :** II **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<140		neutral		0	mg/l	0	mg/l	<1	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	>1500	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Gasoline	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ *Off-specification fuels*
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Micheal R Mustion **Date:** 07-08-09

Printed Name/Title: Micheal R. Mustion SES specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]

Date: 7-8-09 ☑ Approved ☐ Rejected

Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$95.00/tote plus field service charges

2. Contamination Limit (maximum limit before surchages apply):

~~NA~~ make sure the material conforms to the profile.

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

Check compatability with lightends

5. Treatment and Handling Protocol:

mix with lightends

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

July 8, 2009

Praxair Inc.
Attn: Michael Mustion
622 Tidal Road
Deer Park, TX 77536

RE: Recycling of gasoline

Dear Mr. Mustion,

CES Environmental Services, Inc. appreciates the opportunity to present to you our proposal for the removal and recycling of unused gasoline from your operations. Please find below our proposed scope of service and associated pricing for your consideration.

Scope of Service

- CES will assist the customer in creating a recyclable profile.
- Upon profile approval, CES will arrange for a field service supervisor to utiltize a diaphragm pump to pump out the gasoline into totes.
- The gasoline will be brought to CES under profile, and recycled as a lightend hydrocarbon.
- CES will provide all proper shipping documents.

Estimated Costs

Description	**Estimated Qty.**	**Price**	**Total**
Field Service Supervisor	5 hours	$40.00/hour	$ 200.00
Utility Truck	1 day	$150.00/day	$ 150.00
Diaphragm Pump/Air Compressor	1 day	$150.00/day	$150.00
PPE (per man/day)	1 sets/day	$30.00/set	$ 30.00
Tote rental	2 totes	$50.00/tote	$100.00
Recycling of Gasoline	2 totes	$95.00/tote	$190.00
	Estimated	**Total**	**$ 820.00**

Conditions/Assumptions:

1. A profile must be approved prior to scheduling any disposal. Profile must be given at least 72 hours for approval.
2. There is a 4 hour minimum on all feild services.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

3. Cancelations must be given 24 hours in advance. If 24 hours notice is not given, a fee will be charged.
4. Transportation rate does not include any applicable fuel surcharges as per the U.S. Department of Energy National Diesel Average. Fuel surcharges are evaluated on a monthly basis. The current rate for June 2009 is 9.5%
5. Energy surcharge will be charged according to the national average utility pricing index on all disposal services. At the time of this quote, the energy surcharge is 0.0%. Rate is subject to change on a monthly basis.
6. A 1% Compliance surcharge will be charged in order to stay compliant with federal and state government requirements. This surcharge is applied against the entire invoice (including other surcharges and direct fees).

Thank you again for the opportunity and your interest in CES Environmental Services, Inc. If you have any questions or need additional assistance, feel free to contact me at (713) 748-9804.

Sincerely,
Dana R. Carter
Account Manager

Praxair Inc (Praxair Inc - Valero)

Recyclable Drums

EPAHO04500071

Customer Special Requests/Requirements
email Robert - Robert_Long@Praxair.com

P.O. Required:	☒ Y	☐ N	Fuel Surcharge:	☒ Y	☐ N
4% City of Houston Fee:	☐ Y	☒ N	4-hr Minimum:	☐ Y	☒ N

Job Estimate

PO # / Item	CES Cost	Customer Charge
4/30		
Trans 1 load		350.00
31.5% FSC		110.25
Recycle-CES BOL 63291 3DM		195.00
		655.25
Invoice #45328 E-MAILED 5-16-08		

CES Environmental Services, Inc.

CONFIDENTIAL **Profit & Loss Sheet** CONFIDENTIAL

Billing/AP Information	
Name:	Praxair Inc (Valero)
Contact:	Robert Long
Address:	1720 Grant Avenue
	Texas City, TX 77590
Phone:	409-682-0591
Fax:	409-945-4451

Salesperson:	Dana Carter
Assigned:	X Unassigned:

Folder I.D.#	Praxair Inc (Praxair Inc - Valero) Recyclable Drums

Job Contact:	Robert Long
Phone:	409-682-0591
Fax:	

P.O Required:	Y:	X	N:	Fuel Surcharge:	Y:	X	N:
City of Houston:	Y:		N: X	4-hour Minimum:	Y:		N: X

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Drums of Oily Ras	CES	2766		$65.00/drum
Transportation	CES			$350.00/load

Customer Special Request/Requirement

CONFIDENTIAL

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
5/13/2008	45328

Bill To: Praxair
Attn: Robert Long
P O Box 1758
Texas City, TX 77592

P.O. No.	Terms	Project
	Net 30	Valero

Quantity	Description	Manifest #	Rate	Amount
	4/30/08			
1	Transportation services by CES @ $350.00 per load		350.00	350.00
	31.5% Fuel Surcharge		110.25	110.25
3	Recycling of Non RCRA / Non DOT regulated oily rags @ $65.00 per drum	BOL 63291	65.00	195.00
	CES Job#63291			

We appreciate your business!

Subtotal	$655.25
Sales Tax (8.25%)	$0.00
Total	$655.25

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

PAID
~~CK NO.~~ VISA
DATE 5-9-08

CES Environmental Services, Inc.

Bill Of Lading # : 63291

102

Folder ID :	Praxair (Valero) Recyclable Drums

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair (Valero)
1301 Loop 197 S.
Texas City , TX 77590
(409) 682-0591

11a) 2766
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which *said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract)* agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. *This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.*

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	3	DM	165	G	Non-RCRA/Non DOT regulated oily rags

Shipper : Praxair (Valero)
Per : Clay Nolwood **Signature :** [signature] **Date :** 4-30-08

Carrier CES Environmental Services, Inc.
Per : Judd Price **Signature :** [signature] **Date :** 4-30-08

Receiving Facility CES Environmental Services, Inc.
Per : Sam Brown **Signature :** [signature] **Date :** 4-30-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Valero) Recyclable Drums

Date : 4/30/2008 **Manifest # :**

Client : Praxair (Valero) **Ticket :** 63291

Phone : 4096820591 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :		**Arrive At Destination**	12:35 PM
Arrive At Customer :	10:25 AM	**Begin Unloading :**	
Begin Loading :	10:30 AM	**Finish Unloading :**	
Finish Loading :	11:41 AM	**Leave Destination :**	
Leave Customer :	12:00 PM	**Arrive At CES Yard :**	12:35 PM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	161612
Tare Weight :		**Begining Odometer :**	161580
Net Weight :		**Total Miles :**	

Driver : Frias, Juan **Tractor # :** 102 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
5/13/2008	45328

Bill To: Praxair
Attn: Robert Long
P O Box 1758
Texas City, TX 77592

COPY

P.O. No.	Terms	Project
	Net 30	Valero

Quantity	Description	Manifest #	Rate	Amount
	4/30/08			
1	Transportation services by CES @ $350.00 per load		350.00	350.00
	31.5% Fuel Surcharge		110.25	110.25
3	Recycling of Non RCRA / Non DOT regulated oily rags @ $65.00 per drum	BOL 63291	65.00	195.00
	CES Job#63291			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$655.25
Sales Tax (8.25%)	$0.00
Total	$655.25

CES Environmental Services, Inc.

102

Bill Of Lading # : 63291

Folder ID :	Praxair (Valero) Recyclable Drums

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair (Valero)
1301 Loop 197 S.
Texas City , TX 77590
(409) 682-0591

11a) 2766
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	3	DM	165	G	Non-RCRA/Non DOT regulated oily rags

Shipper : Praxair (Valero)
Per : Clay Norwood **Signature :** [signature] **Date :** 4-30-08

Carrier CES Environmental Services, Inc.
Per : Judy Frias **Signature :** [signature] **Date :** 4-30-08

Receiving Facility CES Environmental Services, Inc.
Per : Sam Bretow **Signature :** [signature] **Date :** 4-30-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000078

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Valero) Recyclable Drums

Date : 4/30/2008 **Manifest # :**

Client : Praxair (Valero) **Ticket :** 63291

Phone : 4096820591 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :		**Arrive At Destination**	12:35 PM
Arrive At Customer :	10:25 AM	**Begin Unloading :**	
Begin Loading :	10:30 AM	**Finish Unloading :**	
Finish Loading :	11:41 AM	**Leave Destination :**	
Leave Customer :	12:00PM	**Arrive At CES Yard :**	12:30 PM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	161612
Tare Weight :		**Begining Odometer :**	161580
Net Weight :		**Total Miles :**	

Driver : Frias, Juan **Tractor # :** 102 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/29/2008**

Dear **Robert Long**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2766

Expiration Date 4/29/2010

Generator: Praxair (Valero)
Address: 1301 Loop 197 S.
Texas City, TX 77590

Waste Information

Name of Waste: Oily Rags
TCEQ Waste Code # Recycle
Container Type:
Detailed Description of Process Generating Waste:
rags/absorbants from cleaning up oil spills
Color: Varies **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

SR

OK

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Praxair (Texas City @ Valero)
Address : 1301 Loop 197 S.
City, State, Zip : Texas City TX 77590
Contact : Robert **Title :**
Phone No : 409-682-0591 **Fax :**
24 / HR Phone : 409-945-4451 (Valero)
U.S EPA I.D No : N/A
State I.D : N/A **SIC Code** NA

SECTION 2: Billing Information

Company : Praxair (Texas City)
Address : 1720 Grant Ave.
City, State, Zip : Texas City TX 77590
Contact : Robert **Title :**
Phone No : 409-682-0591 **Fax :**

SECTION 3: General Description of the Waste

Name of Waste : Oily rags

Detailed Description of the Process Generating Waste:

Rags/absorbents from cleaning up oil spills

Physical State : ☐ Liquid ☐ Sludge ☐ Powder
☑ Solid ☐ Filter Cake ☐ Combination

Color : Varies **Odor :** None

Specific Gravity (Water=1) : **Density :** lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☐ No

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 2-5

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : Non DOT regulated oily rags

Class : — **UN/NA :** — **PG :** — **RQ :** —

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	na	na mg/l	na mg/l	100 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Oily rags.	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
None

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : na
TCLP Volatilies : na
TCLP Semi-Volatiles : na
Reactivity : na
Corrosivity : na
Ignitability : na

SECTION 9: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Robert Long **Date :** 4/25/08

Printed Name / Title : Robert Long

#2766

EPAHO045000082

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : Prabhakar Thangudu

Date : 4-29-08 **Status :** Approved Rejected

Approval Number : 2766

Process Facility Information :
$65.00/drum

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes

- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcatego
- ☐ Oils Subcatego
- ☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$65.00/drum

2. **Contamination Limits (maximum limit before surcharges apply):**

None No Free liquids

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

None

5. **Treatment and Handling Protocol:**

Recycle

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO045000085

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable);**

NA

Praxair Inc (Praxair Inc-TX City Grant Ave) BP

Natural Gas Condensate

[redacted] DC

Assigned

EPAHO045000087

Dana -
How much for
recycling of
Empty Tote
$
No Charge

Mellen

Put LOCATION ON INVOICE

BP TexasCity

Customer Special Requests/Requirements

~~Blanket PO# 6004204~~ E-Mail for PO# raquel-cervantez@Praxair.com

USE TONAWANDA, NY Address!

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

	Item	CES Cost	Customer Charge
	TRANSPORTATION - CES		$325./LOAD
DSP-	Recycle - CES Nat. Gas Condesate		$60./DRM
			$240./TOTE
	Recycle-CES Empty TOTE		N/C
2-6-08	PO# 30311928		
	TRANS w/ Drum plu		
	Recycle - CES BOL 58108 1 TOTE		240.00
			240.00

E-MAILED 3/10/08 E-MAILED 3/28/08

E-MAILED 4/28/08 E-MAILED 5/9/08

Put location on invoice

Customer Special Requests/Requirements

~~Blanket PO# 6004204~~ email Raquel for PO# raquel-cervantez@pr.aair.com

USE TONAWANDA, NY Address!

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

	Item	CES Cost	Customer Charge
	TRANSPORTATION - CES		$325./LOAD
DSP-	Recycle - CES Nat. Gas Condesate		$60./Drm
			$240./TOTE
	Recycle-CES Empty TOTE		N/C
8-24-07	TRANS		325.00
	20% FSC		65.00
	Recycle-CES BOL 47525 1 TP		240.00
	E-MAILED 9-4-07		630.00
10/9	Trans 1 load		325.00
	20% FSC		65.00
	Invoice # 39075		390.00
1/14	TRANS - 1 LOAD		325.00
	24% FSC		78.00
	Recycle-CES BOL 56534 1 tp		~~720.00~~ 240.00
	empty tote (1)		N/C
	Invoice #		~~1123.00~~ 643.00
	PO# 6004204		
1/29	TRANS - 1 load		325.00
	24% FSC		78.00
	Recycle-CES BOL 57452 - 1 tp		240.00
	Invoice # 42136		643.00

EPAHO045000090

Customer Special Requests/Requirements

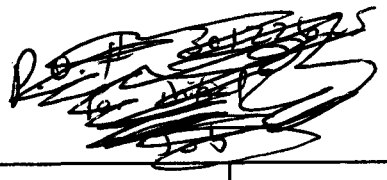
Blanket PO# 60004204

USE Tonawanda, NY Address

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

	Item	CES Cost	Customer Charge
	TRANSPORTATION - CES		$325./ Load
DSP-	Recycle - CES Nat. Gas Condensate		$60./ Drum
			$240./ Tote
	Recycle-CES Empty TOTE		N/C
	PO# 60004204-OB		
8-3-06	TRANS- 103		325.00
	16% FSC		52.00
DSP-	Recycle-CES BOL 24267 1 TOTE		240.00
	Empty Totes 3		N/C
	PC 2½ - 15.43		
			617.00
3/29 DSP	PO#		
	TRANS- 1 load		325.00
	16% FSC		52.00
	Recycle-CES BOL 38617- 1 tote		240.00
	INVOICE# 33595		617.00
7-27	TOTE Delivery		325.00
	20% FSC		65.00
	E-MAILED 8-7-07		390.00
8/3 DSP	PO# 60004204		
	TRANS- 1 load		325.00
	20% FSC		65.00
	Recycle-CES BOL 46246. 1 tote		240.00
	E-MAILED 8-13-07		630.00
	INVOICE# 37283		



Job Estimate

Expense Item	Estimated Cost	Cost to Customer
PO# 301 22625		
1.10.05 Trans - CES (#103) 4 tons delivery		325.00
8% fuel surcharge		26.00
Recycle - CES 12 drums		720.00
		1071.00

CES Environmental Services, Inc.
Profit/Loss Sheet

Billing Information:	
Name:	Praxair TX City Grant Ave
Contact:	Raquel Cervantes
Address:	1720 Grant Avenue
Tonawanda, NY	Texas City, TX 77590
Phone:	409-643-5610
Fax:	409-643-5637

Salesperson: _____

Job Contact:	
Phone:	
Fax:	

A/P Contact:	
Phone:	
Fax:	

P.O. Required:	Y	N	Fuel Surcharge:	Y	(N)
4% City of Houston Fee:	Y	(N)	4-hr Minimum:	Y	(N)

Job Estimate

Item	Vendor	CES Cost	Customer Charge
Transportation by CES	CES		$325.00
Recycle Natural Gas Condensate:	CES		
Drum			$160.00/dm
Tote			$240.00/Tote

Customer Special Requests/Requirements

Put Location in Project Box "BP Texas City"

Email Raquel for PO#

raquel_cervantez@praxair.com

UPDATE FOLDERS IMMEDIATELY WITH ANY CHANGES

Confidential

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
2/25/2008	42840

Bill To: Praxair, Inc.
Invoice Auditing Dept.
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
30311928	Net 30	BP Texas City

Quantity	Description	Manifest #	Rate	Amount
1	2/6/08 Recycling of Non-RCRA material (natural gas condensate) @ $240.00 per tote	BOL 58108	240.00	240.00
	CES job #58108			

We appreciate your business!

Subtotal	$240.00
Sales Tax (8.0%)	$0.00
Total	$240.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

FILL ALL BLANKS

bp TEXAS CITY, TEXAS

MATERIAL / PROPERTY REMOVAL PERMIT

X (Pass Bearer) Print Name:

X (Pass Bearer) ~~SSN #~~ DL #
17503371

(Circle One) PROPERTY BELONGS TO:
Company (Contractor) Employee Vendor

Date Pass Issued:
2/6/2008

(Circle One)
~~Work Materials~~ Loaned Scrap/Given
Repair Returned Material

Reason for Removal:
Send to reclaimer

Origin of Material:
Hydrogen Units

If loaned, date to be returned:

NOTICE: The bearer of this pass has permission to leave the refinery THIS DATE ONLY with the material(s), merchandise, scrap or tools listed below, *subject to inspection by bp SECURITY.*

6) Drums used oil : rags
1) Tote

NOTE TO EMPLOYEE REMOVING MATERIAL/EQUIPMENT FOR PERSONAL USE:
1. Employee accepts this material/equipment on an "as is" basis and Company provides no warranty of any kind, either expressed or implied.
2. Employee is responsible for damage to or loss of material/equipment and its return.
3. Employee acknowledges that he has been trained in the safe use of the materials/equipment.
4. Employee expressly assumes responsibility for, as of the date of this permit, all risk of loss, damage to property, injury or death to anyone arising directly out of or in connection with any ownership, possession, handling, use or failure of the material/equipment listed herein and agrees to indemnify and hold **bp**, its' officers, directors and employees, harmless (including reimbursement of attorneys fees and other costs of defense) from any and all claims, actions or causes of action of any kind whatsoever, by any person whosoever for any act of negligence and/or gross negligence on the part of **bp**, its directors, officers or employees.

Pass Bearer's Signature:	Date:	PROPER bp SUPERVISION ONLY. Authorized by: (name)
X	2/6/2008	

NOTES: (1) LOANED MATERIAL/bp EMPLOYEES - Bearer of this pass and property is responsible until loaned property is returned. If lost or not returned by the date listed above, the cost may be deducted from your check. Keep your copy/receipt for proof of property return.
(2) CONTRACTORS - Possession of **bp** tools and/or materials **without a valid removal permit** could result in Pass Bearer being barred from refinery.

Employee Signature (Loan)	*Date to be returned:*	Date returned:	Return accepted by:

This section for **bp** Security Only. Property checked by:

Date: 2-6-08 Time: 1012 Gate: 16 Officer: S/O J. ESPINOZA

677706609 (1/01)

EMPLOYEE / VENDOR

EPAHO045000095

Need to bill

trans w/
drum p/u

CES Environmental Services, Inc.

Bill Of Lading # : 58108

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condeeate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Praxair-Texas City
1720 Grant Ave
Texas City , TX 77590
(409) 643-5610

ces profile #
11a) 1972
11b)
11c)
11c)

The property described below, in apparent good order, ex[illegible] as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1 ~~2,800~~	TP	2800	P	Non-RCRA/Non-DOT Regulated Material (natural gas condensate)

Shipper : Praxair-Texas City
Per : X Robert Long **Signature :** X Robert Long **Date :**

Carrier CES Environmental Services, Inc.
Per : [illegible] **Signature :** [illegible] **Date :** 2/6/08

Receiving Facility CES Environmental Services, Inc.
Per : [illegible] **Signature :** [illegible] **Date :** 2-6-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000097

CES Environmental Services, Inc.

3804 Briggs Road
Houston, TX 77021
Tel (713) 678-1460
Fax (713) 678-1678

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Grant Ave)
Natural Gas Condesate/Empty Totes

Date : 2/6/2008 Manifest # :

Client : Praxair-Texas City Robert Long Ticket : 581108

Phone : 4096435610 Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature Signature

Leave CES Yard :	9:00	Arrive At Destination	
Arrive At Customer :	8:45	Begin Unloading :	
Begin Loading :	9:15	Finish Unloading :	
Finish Loading :	10:00	Leave Destination :	
Leave Customer :	10:15	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	71582
Tare Weight :		Begining Odometer :	71503
Net Weight :		Total Miles :	79

Driver : Omar Sandoz Tractor # : 103 Tote # :

Signature : Trailer # : Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / PTA) Golden Rod (Customer)

EPAHO045000098

PRAXAIR

PURCHASE ORDER NO. 30311928 US

Original Doc:	60004204 OB
Project/Business Unit	U4980206
Branch/Plant	U4980206

Purchase Order No. must appear on all Packages. Invoices and B/L pertaining to this Purchase Order

MAIL INVOICE TO:
Invoice Auditing Department
Praxair, Inc
P.O. Box 808, Tonawanda, NY 14151-0808

Ship To: Praxair, Inc.
1720 Grant Avenue, Gate 16
Texas City TX 77590

Supplier: CES Environmental
4904 Griggs Rd.
Houston TX 77021

PH: 713-676-1460 FX: 713-676-1676

MARK FOR USE ON: *OAS

ATTN: SUPPLIER INVOICE AMOUNT SHALL NOT EXCEED TOTAL VALUE OF PURCHASE ORDER AS STATED BELOW.
BUYER HEREBY ORDERS UPON THE TERMS HEREIN CONTAINED, INCLUDING THE ADDITIONAL TERMS ON THE REVERSE SIDE HEREOF

Order Date:	5/14/2008	Terms of Sale:	.	PH: N/A FX: N/A	Currency Code: USD
Required Ship Date:	5/14/2008	Refer Commercial Question to:	McAndrew, Jessica		Payments Terms: Net 60 Days
Order Taken By:		Delivery Instructions:			Ship Via:

Line Num	Praxair Internal Item Number / Description	Quantity Ordered	Tran UoM	Purc UoM	Unit Price	Extended Price	Promised Ship Date	Tax
1	PX Item Number 10023922 Services - Environmental *Type:Waste Disposal *Description:Non-Hazardous		EA	EA	.0000	240.00	5/14/2008	

Invoice # 42840, 2/25/08
Recycling of Non-RCRA material (natural gas condensate)

Kara Disney

From: Morgan McCarley
Sent: Tuesday, April 01, 2008 9:05 AM
To: Kara Disney
Subject: FW: invoices

Can you take a look at this for me?

From: Raquel_Cervantes@Praxair.com [mailto:Raquel_Cervantes@Praxair.com]
Sent: Monday, March 31, 2008 1:11 PM
To: Morgan McCarley
Subject: Re: invoices

Morgan

Invoice #42840 doesn't match the service on job #58108. We did not send a tote of NG Condensate. Can you correct and resend that invoice?

Thanks
Raquel

Raquel Cervantes
HYCO Operations
Plant Engineer
Phone: (409) 643-5610
Fax: (409) 643-5637
Email: Raquel_Cervantes@praxair.com

This e-mail, including any attachments, is intended solely for the person or entity to which it is addressed and may contain confidential, proprietary and/or non-public material. Except as stated above, any review, re-transmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than an intended recipient is prohibited. If you receive this in error, please so notify the sender and delete the material from any media and destroy any printouts or copies.

Morgan McCarley
<mmccarley@cesenvironmental.com>

03/25/2008 02:27 PM

To "raquel_cervantes@praxair.com" <raquel_cervantes@praxair.com>
cc
Subject invoices

[x]

Raquel-

Please let me know if you have any questions or concerns.

Thanks-

3/31/2008

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
1/31/2008	42281

Bill To: Praxair, Inc.
Invoice Auditing Dept.
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
	Net 30	BP Texas City

Quantity	Description	Manifest #	Rate	Amount
	01/14/08			
1	Transportation services by CES on 01/14/08 @ $325.00 per load.		325.00	325.00
	24% Fuel Surcharge		78.00	78.00
1	Recycling of hydrocarbon and water mixture (natural gas condensate) from Texas City, TX location @ $240.00 per tote	BOL 56534	240.00	240.00
	2 empty tote (no charge)			
	CES job #56534			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$643.00
Sales Tax (8.0%)	$0.00
Total	$643.00

CES Environmental Services, Inc.

Bill Of Lading # : 56534

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condeeate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Praxair-Texas City
1720 Grant Ave
Texas City , TX 77590
(409) 643-5610

ces profile #
11a) 1694
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	4	TP	600	P	Non-RCRA/Non-DOT Regulated (Natural gas condensate wastewater)
	1	TP	476	P	Empty Stainless Steel Tote (Delivered)

Shipper : Praxair-Texas City
Per : T.J. Simpton **Signature :** T.J. Simpton **Date :** 1/14/08

Carrier CES Environmental Services, Inc.
Per : Travis L. Woodard **Signature :** Travis L. Woodard **Date :** 01-14-08

Receiving Facility CES Environmental Services, Inc.
Per : SAM BROWN **Signature :** Sam Brown **Date :** 1-14-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

FILL ALL BLANKS

bp TEXAS CITY, TEXAS	MATERIAL / PROPERTY REMOVAL PERMIT
(Pass Bearer) Print Name: IRVIN L. WOODARD	(Circle One) PROPERTY BELONGS TO: Company / Contractor / Employee / Vendor
(Pass Bearer) ~~SSN #~~ DL # 07855834	
Date Pass Issued: 1-14-08	(Circle One) Work Materials / Loaned / Scrap/Given / Repair / Returned Material
Reason for Removal: work complete	
Origin of Material: HU3	If loaned, date to be returned:

NOTICE: The bearer of this pass has permission to leave the refinery THIS DATE ONLY with the material(s), merchandise, scrap or tools listed below, *subject to inspection by bp SECURITY.*

3-storage tubes

NOTE TO EMPLOYEE REMOVING MATERIAL/EQUIPMENT FOR PERSONAL USE:

1. Employee accepts this material/equipment on an "as is" basis and Company provides no warranty of any kind, either expressed or implied.
2. Employee is responsible for damage to or loss of material/equipment and its return.
3. Employee acknowledges that he has been trained in the safe use of the materials/equipment.
4. Employee expressly assumes responsibility for, as of the date of this permit, all risk of loss, damage to property, injury or death to anyone arising directly out of or in connection with any ownership, possession, handling, use or failure of the material/equipment listed herein and agrees to indemnify and hold **bp**, its' officers, directors and employees, harmless (including reimbursement of attorneys fees and other costs of defense) from any and all claims, actions or causes of action of any kind whatsoever, by any person whosoever for any act of negligence and/or gross negligence on the part of **bp**, its directors, officers or employees.

Pass Bearer's Signature:	Date:	PROPER **bp** SUPERVISION ONLY. Authorized by: (name) PX
[illegible]	1-14-08	[illegible]

NOTES: (1) LOANED MATERIAL/bp EMPLOYEES - Bearer of this pass and property is responsible until loaned property is returned. If lost or not returned by the date listed above, the cost may be deducted from your check. Keep your copy/receipt for proof of property return.
(2) CONTRACTORS - Possession of **bp** tools and/or materials **without a valid removal permit** could result in Pass Bearer being barred from refinery.

Employee Signature (Loan)	Date to be returned:	Date returned:	Return accepted by:

This section for **bp** Security Only. Property checked by:

Date: 1-14-08 Time: 1708 Gate: 16 Officer: S/O J. ESPINOZA

677706609 (1/01)

EMPLOYEE / VENDOR

EPAHO045000103

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Grant Ave)
Natural Gas Condesate/Empty Totes

Date : 1/14/2008 **Manifest # :**

Client : Praxair-Texas City **Ticket :** 56534

Phone : 4096435610 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X **Signature**

Leave CES Yard :	0500	**Arrive At Destination**	
Arrive At Customer :	1600	**Begin Unloading :**	
Begin Loading :	1635	**Finish Unloading :**	
Finish Loading :	16:55	**Leave Destination :**	
Leave Customer :	17:00	**Arrive At CES Yard :**	17:55

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	28781
Tare Weight :		**Begining Odometer :**	28766
Net Weight :		**Total Miles :**	15

Driver : Woodard, Irvin **Tractor # :** 102 **Tote # :** 6047R

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment : Picked up Three C.E.S. Stainless Steel Totes all are Empty. (0015M, 1798 024) Serial Numbers

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000104

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condesate/Empty Totes

Customer : Praxair-Texas City
Address : 1720 Grant Ave
City,State,Zip : Texas City TX , 77590
CES Contact : Dana Carter (713) 748 - 9804

Driver : Woodard, Irvin
Helper :
Date : 1/14/2008 Time : 2nd
Truck # 102 Trailer #

Job Description :

*****DELIVER 1 Stainless Steel Tote (get w/ Loren to make sure tote meets all specifications)

p/u 4 totes of natural gas condensate [profile #1694]

Raquel Cervantez (409) 643-5610

ID #: 56534

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
1/31/2008	42136

Bill To: Praxair, Inc.
Invoice Auditing Dept.
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
	Net 30	BP Texas City

Quantity	Description	Manifest #	Rate	Amount
	01/29/08			
1	Transportation services by CES @ $325.00 per load		325.00	325.00
	24% Fuel Surcharge		78.00	78.00
1	Recycling of hydrocarbon and water mixture (natural gas condensate) @ $240.00 per tote	BOL 57452	240.00	240.00
	CES job #57452			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$643.00
Sales Tax (8.0%)	$0.00
Total	$643.00

CES Environmental Services, Inc.

Bill Of Lading # : 57452

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condensate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Praxair-Texas City
1720 Grant Ave
Texas City , TX 77590
(409) 643-5610

ces profile #
11a) 1972
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390 SAB implementing the Intermodal State Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TP	800	P	Non-RCRA/Non-DOT Regulated Material (natural gas condensate)

Shipper : Praxair-Texas City
Per : DAVID GRAPPE **Signature :** [signature] **Date :** 1-29-08

Carrier CES Environmental Services, Inc.
Per : Robert Brown **Signature :** [signature] **Date :** 1/29/08

Receiving Facility CES Environmental Services, Inc.
Per : [illegible] **Signature :** [signature] **Date :** 1-29-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel: (713) 676-1460
Fax: (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Grant Ave)
Natural Gas Condesate/Empty Totes

Date : 1/29/2008 **Manifest # :**

Praxair-Texas City

Client : **Ticket :** 57452

Phone : 4096435610

CES Environmental Services, Inc.

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature **Signature**

Leave CES Yard :	7:45 AM.	**Arrive At Destination**	
Arrive At Customer :		**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :		**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	215107
Net Weight :		**Total Miles :**	

Driver : Mata, Benjamin **Tractor # :** 101 **Tote # :**

Signature : Benjamin Mata **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000108

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
10/12/2007	39075

Bill To: Praxair, Inc.
Invoice Auditing Dept.
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
6004204	Net 30	

Quantity	Description	Manifest #	Rate	Amount
1	Transportation services by CES on 10/9/07 @ $325.00 per load for delivery of totes		325.00	325.00
	20% Fuel Surcharge		65.00	65.00
	CES Job # 50793			

We appreciate your business!

Subtotal	$390.00
Sales Tax (8.0%)	$0.00
Total	$390.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Raquel McCrate

7:30 AM
8:15 AM
8:20 AM
8:30 AM
8:45 AM

9:45 AM

154531
154458
73

Andres Soto

Deliver 2 TOTES TO Praxair Texas CITY
1 TOTE Return TO CES (empty - can't use w/current lid)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
8/29/2007	37851

Bill To: Praxair, Inc.
Invoice Auditing Dept.
Vas Papavassiliou
P.O. Box 808
Tonawanda, NY 14151-0808

P.O. No.	Terms	Project
6004204	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	8/24/07			
1	Transportation services by CES @ $325.00 per load		325.00	325.00
	20% Fuel Surcharge		65.00	65.00
1	Recycling of hydrocarbon and water mixture (natural gas condensate) from Texas City, TX location @ $240.00 per tote	BOL 47525	240.00	240.00
	CES job #47525			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$630.00
Sales Tax (8.0%)	$0.00
Total	$630.00

CES Environmental Services, Inc.

Bill Of Lading # : 47525

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condeeate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Praxair-Texas City
1720 Grant Ave
Texas City , TX 77590

ces profile #
11a) 1694
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. *This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.*

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the *"Billed to"* party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5469 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TP		P	Recyclable hydrocarbon and water mixture (natural gas condesate)

Shipper : Praxair-Texas City
Per : Raquel Cervantes **Signature :** [signature] **Date :** 8-24-07

Carrier CES Environmental Services, Inc.
Per : Perry West **Signature :** [signature] **Date :** 8-24-07

Receiving Facility CES Environmental Services, Inc.
Per : [illegible] **Signature :** [signature] **Date :** 08/24/07

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Grant Ave)
Natural Gas Condesate/Empty Totes

Date : 8/24/2007 **Manifest # :**

Praxair-Texas City

Client : **Ticket :** 47525

Phone : 4096435610 **Consignee :** CES Environmental Services, Inc.

CES Environmental Services, Inc.

Transporter :

Signature **Signature**

Leave CES Yard :	708	**Arrive At Destination**	
Arrive At Customer :	838	**Begin Unloading :**	
Begin Loading :	930	**Finish Unloading :**	
Finish Loading :	1015	**Leave Destination :**	
Leave Customer :	1020	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	56898
Tare Weight :		**Begining Odometer :**	56771
Net Weight :		**Total Miles :**	127

Driver : West Perry **Tractor # :** 291 **Tote # :**

Signature : **Trailer # :** 217 **Box # :**

Job Comments/Equipment : Sally Class, Waiting for B.O.L Fax

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Praxair Inc (Praxair Inc - Texas City Grant Ave) Natural Gas Condesate/Empty Totes

Customer : Praxair-Texas City
Address : 1720 Grant Ave
City,State,Zip : Texas City TX , 77590
CES Contact : () -

Driver : **West, Perry**
Helper :
Date : 8/24/2007 Time : 0600
Truck # 291 Trailer # 217

Job Description :

*****DELIVER 1 Stainless Steel Tote

1) Pickup and label the following:
~1 tote of Natural Gas Condesate

Contact number 409-943-9203

ID #: 47525

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

713 922 5022

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

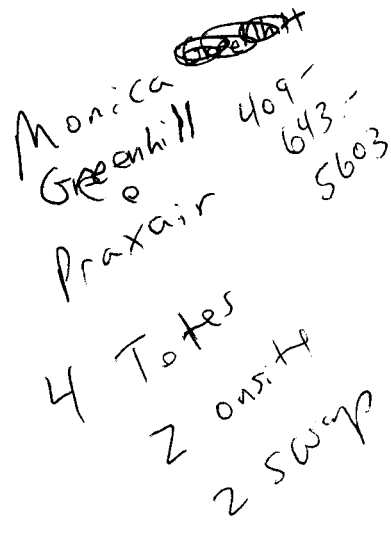
CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

DRUM DOLLY NEEDED: ☐ YES ☐ NO


Monica
Greenhill
Praxair
409-
643-
5603
4 Totes
2 onsite
2 swap

Praxair
1720 Grant Ave.
Gate #16
Texas City, TX
77590
(Inside BP
refinery)

Praxair Inc (Praxair Inc - Motiva [redacted] Enterprises)

Natural Gas Condensate

DC

assigned

Do Not File

Return to

MELBA

thanks!

EPAHO045000117

ON GOING
TOTE Rental

START
7/10/06
QRTLY

Customer Special Requests/Requirements
Email phillip_smith@praxair.com

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

Item	CES Cost	Customer Charge
JAN 1-31-09 (2) E-MAILED 4.9.09		186.00
FEB 1-28-09 (1)		84.00
FEB 1-18-09 (1)		54.00
MARCH 1-31-09 (1)		93.00
Sales Tax		34.41
1% Compliance	7.61	7.61
TRANS- P/U 1 TOTE (EMPTY) 2/18/09		280.00
10.5% FSC		29.40
	7.61	768.42
	(760.81)	

EPAHO045000119

Customer Special Requests/Requirements

Email:
Bill QUARTLEY daniel_davison@praxair.com
phillip_smith@praxair.com

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item		CES Cost	Customer Charge
JAN 08	1-31 (2 TOTES)	31 days		186.00
FEB 08	1-29	29 days		174.00
MARCH 08	1-31	31 days		186.00
		SALES TAX 8.25%	45.05	45.05
			45.05	591.05
	E-MAILED 5-15-08		546.00	
April 08	1-30 (2 TOTES)	30 days		180.00
May 08	1-31	31 days		186.00
June 08	1-30	30 days		180.00
		Sales Tax	45.05	45.05
			45.05	591.05
			546.00	
July 08	1-31			186.00
Aug 08	1-31			186.00
Sept 08	1-30			180.00
		Sales Tax	45.54	45.54
		1% compliance	5.98	5.98
			51.52	603.52
			552.00	
Oct 08	1-31 (2 totes)	31 days		186.00
Nov 08	1-30	30		180.00
Dec 08	1-31	31		186.00
		Sales tax	45.54	45.54
		1% Compliance	5.98	5.98
			51.52	603.52
			552.00	

EPAHO045000120

Customer Special Requests/Requirements
Bill Quartley

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item	CES Cost	Customer Charge
July 06	7/10 - 7/31 (2) TOTE Rental 22 days		132.00
Aug 06	8/1 - 8/31 " " 31 days		186.00
Sept 06	9/1 - 9/30 " " 30 days		180.00
	Sales Tax 8.25		41.09
	Inv# 31963		
	DC 2 1/2 - 13.48		539.09
Oct 06	10-1 / 10-31 (2) Tote Rental 31 days		186.00
Nov 06	11-1 / 11-30 " " 30 days		180.00
Dec 06	12-1 / 12-31 " " 31 days		186.00
	Sales Tax		45.54
	Inv 31966		
			597.54
	DC 2 1/2 - 14.94		
Jan 07	1/1 - 1/31 31 days		186.00
Feb 07	2/1 - 2/28 28 days		168.00
March 07	3/1 - 3/31 31 days		186.00
	Sales Tax		44.55
	34514		
			584.55
April 07	4/1 - 4/30 (2 TOTES) 30 days @		180.00
May 07	5/1 - 5/31 " 31 days @		186.00
June 07	6/1 - 6/30 " 30 days @		180.00
	Sales TAX	45.05	45.05
	42650	45.05	591.05
		(546.00)	
July 07	7/1 - 7/31 (2 TOTES) 31 days @		186.00
Aug 07	8/1 - 8/31 " 31 days @		186.00
Sept 07	9/1 - 9/30 " 30 days @		180.00
	Sales TAX	45.54	45.54
	42651		597.54
		(552.00)	
Oct 07	10/1 - 10/31 (2 TOTES) 31 days @		186.00
Nov 07	11/1 - 11/30 " 30 days @		180.00
Dec 07	12/1 - 12/31 " 31 days @		186.00
	Sales	45.54	45.54
	42652		

CES Environmental Services, Inc.
Profit/Loss Sheet

Billing Information:	
Name:	Praxair (Motiva-Port Aurthur)
Contact:	~~Alfred Trahan~~
Address:	PO Box 712
	Port Aurthur TX 77641
Phone:	409-984-7908
Fax:	409-984-7911

Salesperson: Dana Carter

Job Contact:	
Phone:	
Fax:	

A/P Contact:	
Phone:	
Fax:	

P.O. Required: Y N (N)
Fuel Surcharge: Y (N)
4% City of Houston Fee: Y (N)
4-hr Minimum: Y (N)

Job Estimate

Item	Vendor	CES Cost	Customer Charge
Rental fee for 2 $S totes ($3/tote) *Begin 7/10/06	CES	—	$6.00/DAY

Customer Special Requests/Requirements

UPDATE FOLDERS IMMEDIATELY WITH ANY CHANGES

Confidential

Job Estimate

Expense Item	Estimated Cost	Cost to Customer
charge credit card - see note		
1·10·05 Trans CES - 4 drums + 2 totes (#103)	-	390.00
9% fuel surcharge		31.20
Recycle CES - 4 drums		240.00
		661 20

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
3/31/2009	55496

Bill To: Praxair
Attn: Phillip Smith
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of Totes @ $3.00 per tote / per day			
31	January 1 thru 31/09 (2 totes)		6.00	186.00T
28	February 1 thru 28/09 (1 tote)		3.00	84.00T
18	February 1 thru 18/09 (1 tote)		3.00	54.00T
4	Transportation services by CES @ $70.00 per hour		70.00	280.00
	-- pick up 1 tote (off rent)			
	10.5% Fuel Surcharge		29.40	29.40
31	March 1 thru 31/09 (1 tote)		3.00	93.00T
	1% Compliance Fee		7.61	7.61

We appreciate your business!

Subtotal	$734.01
Sales Tax (8.25%)	$34.41
Total	$768.42

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Motiva Enterprises- Port Arthur) Natural Gas Condesate

Date : 2/18/2009

Manifest # :

Client : Praxair (Motiva Enterprises)

Ticket : 81702

Phone : 4099847908

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature [signature]

Signature

Leave CES Yard :	1:50 PM	Arrive At Destination	
Arrive At Customer :	3:35 PM	Begin Unloading :	
Begin Loading :	3:45 PM	Finish Unloading :	
Finish Loading :	3:50 PM	Leave Destination :	
Leave Customer :	4:00 PM	Arrive At CES Yard :	5:50 PM

Customer PO #:

Total Hours: 4

CES Unload: ☐

Gross Weight :		Ending Odometer :	108757
Tare Weight :		Begining Odometer :	108655
Net Weight :		Total Miles :	102

Driver : Soto, Andre

Tractor # : 103

Tote # :

Signature : Andres Soto

Trailer # :

Box # :

Job Comments/Equipment :

PICKUP 1 EMPTY TOTE from
Praxair PORT ARTHUR

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000125

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
3/31/2009	55496

Bill To: Praxair
Attn: Phillip Smith
PO Box 712
Port Arthur, TX 77641

DO NOT MAIL

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of Totes @ $3.00 per tote / per day			
31	January 1 thru 31/09 (2 totes)		6.00	186.00T
28	February 1 thru 28/09 (1 tote)		3.00	84.00T
18	February 1 thru 18/09 (1 tote)		3.00	54.00T
4	Transportation services by CES @ $70.00 per hour		70.00	280.00
	-- pick up 1 tote (off rent)			
	10.5% Fuel Surcharge		29.40	29.40
31	March 1 thru 31/09 (1 tote)		3.00	93.00T
	1% Compliance Fee		7.61	7.61

PAID
OK NO. VISA
DATE 5-13-09

We appreciate your business!

Subtotal	$734.01
Sales Tax (8.25%)	$34.41
Total	$768.42

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Praxair (Motiva Enterprises- Port Arthur)
Natural Gas Condesate

Date : 2/18/2009 **Manifest # :**

Client : Praxair (Motiva Enterprises) **Ticket :** 81702

Phone : 4099847908 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature Juan Soto **Signature**

Leave CES Yard :	~~3:50 PM~~	**Arrive At Destination**	
Arrive At Customer :	3:35 PM	**Begin Unloading :**	
Begin Loading :	3:45 PM	**Finish Unloading :**	
Finish Loading :	3:50 PM	**Leave Destination :**	
Leave Customer :	4:00 PM	**Arrive At CES Yard :**	5:50 PM

Customer PO #:

Total Hours: 4

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	108757
Tare Weight :		**Begining Odometer :**	108655
Net Weight :		**Total Miles :**	102

Driver : Soto, Andre **Tractor # :** 103 **Tote # :**

Signature : Andres Soto **Trailer # :** **Box # :**

Job Comments/Equipment :

PICK UP 1 EMPTY TOTE From
Praxair PORT ARTHUR

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000127

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
1/8/2009	53171

COPY

Bill To: Praxair
Attn: Daniel Davison
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per tote / per day			
31	10/1 - 10/31/08		6.00	186.00T
30	11/1 - 11/30/08		6.00	180.00T
31	12/1 - 12/31/08		6.00	186.00T
	1% Compliance Fee		5.98	5.98

We appreciate your business!

Subtotal	$557.98
Sales Tax (8.25%)	$45.54
Total	$603.52

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
9/22/2008	49834

Bill To: Praxair
Attn: Daniel Davison
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per tote / per day			
31	7/1 - 7/31/08		6.00	186.00T
31	8/1 - 8/31/08		6.00	186.00T
30	9/1 - 9/30/08		6.00	180.00T
	1% Compliance Fee		5.98	5.98

PAID
CK.NO. VISA
DATE 11-13-08

We appreciate your business!

Subtotal	$557.98
Sales Tax (8.25%)	$45.54
Total	$603.52

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
8/27/2008	49008

Bill To: Praxair
Attn: Daniel Davison
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per tote / per day			
30	4/1 - 4/30/08		6.00	180.00T
31	5/1 - 5/31/08		6.00	186.00T
30	6/1 - 6/30/08		6.00	180.00T

PAID
CK. NO. V154
DATE 11-13-08

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$546.00
Sales Tax (8.25%)	$45.05
Total	$591.05

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
3/29/2008	43876

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per tote / per day			
31	1/1 - 1/31/08		6.00	186.00T
29	2/1 - 2/29/08		6.00	174.00T
31	3/1 - 3/31/08		6.00	186.00T

We appreciate your business!

Subtotal	$546.00
Sales Tax (8.25%)	$45.05
Total	$591.05

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

PAID
~~OK.~~ NO. VISA
DATE 8-22-08

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
3/29/2008	43876

COPY

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per tote / per day			
31	1/1 - 1/31/08		6.00	186.00T
29	2/1 - 2/29/08		6.00	174.00T
31	3/1 - 3/31/08		6.00	186.00T

We appreciate your business!

Subtotal	$546.00
Sales Tax (8.25%)	$45.05
Total	$591.05

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
2/19/2008	42653

COPY

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 per day			
31	10/07 - 10/31/07		6.00	186.00T
30	11/07 - 11/30/07		6.00	180.00T
31	12/01 - 12/31/07		6.00	186.00T

PAID
CK.NO. VISA
DATE 3-19-08

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$552.00
Sales Tax (8.25%)	$45.54
Total	$597.54

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
2/19/2008	42651

COPY

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 each per day			
31	07/07 - 07/31/07		6.00	186.00T
31	08/07 - 08/31/07		6.00	186.00T
30	09/07 - 09/30/07		6.00	180.00T

PAID
OK-NO. VISA
DATE 3-14-08

We appreciate your business!

Subtotal	$552.00
Sales Tax (8.25%)	$45.54
Total	$597.54

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
2/19/2008	42650

COPY

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 each per day			
30	04/01 - 04/30/07		6.00	180.00T
31	05/01 - 05/31/07		6.00	186.00T
30	06/01 - 06/30/07		6.00	180.00T

PAID
~~CK.NO.~~ VISA
DATE 3-19-08

We appreciate your business!

Subtotal	$546.00
Sales Tax (8.25%)	$45.05
Total	$591.05

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
4/30/2007	34514

Bill To: Praxair
Attn: Daniel Davidson
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 each per day			
31	1/1 - 1/31/07		6.00	186.00T
28	2/1 - 2/28/07		6.00	168.00T
31	3/1 - 3/31/07		6.00	186.00T

PAID
CK.NO. VISA
DATE 5-8-07

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$540.00
Sales Tax (8.25%)	$44.55
Total	$584.55

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
2/6/2007	31966

Bill To: Praxair
Attn: Alfred Trahan
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 each per day			
31	10/1 - 10/31/06		6.00	186.00T
30	11/1 - 11/30/06		6.00	180.00T
31	12/1 - 12/31/06		6.00	186.00T

PAID
CK. NO. VISA
DATE 3-5-07

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$552.00
Sales Tax (8.25%)	$45.54
Total	$597.54

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
2/6/2007	31963

Bill To: Praxair
Attn: Alfred Trahan
PO Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
		Motiva

Quantity	Description	Manifest #	Rate	Amount
	Rental of 2 totes @ $3.00 each per day			
22	7/10 - 7/30/06		6.00	132.00T
31	8/1 - 8/31/06		6.00	186.00T
30	9/1 - 9/30/06		6.00	180.00T

PAID
CK.NO. 1115A
DATE 3-5-07

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$498.00
Sales Tax (8.25%)	$41.09
Total	$539.09

Visa
4715 6349 0001 4873
exp 06/07
Alfred G. Trahan

Quartly Payments

Send invoice
Will call for approval

break up in quaters

end of next months

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
2/11/2005	15776

COPY

Bill To: Praxair, Inc.
C/O Motiva Enterprises
P.O. Box 712
Port Arthur, TX 77641

P.O. No.	Terms	Project
	Net 30	Motiva Enterprises

Quantity	Description	Manifest #	Rate	Amount
	January 10, 2005			
1	Transportation services by CES for drums and totes		390.00	390.00
	8% Fuel Surcharge		31.20	31.20
4	Recycling of hydrocarbon and water mixture (natural gas condensate) @ $60.00 per drum.	BOL 8271	60.00	240.00

VISA Credit Card
2-16-05

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$661.20
Sales Tax (7.75%)	$0.00
Total	$661.20

CES Environmental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1480
Fax: (713) 676-1676

Bill Of Lading # : 8271

Original - Shipper Provided Short Form Straight Bill of Lading - Not Negotiable - Domestic

RECEIVED, subject to the contract in effect on the date of the issue of this Bill of Lading.

SHIPPED FROM :
Praxair (Motiva Enterprises)
2100 Houston Ave
Port Arthur , TX 77640

SHIP DATE : 1/10/2005

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods, it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to.

CONSIGNED TO :
CES Environmental Service, Inc
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Service, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.540 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

FOR CHEMICAL EMERGENCY CALL - Matt Bowman (713) 826-1329 or Sean Easton (713) 416-4160

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	4	220 gal	Drums		Recyclable hydrocarbon and water mixture (natural gas condesate)
	1				Empty Drum

Shipper : Praxair (Motiva Enterprises)
Per : [signature] **Signature :** [signature] **Date :** 1-10-05

Carrier : CES Environmental Service, Inc
Per : JOE PARDETTO **Signature :** [signature] **Date :** 1/10/05

Receiving Facility : CES Environmental Service, Inc
Per : LOREN THOMAS **Signature :** Loren Thomas **Date :**

White (Consignee Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000142

CES Enviromental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1460
Fax: (713) 676-1676

Transportation Work Ticket

Date : 1/10/2005 **Manifest # :** 8271

Client : Praxair (Motiva Enterprises) **Ticket :** 8271

Phone : 4099847906 **Consignee :** CES Environmental Service, Inc.

Shipper : CES Environmental Service, Inc.

Description : Natural Gas Condesate

Signature : _____ **Signature :** _____

Leave CES Yard : 7:30 AM **Arrive At Destination :** 9:30 AM

Arrive At Customer : _____ **Begin Unloading :** _____

Begin Loading : _____ **Finish Unloading :** _____

Finish Loading : _____ **Leave Receiving Facility :** 10:45 AM

Leave Customer : _____ **Arrive At CES Yard :** _____

Gross Weight : _____ **Ending Odometer :** 15264

Tare Weight : _____ **Begining Odometer :** 15669

Net Weight : _____ **Total Miles :** 95

Driver : Joe Carrillo **Tractor # :** 103 **Tote # :** _____

Signature : _____ **Trailer # :** _____ **Box # :** _____

Job Comments : P/U 4 Full Drums and One Empty, Del Two Totes S/S H

9027-7

6371-11

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1460
Fax: (713) 676-1676

Transportation Work Ticket

Date : 1/10/2005

Manifest # : 8271

Client : Praxair (Motiva Enterprises)

Ticket : 8271

Phone : 4099847906

Consignee : CES Environmental Service, Inc.

Shipper : CES Environmental Service, Inc.

Description : Natural Gas Condesate

Signature :

Signature :

Leave CES Yard : 7:30 AM

Arrive At Destination : 9:30 AM

Arrive At Customer :

Begin Unloading :

Begin Loading :

Finish Unloading :

Finish Loading :

Leave Receiving Facility : 10:45 AM

Leave Customer :

Arrive At CES Yard :

Gross Weight :

Ending Odometer : 15264

Tare Weight :

Begining Odometer : 15669

Net Weight :

Total Miles : 95

Driver : Joe Carrillo

Tractor # : 103

Tote # :

Signature : Joe Carrillo

Trailer # :

Box # :

Job Comments : Pick 4 Full Drum and One Empty, Dr Two Tote's S/S #
9087-7
6371-11

Pink (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IETA) Golden Rod (Customer)

EPAHO045000144

CES Enviromental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1460
Fax: (713) 676-1676

Driver : Joe Carrillo

15669

Service Request Form

Customer : Praxair (Motiva Enterprises)
Address : 2100 Houston Ave
City,State,Zip : Port Arthur, TX 77640
Contact : Alfred Trahan (409) 984 - 7906
Called In By : () -
CES Contact : Matthew Bowman (713) 826 - 1329

Date : 1/10/2005
Time : Be at Praxair by 10:00am

Job Description :

1) Deliver the following (get with Loren):
- 2 totes

2) Pickup and label the following:
~4 drums of Natural Gas Condesate

X GO INTO THE XYZ GATE ON HWY 82

CONTACT ALFRED TRAHAN (b) (6)

CONTROL ROOM (b) (6)

9027-2
6371-11

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

CES Environmental Credit Card Authorization Form

Card Type (circle one): MasterCard (VISA)

Card Number: (b) (6) [redacted]

Card Expiration Date: Month 06 Year 07

Amount: $ 661.20

Additional Information (i.e., manifest #, invoice#, etc.):
INV# 15776

Authorization Signature: _____

Name (Printed): Alfred Trahan

Date: 2-16-05

** CUSTOMER COPY **

SALES DRAFT

CES ENVIRONMENTAL SERV
4904 GRIGGS RD
HOUSTON, TX 77021
713-676-1460
4301348400393792

TID : 3484003937924301000 1
DATE : 02/16/05 05:21:31 PM WED
ACCT : ********** (b) (4) VI
BATCH : 49

TRAN # : 0074

AMOUNT : $661.20

THANK YOU.
PLEASE COME AGAIN.

APPROVAL: 029928
AVS CODE: N (NO MATCH)

CST CODE: 15776

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Fax Transmittal

Total Number of Pages (Including cover sheet): 4

Date: 2-17-05

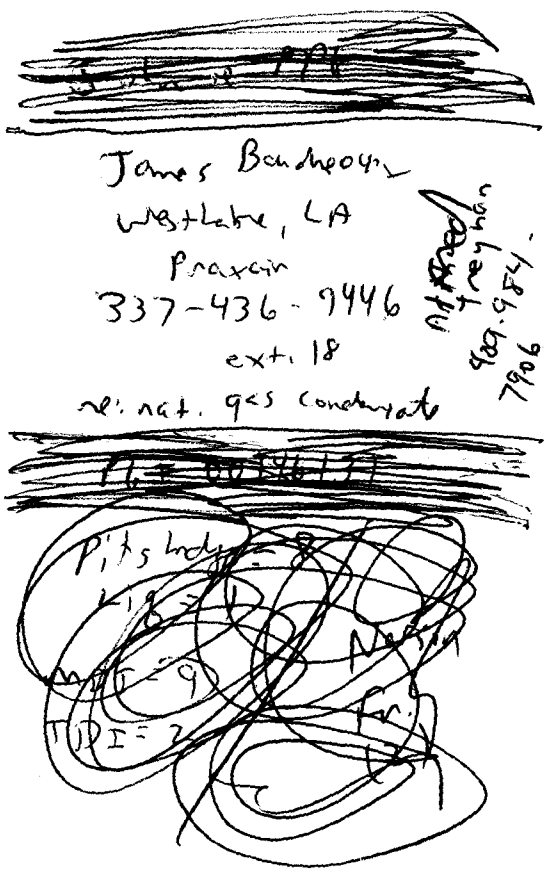
To: Alfred TRAHAN
Praxair, Inc.
409-984-7911

From: **Melba Stephens**
CES Environmental Services, Inc.

Notes: Copy of Invoice #15776 with proof of Payment.

Mailing Original today - 12-17-05

Thank You


James Bachman
Westlake, LA
Praxair
337-436-9446
ext. 18
re: nat. gas condensate

- 2 onsite
- 2 for swapping out

To Matt Bowman CES

From Alfred Trahan
Praxair, Inc.

We have 4 drums of natural gas condensate for disposal. Would also like to get ~~2~~ 4 totes to keep on site to put condensate in for disposal.
We are located at Motiva refinery in Port Arthur Tx. To get to the plant go to the XYZ gate on Hwy [redacted], The guard will call the plant and some one will escort you in.

Phone # control room 409-984-7901
Alfred Trahan 409-984-7906
409-984-7911 - FAX

Thanks
Alfrede Trahan

2100 Houston Ave.

Praxair (Praxair Tx City Sterling Chemical Plant) Natural gas Condensate

DC

2.5

EPAHO045000150

Customer Special Requests/Requirements

P.O. Required:	☑ Y	☐ N	Fuel Surcharge:	☐ Y	☑ N
4% City of Houston Fee:	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

Item	CES Cost	Customer Charge
12-2000 TRANS		325.00
16% FSC		52.00
Recycle-CES 32527 NAT. GAS Cond. 2dm		120.00
Empty Tote		N/C
DC 7½ - 12.43		497.00
PO#		
8/5 TRANS 1 load		325.00
24% FSC		78.00
Recycle-CES SOL 46296 - 1 tote		240.00
		643.00
INVOICE#		
1/25 TRANS- 1 load		325.00
24% FSC		78.00
Recycle-CES SOL 51235- natural gas cond - 1 hp		240.00
empty tote		N/C
INVOICE# 41235		643.00
2/4 TRANS 1 load		325.00
24% FSC		78.00
Recycle-CES SOL 51452 - Natural gas cond. 1 hp		240.00
INVOICE# 41236		643.00

CONFIDENTIAL

CES Environmental Services, Inc.

Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	Praxair Texas City - Sterling Chemical
Contact:	John Dobbs
Address:	PO Box 3777
	Texas City, TX 77592
Phone:	
Fax:	

Salesperson:	Dana Carter
Assigned:	X Unassigned:

Folder I.D.#	Praxair (Praxair Texas City Sterling Chemical Plant) Natural Gas Condensate

Job Contact:	John Dobbs
Phone:	409-943-9203
Fax:	

P.O Required:	Y:	X	N:		Fuel Surcharge:	Y:	N: X
City of Houston:	Y:		N:	X	4-hour Minimum:	Y:	N: X

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Transportation	CES			$325/load
Recycle Natural Gas Condensate-Drum	CES	1972		$60.00/drum
Recycle Natural Gas Condensate-Tote	CES	1972		$240.00/tote
Recycle Empty Tote	CES			N/C

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO045000152

PRAXAIR

PURCHASE ORDER NO. 30295894 US

Original Doc:	60004204 OB
Project/Business Unit	U8490333
Branch/Plant	U8490333

Purchase Order No. must appear on all Packages. Invoices and B/L pertaining to this Purchase Order

MAIL INVOICE TO:
Invoice Auditing Department
Praxair, Inc
P.O. Box 808, Tonawanda, NY 14151-0808

Ship To: Plant 849 Texas City TX
703 6th Street South
Texas City TX 77590

Supplier: CES Environmental
4904 Griggs Rd.
Houston TX 77021

PH: 713-676-1460 FX: 713-676-1676

MARK FOR USE ON: *OAS

ATTN: SUPPLIER INVOICE AMOUNT SHALL NOT EXCEED TOTAL VALUE OF PURCHASE ORDER AS STATED BELOW.
BUYER HEREBY ORDERS UPON THE TERMS HEREIN CONTAINED, INCLUDING THE ADDITIONAL TERMS ON THE REVERSE SIDE HEREOF

Order Date: 2/13/2008	Terms of Sale: .	PH: N/A	Currency Code: USD	
Required Ship Date: 2/13/2008	Refer Commercial Question to: Willis, Keyonna	FX: N/A	Payments Terms: Net 60 Days	
Order Taken By:	Delivery Instructions:		Ship Via:	

Line Num	Praxair Internal Item Number / Description	Quantity Ordered	Tran UoM	Purc UoM	Unit Price	Extended Price	Promised Ship Date	Tax
1	PX Item Number 10023922 Services - Environmental *Type:Waste Disposal *Description:Non-Hazardous		EA	EA	.0000	643.00	2/13/2008	

Recycling of Natural Gas condensate(1) Tote Per inv# 42135

PRAXAIR

PURCHASE ORDER NO. 30295894 US

Original Doc:	60004204 OB
Project/Business Unit	U8490333
Branch/Plant	U8490333

Purchase Order No. must appear on all Packages. Invoices and B/L pertaining to this Purchase Order

MAIL INVOICE TO:
Invoice Auditing Department
Praxair, Inc
P.O. Box 808, Tonawanda, NY 14151-0808

Ship To: Plant 849 Texas City TX
703 6th Street South
Texas City TX 77590

Supplier: CES Environmental
4904 Griggs Rd.
Houston TX 77021

PH: 713-676-1460 FX: 713-676-1676

ATTN: SUPPLIER INVOICE AMOUNT SHALL NOT EXCEED TOTAL VALUE OF PURCHASE ORDER AS STATED BELOW.
BUYER HEREBY ORDERS UPON THE TERMS HEREIN CONTAINED, INCLUDING THE ADDITIONAL TERMS ON THE REVERSE SIDE HEREOF

Order Date: 2/13/2008	Terms of Sale:		PH: N/A FX: N/A	Currency Code: USD
Required Ship Date: 2/13/2008	Refer Commercial Question to: Willis, Keyonna			Payments Terms: Net 60 Days
Order Taken By:	Delivery Instructions:			Ship Via:

Tax Rate	Sales Tax	.00	**Total Order**	**643.00**

Tax Information
Texas: Do Not Bill Taxes, Texas Direct Pay Permit No.
1-06-1249050-7
West Virginia: Do Not Bill Taxes, West Virginia Direct Pay Permit No.
91-1-046392

Acknowledged and Accepted

Definite Shipping Date Shipment will be made from

Signed for Seller Date

Purchasing Agent:

Please Sign and Return Promptly to: THE PURCHASING DEPT AT FACSIMILE NUMBER 716-879-2344

ACCEPTANCE; TITLE AND RISK OF LOSS: Except as otherwise expressly provided in this order, acceptance of any of the goods and or services shall not occur until Buyer has been given a reasonable opportunity to inspect and test such goods and services after arrival at destination or after completion of installation or completion of the services, if Seller is obligated to install the goods or perform any services. Buyer may reject any non-conformance or defective goods F.O.B. the location at which Buyer discovers the non-conformance or defect in the goods or services, if Seller fails to promptly correct said non-conformance or defect after being given the opportunity to do so. Seller shall pay the cost of inspecting and testing of goods rejected and all transportation charges thereon. Except as otherwise mutually agreed in writing, delivery will occur, and title and risk of loss will transfer, when: (i) with respect to goods not incorporated into services, goods are accepted and are placed in operation or into Buyer's storage facility; and (ii) with respect to product incorporated into services, the completed services have been accepted by Buyer.

EXCESS QUANTITY; TERMINATION; CHANGES: (a) Goods shipped in excess of quantity designated in this order may be returned at Seller's expense. Buyer shall have no obligation to Seller to purchase any minimum amount of goods or services; (b) Buyer may, by written notice to Seller, terminate its purchase of any quantity of products or services (i) for convenience, (ii) if Seller fails to complete or deliver any part thereof when required, and (iii) if Seller is in breach of any material term of this order, immediately prior to the delivery thereof. If terminating for convenience, Buyer will pay Seller termination charges equal to the cost of materials and labor incurred (and not otherwise mitigated) on ordered products or services prior to the date of Buyer's termination notice, provided Seller takes all steps reasonably necessary to mitigate such costs. Seller will notify Buyer of the actual termination charges within thirty (30) days after termination. If termination is due to a failure of completion or delivery or breach of any material term of the order, no termination charges will apply and Buyer may procure substitute products or services and Seller will be liable to Buyer for any excess costs incurred by Buyer.

TRANSPORTATION CHARGES: Except as otherwise mutually agreed to in writing, (a) where transportation charges are separately charged to Buyer by Seller, such charges shall in no event exceed the lowest legal freight charges via the carrier or routing specified herein, in effect on the date of shipment, and (b) where transportation charges are allowed to Buyer by Seller, such allowance shall not be less than the actual freight charges paid by Buyer or, where Buyer performs the transportation, such allowance shall be in an amount equal to the freight charges which would have been assessed for a like movement via common carrier.

DELIVERY: The goods shall be properly packaged for shipment. Each package shall be numbered and labeled with Buyer's order number, stock number, contents, and weight, and shall contain an itemized packing slip. No charges will be allowed for packing, crating, freight express or cartage unless specified on the face hereof. Seller will promptly notify Buyer in writing if Seller anticipates difficulty in complying with any required delivery date. Time is of the essence hereof. If any goods are not delivered within the time specified in this order, or within a reasonable time if no time is specified, Buyer may either (i) refuse to accept such goods and terminate this order, or (ii) cause Seller to ship the goods by the most expeditious means of transportation whereupon any additional transportation charges in excess of those which would apply for the usual means of transportation shall be for the account of Seller, or (iii) Buyer may procure replacement products or services and Seller will be responsible for all costs incurred by Buyer as a result of such late deliveries.

INVOICES: Unless otherwise requested by Buyer, invoices shall (a) be rendered separately for each delivery; (b) cover not more than one order (c) be rendered with order number noted thereon.

PRICING; PAYMENT: (a) Unless otherwise provided elsewhere in the order, prices are: (i) stated in U.S. dollars; (ii) not subject to increase for the duration of the order; and (iii) DDP (INCOTERMS 2000) at a facility specified by Buyer. No extra charges of any kind will be allowed unless specifically agreed to by Buyer in writing; (b) Unless prohibited by law, Seller will separately indicate on its invoices any taxes imposed on the sale or delivery of products or services. Any claim for payment for any goods or services ordered pursuant to this order must be made within one year of when such goods or services are delivered to Buyer, otherwise such claim shall be waived; (c) Unless otherwise provided elsewhere in the order, terms of payment shall be net 60 days from the later of (i) the date of Buyer's receipt of a correctly stated invoice; or (ii) receipt of goods or services, as applicable; (d) Seller warrants that it is selling at the lowest prices and upon the most favorable terms (including, without limitation, volume, quality and/or payment terms) that it offers any buyer for goods or services of the same or similar quality to that provided for in this order; (e) Buyer will be responsible for all sales, use, and similar taxes (excluding taxes based on or measured by the net income, net worth or gross receipts of Seller) imposed as a result of the sale of products or services. With notice to Seller, Buyer may pay such taxes directly to the taxing authority where allowed by law. Seller shall remit all taxes paid by Buyer to the appropriate taxing authority. Upon Buyer's request, Seller will provide written evidence that Seller is properly licensed to collect the taxes paid by Buyer.

WARRANTY: (a) Seller warrants that the goods shall (i) conform to the description and specifications contained in or referred to in this order; (ii) be free from all defects in material, workmanship and all defects due to design; (iii) will comply with the requirements of this order; and (iv) be of merchantable quality and fit and suitable for the purpose intended by Buyer; (b) Seller further represents and warrants that (i) the goods and all parts thereof will consist of new (not used or recycled) material, and (ii) Buyer shall acquire good and marketable title to the goods, free and clear of all liens, claims and encumbrances; (c) The above warranties will be in effect for a period of the longer of (1) twelve (12) months from the date such goods are used or placed in operation or (2) the standard warranty period provided by Seller for such goods. If any products fail to conform to the above warranties, Seller, at Buyer's option, will: (i) with respect to goods and products, replace or repair the nonconforming products; (ii) refund the purchase price of the nonconforming products and any related costs incurred by Buyer. Any replacement products also will be subject to the above warranties and warranty period. The warranty period for repaired products will be extended for the period of the original warranty period as set forth above. If Seller does not replace or repair, as applicable, within a reasonable time after notice, Buyer may do so at Seller's expense.

PATENTS: Except as hereinafter limited, Seller shall defend, indemnify and hold harmless Buyer from and against claims, damages, judgments, expenses and loss arising from infringement or alleged infringement of any patent by any of the goods delivered hereunder, and Seller shall defend or settle at its own expense any suit or proceeding brought against Buyer for such infringement.

INSURANCE: Seller shall, at its expense, procure and maintain Workmen's Compensation insurance to the extent required by law and Seller's Bodily Injury Liability and Property Damage Liability insurance (including Contractual Liability, covering the indemnities set forth herein) in amounts approved by Buyer. Seller shall furnish to Buyer written certificates establishing that the above insurance has been procured and is being maintained, which certificates shall provide that a written notice of cancellation shall be given to Buyer at least thirty (30) days prior to the effective date of such cancellation.

INDEMNITY: Seller shall defend, indemnify, and hold harmless Buyer from and against any and all claims, losses, damages, expenses and liabilities, including attorneys' fees (collectively "Claims"), arising from or in connection with Seller's performance pursuant to this order, including without limitation any Claims arising from the failure of the goods to conform to specifications, or from personal injuries or property damage proximately caused by defects in design or manufacture of the goods or by Seller's failure to provide adequate warnings or instructions with respect to the goods. Seller shall also defend, indemnify and hold harmless Buyer, any party on whose property the goods are installed, and their employees, agents, contractors and subcontractors from and against all Claims for bodily injury, sickness and/or disease, including death at any time sustained by any employee of Seller, or of a contractor or subcontractor of Seller, while in, on or about the property of Buyer or the site of installation of the goods, if or where such injury, sickness, disease and/or death was in any way connected with (i) any work under the WARRANTY paragraph of this order, (ii) any services performed by Seller for Buyer with respect to this order or with respect to any of the goods sold to Seller pursuant to this order or otherwise, (iii) any other terms of this order or (iv) the performance of or failure to perform said work or services, unless such injury, sickness, disease and/or death is the result of the sole negligence of Buyer, contractor or subcontractor of Buyer, or any of Buyer's employees or agents.

FORCE MAJEURE: Neither party hereto shall be liable to the other for default or delay in performing its obligations hereunder if caused by an occurrence beyond the reasonable control of the party so defaulting or delaying. If a force majeure event compels Seller to allocate deliveries of products or services, Seller will make such allocation in a manner that ensures Buyer at least the same proportion of the Seller's total output as was purchased by Buyer prior to the force majeure. Seller will use best efforts to source products or other items, at Seller's expense, from its own or its affiliates' global operations or the market in order to meet Buyer's required delivery dates.

DRAWINGS AND OTHER ITEMS: Unless otherwise expressly provided in this order, all drawings, blueprints, dies, patterns, tools, printing plates and other items used in connection with the manufacture of the goods hereunder, which are prepared or constructed by Seller pursuant to the terms of this order, shall be the property of Buyer, and upon completion of deliveries of the goods hereunder, or upon termination of this order, shall be delivered to Buyer.

COMPLIANCE WITH LAWS AND GOVERNMENT CONTRACTIONG REGUALTIONS: Seller shall comply with all laws, ordinances, permits and governmental rules and regulations applicable to Seller and the goods and services provided by Seller, including but not limited to those laws, ordinances, rules and regulations with respect to or under the Occupational Safety Health Act of 1970, or any other statute, rule, or regulation of any governmental authority or agency concerning safety, health, welfare and conduct of employees. Seller hereby agrees that any services will be provided in compliance with the Fair Labor Standards Act, as amended, and agrees to so certify on its invoices. Seller shall also comply with all applicable equal employment opportunity (EEO), affirmative action (AA), and employee notice laws and requirements including but not limited to those set forth in 41 C.F.R. Part 60-1.4(a) (EEO/AA for women and minorities), 41 C.F.R. Part 60-250.5(a) (EEO/AA for covered veterans), 41 C.F.R. Part 60-741.5(a) (EEO/AA for individuals with disabilities), and 29 C.F.R. Part 470 (employee notice clause requirements). Seller will comply with Federal Acquisition Regulations ("FARS") 52-219-8, "Utilization of Small Business Concerns" and FAR 52-219-9, "Small Business Subcontracting Plan." Without limiting the foregoing, Seller shall (a) adopt a subcontracting plan that complies with FAR 52-219-9 and shall provide Buyer with a copy of such plan and a copy of any amendment or modification thereof; and (b) track and maintain spending data regarding its Small Business Concern(as such term is defined in FAR 52-219-8) spending as required by FAR 52-219-9 and shall report the same to the appropriate U.S. federal agency, as and when required and to Praxair in a form as may be designated by Praxair. The foregoing requirements to comply with FARS shall not apply if Seller is a Small Business Concern. Seller shall comply with and shall indemnify and hold harmless Buyer from and against all damages or penalties arising out of Seller's failure to comply with any laws, ordinances, and government rules, regulations and orders applicable to this order.

ASSIGNMENT: Any assignment of this order without the prior written consent of Buyer shall be void.

NON-WAIVER: No waiver by either party of any breach of any of the terms of this order to be performed by the other party shall be construed as a waiver of any subsequent breach, whether of the same or of any other term of this order.

REMEDIES AND SET-OFF: The rights and remedies of Buyer set forth in this order are not exclusive and are in addition to all other rights and remedies of Buyer. Buyer may set off any amount owing at any time from Seller to Buyer or any of its affiliated companies against any amount payable at any time by Buyer to Seller under this order.

GOVERNING LAW AND JURISDICTION: The validity, interpretation, and performance of this order shall be governed by and construed and enforced in accordance with the law of the State of Connecticut without giving effect to the principles of conflicts of law. This order shall not be governed by the U.N. Convention on Contracts for the International Sale of Goods. The Buyer and Seller consent and submit exclusively to the jurisdiction of the state or federal courts of the State of Connecticut.

NO GRATUITY; FCPA: Neither party will offer or give any gratuity to induce any person or entity to enter into, execute or perform any term or condition of this order or any other agreement between the parties.

SECRECY: As used in this order, "Confidential Information" shall mean and include all of the information, know-how and data, whether technical or non-technical, which is in any way, heretofore or hereafter, disclosed to Seller by or on behalf of Buyer in the course of, or in connection with this order or in connection with proposals or negotiations for the order. Except as provided below and except as otherwise agreed to in writing by Buyer, Seller shall use its best efforts to keep confidential and to prevent the disclosure of Confidential Information except on a confidential basis, to such of its employees and subcontractors who need such Confidential Information in order to enable Seller to properly perform under this order and who sign secrecy agreements obligating them at least to the same extent as Seller is obligated under this provision, and Seller shall not use or permit to be used Confidential Information for anyone other than Buyer.

NOTICES: All notices will be in writing and deemed given on the date the notice is hand delivered, mailed or electronically transmitted to the receiving party at such party's address set forth on the face of this order. Either party may change its address upon notice to the other party.

PUBLICITY: No information relative to this order shall be released by Seller and Seller shall not use the name, tradename, trademarks, service marks or logos of Buyer, either before or after completion of the order, for publication through newspapers, radio, television or other media, or for advertising purposes without the prior written consent of Buyer.

MISCELLANEOUS: If this order constitutes an offer, Seller's acceptance of this order is hereby expressly limited to the terms of this order and shipment of any part of the goods covered hereunder shall be deemed to constitute such acceptance. If this order constitutes an acceptance of an offer, such acceptance is expressly made conditional on Seller's assent to the terms of this order, and shipment of any part of the goods covered hereunder shall be deemed to constitute such assent. This order constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof, and there are no oral understandings, representations or warranties affecting it. Neither course of performance nor course of dealing nor usage of trade shall be used to interpret, construe, qualify, explain or supplement any of the terms of this order. This order shall not be amended except in writing signed by the parties hereto.

PRAXAIR, INC - CARRIER ROUTING INSTRUCTION

NOTE: PREPAID FREIGHT IS NOT AUTHORIZED AND WILL NOT BE REIMBURSED. ANY ADDITIONAL FREIGHT CHARGES RESULTING FROM SELLER'S FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL BE DEDUCTED BY BUYER FROM SELLER'S INVOICE.

If 'Ship To' Address Is Not Stated, Call Praxair For Details. See 'Refer Commercial Questions To' Box On Purchase Order. In The Absence of Written Carrier Routing Instructions, The Following Instructions Must Be Used:

SMALL PARCEL: Base the carrier choice on the information below for shipments within these size and weight limits (0-150 lbs. and combined length and girth up to 130 inches).

Within the USA or cross border with Canada: Use **UPS** with 'Third Party Billing' to Praxair's account number 81W302. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number. The list below shows the available services in order of preference. **Use air service only when absolutely necessary**.

1. Ground
2. 3 Day Select
3. 2nd Day Air
4. 2nd Day Air AM
5. Next Day Air Saver
6. Next Day Air

IMPORTS TO THE USA: Use **DHL Express** with 'Third Party Billing' to Praxair's account number 963105996. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number.

EXPORTS FROM THE USA: Use **DHL Express** with 'Third Party Billing' to Praxair's account number 754730626. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number.

AIR FREIGHT: Use the following Praxair, Inc. carriers (listed in order of preference) for shipments requiring air freight transportation that **can not** travel via **SMALL PARCEL** service. Use 'Third Party Billing' to Praxair's account number. Do not declare a value or purchase additional insurance. Show reference to Buyer's Purchase Order Number. **Use air service only when absolutely necessary**.

1. UPS Supply Chain Services (formerly Menlo World Wide); must use for **hazardous** shipments; Praxair account number: 002123792; Phone: 800-443-6379.
2. Seko Air Freight-(Formerly USF Worldwide); Praxair account number: Prax14150; Phone: 800-344-7356.

LESS THAN TRUCKLOAD (LTL): Use for shipments weighing less than 10,000 lbs requiring a closed van. Select the correct carrier based on the Regions defined below for Origin and Destination. **NOTE**: Use **UPS Hundred Weight** rather than **LTL** for multiple piece shipments with total weight between 150 and 499 lbs meeting UPS size and packaging limits (see page 2 for mileage limits and restrictions). Billing for all shipments is 'Collect'.

ALL Zone A hazadous poison inhalation shipments must be transported via ABF Freight; Phone: 800-344-7356

Origin & Destination Regions
Region 1 = CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, NE, NH, NJ, NY, OH, PA, RI, VT, WI, WV
Region 2 = AL, AR, DC, FL, GA, LA, MS, NC, OK, SC, TN, TX, VA
Region 3 = CO, NM, OR, UT, WA
Region 4 = Canada
Region 5 = ID, ND, MT, SD, WY
Region 6 = AZ, CA, NV

Con-Way Freight: 800-755-2728
All shipments within Region 1.
All shipment within Region 2.
All shipments with origin or destination in Region 5 (UPS Freight does not directly service Region 5).
All shipments weighing 400 lbs or less traveling between Region 1 and Region 2 (or 2 and 1).
All shipments weighing 300 lbs or less traveling between Region 2 and Region 3 (or 3 and 2).
All shipments weighing 300 lbs or less traveling between Region 2 and Region 6 (or 6 and 2).
All shipments between Region 4 and Region 1 (or 1 and 4).

UPS Freight (formerly Overnite): 800-333-7400
All shipments within Region 3.
Shipments weighing more than 400 lbs traveling between Region 1 and Region 2 (or 2 and 1).
All shipments weighing more than 300 lbs traveling between Region 2 and Region 3 (or 3 and 2).
All shipments weighing more than 300 lbs traveling between Region 2 and Region 6 (or 6 and 2).
All shipments between Region 1 and Region 3 (or 3 and 1).
All shipments between Region 1 and Region 6 (or 6 and 1).
All shipments between Region 3 and Region 6 (or 6 and 3).
All shipments between Region 4 and Region 2 (or 2 and 4).
All shipments between Region 4 and Region 3 (or 3 and 4).
All shipments between Region 4 and Region 6 (or 6 and 4).

USF Reddaway: 800-688-1118
All shipments within Region 6.

UPS Hundred Weight
Shipments must meet the following criteria to qualify for this service. If shipment does not qualify, ship via **LTL**.

No single package weighs more than 150 lb.
All packages destined for the same consignee.
All freight must be in cardboard boxes with no pallets.
No hazardous materials allowed.
Max single package length = 108 inches; max single package size combining length and girth = 130 inches.
Service is not available to international destinations (Canada, Mexico, etc.).

If shipment qualifies, this information defines the mileage limits for using this service based on total shipment weight. If the shipment mileage exceeds these limits, ship via **LTL**.

150 to 200 lbs - up to 1200 miles or UPS Zones 2, 3, 4 & 5
201 to 300 lbs - up to 725 miles or UPS Zones 2, 3, & 4
301 to 350 lbs - up to 725 miles or UPS Zones 2, 3, & 4
351 to 375 lbs - up to 725 miles or UPS Zones 2, 3, & 4
376 to 425 lbs - up to 400 miles or UPS Zones 2 & 3
426 to 450 lbs - up to 400 miles or UPS Zones 2 & 3
451 to 499 lbs - up to 225 miles or UPS Zone 2

For partial truckload or volume shipments (10,000 lbs +) eligible for dry van transportation, refer to **Other** instructions as below. Shipments requiring flatbed services, please refer to **FLATBED** instructions.

OTHER: For Partial Truckload(10,000 lbs+), Truckload Van, Air Ride or safety handling issues: contact Mark Niederpruem at 716-879-2181 or via email Mark_Niederpruem@Praxair.com.

FLATBED: **At Least Five-Seven (5-7) Days Prior To Ship Date** , Contact Plant Site Logistics at 800-733-2459 x383 with the following information:

1. Shipping Weight And Overall Dimensions
2. Praxair Purchase Order Number
3. Pick Up/Delivery Address with Ready Date

The Following Must Be Included On The Bill Of Lading Provided To The Carrier:

1. Reference Praxair's Purchase Order Number
2. Third Party Billing Address, PO Box 808, Tonawanda NY 14151-0808

SURFACE EXPEDITE: Use the following Praxair, Inc. carriers (listed in order of preference) for shipments requiring day definite delivery and/or shortest transit time. **Use this service only when absolutely necessary**.

1. Yellow Exact Express; day definite delivery via shared or dedicated truck; Phone: 800-610-6500.
2. FedEx Custom Critical; day definite delivery via dedicated truck; Phone: 800-762-3787.

IMPORT/EXPORT: DHL Danzas is Praxair's global service provider for *International Freight Forwarding, and sole import broker* for goods entering the United States. Contact Cynthia Creed at 716-879-3123 or via email cynthia_creed@praxair.com

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
1/31/2008	42135

COPY

Bill To: Praxair
Attn: Accounts Payable
P.O. Box 3777
Texas City, TX 77590

P.O. No.	Terms	Project
30295894	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	01/25/08			
1	Transportation services by CES @ $325.00 per load		325.00	325.00
	24% Fuel Surcharge		78.00	78.00
1	Recycling of hydrocarbon and water mixture (natural gas condesate) @ $240.00 per tote	BOL 57235	240.00	240.00
	CES job #57235			

We appreciate your business!

Subtotal	$643.00
Sales Tax (8.25%)	$0.00
Total	$643.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

Bill Of Lading # : 57235

Folder ID	Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Natural Gas Condensate/Empty Totes

Original - Shipper Provided Short Form Straight Bill of Lading - Not Negotiable - Domestic

SHIPPED FROM : ces profile #

Praxair (Texas City-Sterling Chemical Plant) (1a) 1972
703 6th St. South (1b)
Texas City TX 77590 (1c)
(409) 943-9296 (1d)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods. It is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any, said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

Prepayment. Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to.

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd
Houston , TX 77021

CARRIER :
CES Environmental Service, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 29 CFR 393.64 implementing the Intermodal Safe Container Act of 1982 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TP	50	G	Recyclable hydrocarbon and water mixture (natural gas condensate)

Shipper : Praxair (Texas City-Sterling Chemical Plant)
Per : [illegible] Signature : [signature] Date : 1-27-08

Carrier CES Environmental Service, Inc.
Per : [illegible] Signature : [signature] Date : 01-23-08

Receiving Facility CES Environmental Services, Inc.
Per : [illegible] Signature : [signature] Date : 1-23-08

Pink (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator Lot Copy)

EPAHO045000158

CES Environmental Services, Inc.

Bill Of Lading # : 57236

Folder ID	Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant) Natural Gas Condensate/Empty Totes

Original - Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :	ces profile #
Praxair (Texas City-Sterling Chemical Plant)	11a)
703 6th St. South	11b)
Texas City, TX 77590	11c)
(409) 943-9296	11d)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property, under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to all, said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment. Charges to be billed to shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to shipper or the "Billed to" party without prior written consent of shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :	CARRIER :
Praxair (Texas City-Sterling Chemical Plant)	CES Environmental Service, Inc.
703 6th St. South	4904 Griggs Rd.
Texas City, TX 77590	Houston, TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 45 CFR 392.9(a) implementing the Intermodal Safe Container Act of 1982 is set forth on the face of this bill of lading. The shipper name herein is the lendering party.

Hwy.	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No.	1	TB			SS tote
					Deliver EMPTY TOTE

Shipper : Praxair (Texas City-Sterling Chemical Plant)

Per : John Dobbs Signature : [signature] Date : 1-23-08

Carrier CES Environmental Service, Inc.

Per : Andrew Sorg Signature : Andrew Sorg Date : 01-23-08

Receiving Facility Praxair (Texas City-Sterling Chemical Plant)

Per : Signature : Date :

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator Net Copy)

EPAHO045000159

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel: (713) 678-4960
Fax: (713) 678-4976

Transportation Work Ticket

Folder ID : Praxair Inc (Praxair Inc - Texas City Sterling Chemical Plant)
Natural Gas Condesate/Empty Totes

Date : 1/23/2008

Manifest # :

Client : Praxair (Texas City-Sterling Chemical Plant)

Ticket : 57235

Phone : 4099439296

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Service, Inc.

Signature

Signature

Leave CES Yard :	7:00 AM	Arrive At Destination	
Arrive At Customer :	7:53 AM	Begin Unloading :	
Begin Loading :	8:00 AM	Finish Unloading :	
Finish Loading :	8:10 AM	Leave Destination :	
Leave Customer :	8:15 AM	Arrive At CES Yard :	9:10 AM

Customer PO #:

Total Hours:

CES Unload. ☐

Gross Weight :		Ending Odometer :	215085
Tare Weight :		Begining Odometer :	215002
Net Weight :		Total Miles :	83

Driver : Soto, Andre

Tractor # : 101

Tote # :

Signature : Andres Soto

Trailer # :

Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / EPA) Golden Rod (Customer)

EPAHO045000160

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
12/29/2006	30828

COPY

Bill To: Praxair
Attn: Accounts Payable
703 6th St. South
Texas City, TX 77590

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	12/20/06			
1	Transportation services by CES @ $325.00 per load		325.00	325.00
	16% Fuel Surcharge		52.00	52.00
2	Recycling of hydrocarbon and water mixture (natural gas condnsate) @ $60.00 per gallon	BOL 32527	60.00	120.00
	CES job #32527			

PAID
CK.NO. VISA
DATE 1-15-07

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$497.00
Sales Tax (8.25%)	$0.00
Total	$497.00

CES Environmental Services, Inc.

Bill Of Lading # : 32527

Folder ID :	Natural Gas Condesate/Empty Totes

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Praxair (Texas City-Sterling Chemical Plant)
703 6th St. South
Texas City , TX 77590

ces profile #
11a) 1972
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Service, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	2	DM	600	P	Recyclable hydrocarbon and water mixture (natural gas condesate)
No	1			Each	Empty Totes

Shipper : Praxair (Texas City-Sterling Chemical Plant)
Per : John Dobbs **Signature :** [signature] **Date :** 12/20/06

Carrier CES Environmental Service, Inc.
Per : Robert Henry **Signature :** [signature] **Date :** 12/20/06

Receiving Facility CES Environmental Services, Inc.
Per : ANTHONY COSTA **Signature :** [signature] **Date :** 12/20/06

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Natural Gas Condesate/Empty Totes

Date : 12/20/2006 **Manifest # :**

Client : Praxair (Texas City-Sterling Chemical Plant) **Ticket :** 32527

Phone : 4099439296 **Consignee :** CES Environmental Services, Inc.

Shipper : CES Environmental Service, Inc.

Signature **Signature**

Leave CES Yard :	7:00	**Arrive At Destination**	
Arrive At Customer :	9:26	**Begin Unloading :**	
Begin Loading :	9:25	**Finish Unloading :**	
Finish Loading :	9:30	**Leave Destination :**	
Leave Customer :	9:40	**Arrive At CES Yard :**	11:20

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	51645
Tare Weight :		**Begining Odometer :**	51545
Net Weight :		**Total Miles :**	100

Driver : Henry, Robert **Tractor # :** 107 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000163

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **12/19/2006**

Dear **Rocky McWhorter**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 1972

Generator: Praxair (Texas City-Sterling Chemical Plant)
Address: 703 6th St. South
Texas City, TX 77590

Waste Information

Name of Waste: Natural gas condensate wastewater
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
Condensate water from a process which compresses natural gas. The gas is compressed a condensate from the air form on copper tubes.
Color: na **Odor:** na **pH:** 3-11
Physical State:
Incompatibilities: na
Safety Related Data/Special Handling:
Standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

#1972 DC

SECTION 1: Generator Information

Company:	Praxair (Texas City - Sterling Chemical Plant)		
Address:	703 6th Street South		
City, State, Zip:	Texas City, TX 77590		
Contact:	Jon Dobbs	**Title:**	Plant Engineer
Phone No:	409-943-9203	**Fax No:**	
24/hr Phone:			
U.S. EPA I.D. No:	N/A		
State I.D.	N/A	**SIC Code:**	N/A

SECTION 2: Billing Information – ☐ Same as Above

Company:	Praxair Inc		
Address:	PO Box 3777		
City, State, Zip:	Texas City, TX 77592		
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Waste

Name of Waste: Natural Gas Condensate wastewater
Detailed Description of Process Generating Waste: condensate water from a process which compresses natural gas. The gas is compressed and condensate from the air form on copper tubes.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: NA **Odor:** NA

Specific Gravity (water=1): 09-1 **Density:** 8 lbs/gal

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☒	**Drum**	☒	**Tote**	☐ **Truck**	☐	**Other (explain)**
Container Size:		55 gal		300 gal	____		____

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**
Number of Units (containers): 5 **Other:** ____
Texas State Waste Code No: Product
Proper U.S. DOT Shipping Name: Non-RCRA/Non-DOT Regulated Material
Class: NA **UN/NA:** NA **PG:** NA **RQ:** NA

Flash Point >140	**pH** 3-11	**Reactive Sulfides** <20mg/l	**Reactive Cyanides** <20mg/l	**Solids** 0-1%
Oil&Grease >1500mg/l	**TOC** NAmg/l	**Zinc** NAmg/l	**Copper** NAmg/l	**Nickel** NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Natural Gas Condensate	90-98	%
Water	0-2	%
Dirt/Sand/Silt	0-1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
NA

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
NA

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:	TCLP Metals are below regulatory limits
TCLP Volatiles:	TCLP Volatiles are below regulatory limits
TCLP Semi-Volatiles:	TCLP Semi-Volatiles are below regulatory limits
Reactivity:	No reactive sulfides or cyanides are introduced into the process
Corrosivity:	pH is neutral
Ignitability:	No ignitable materials are in the process

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** _____

Printed Name/Title: No signature needed

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert [illegible]

Date: 12-19-06 Approved Rejected

Approval Number: 1972

Additional Information: _____

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO045000167

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO045000168

Precision Flange (Hardy) coolant/oil

GB

Direct

2.52

EPAHO045000169

CES Environmental Services, Inc.
Profit/Loss Sheet

Billing Information: (PFAM)	
Name:	Precision Flange & Machine
Contact:	Eddie Shields
Address:	13123 W. Hardy
	H, TX 77060
Phone:	281-447-8077
Fax:	281-447-8422

Salesperson: Brauckman

Job Contact:	Eddie Shields
Phone:	
Fax:	

A/P Contact:	Mike Allan
Phone:	
Fax:	

P.O. Required: Y (N)
4% City of Houston Fee: Y (N)
Fuel Surcharge: (Y) N
4-hr Minimum: Y N

Job Estimate

Item	Vendor	CES Cost	Customer Charge
Testing (TOX)	Mercury	60.00	110.00
Recycle oil/coolant (Includes Replacement Bulk	CES		150.00/Tote
			30¢/Gal
Trans.	CES		~~67.00~~ 70.00
FSC			~~14%~~ STD

Customer Special Requests/Requirements

UPDATE FOLDERS IMMEDIATELY WITH ANY CHANGES

Confidential

EPAHO045000170

Customer Special Requests/Requirements

Please e-mail invoices for payment see front flap.

P.O. Required:	☐ Y ☑ N	Fuel Surcharge:	☑ Y ☐ N
4% City of Houston Fee:	☐ Y ☑ N	4-hr Minimum:	☐ Y ☐ N

Job Estimate

Item	CES Cost	Customer Charge
2007		
1/5/09		
Trans - #105 4 hr		280.00
12.5% energy		35.00
Recycle - CES BOL 78758 1000		300.00
.60% energy	1.80	1.80
1% Compliance	6.17	6.17
	7.97	622.97
#53187 15.38		
	615.00	
6/23/09		
TRANS - CES 2.5 HR		175.00
9.5% FSC		16.63
Recycle-CES BOL 88058 O/W 900 g.		270.00
1% compliance	4.62	4.62
	4.62	466.25
	461.63	

Customer Special Requests/Requirements

P.O. Required:	☐ Y	■ N	Fuel Surcharge:	■ Y	☐ N
4% City of Houston Fee:	☐ Y	■ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item	CES Cost	Customer Charge
	Analyticals - Environ	60.00	110.00
			50.00 → 34%
4-27	TRANS- 104 4.75 hr		318.25
	14% Fuel		44.56
[redacted]	Recycle-CES BOL 20714 O/W 1200G		360.00
	GD 2.5 18.07		722.81
12-27	TRANS 4 HR		268.00
	16% FSC		42.88
DSP	Recycle-CES BOL 32637 O/W 650g.		250.00 min
	GD 2.5 14.02		560.88
~~4-4~~	~~Trans - (customer return) 4hr min~~		~~280.00~~
	~~31.5%~~		~~88.20~~
			~~368.20~~
4/7	TRANS - 3.25 hrs		227.50
	31.5% FSC		71.67
DSP	Recycle-CES BOL 61804- 750		250.00 min
	Invoice #44211 13.73		549.17

PRECISION FLANGE & MACHINE, INC.
13123 W. HARDY RD.
HOUSTON, TEXAS 77060
PHONE: 281-447-8077 FAX: 281-447-8422

TO: ALL PRECISION FLANGE & MACHINE VENDORS

FROM: VALERIE ORDAZ

DATE: JULY 13, 2009

SUBJECT: INVOICES

Precision Flange & Machine, Inc. is trying to implement a new accounts payable method. Please email all invoices to vallen@precisionflange.com , eshields@precisionflange.com and mallen@precisionflange.com . We are hoping that this will help eliminate any past due invoices due to the US Mail system. Also it would be greatly appreciated if your contact information is noted on the invoices where we will be able to contact the appropriate person at your facility if we have any concerns. If you have any questions, or if further information is required, please do not hesitate to contact me at 281-447-8077 or at vallen@precisionflange.com . Thank you in advance for your help.

Sincerely,

Valerie Ordaz

RECEIVED
JUL 15 2009
BY

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
7/9/2009	57536

copy

Bill To: Precision Flange & Machine, Inc.
Attn: Accts Payable
13123 W Hardy Rd
Houston TX 77060

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	6/23/09			
2.5	Transportation services by CES @ $70.00 per hour		70.00	175.00
	9.5% Fuel Surcharge		16.63	16.63
900	Recycling of hydrocarbon and water mixture @ $.30 per gallon	BOL 88058	0.30	270.00
	1% Compliance Fee		4.62	4.62

We appreciate your business!

Subtotal	$466.25
Sales Tax (8.25%)	$0.00
Total	$466.25

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

Bill Of Lading # : 88058

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Precision Flange
13123 West Hardy Road
Houston , TX 77060
(281) 447-8077

CES#
11a) HOU-1211
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a Contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(b) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	900	G	Recyclable hydrocarbon and water mixture

Shipper : Precision Flange
Per : Shasta Marinelli **Signature :** [signature] **Date :** 6/23/09

Carrier CES Environmental Services, Inc.
Per : Andres Soto **Signature :** Andres Soto **Date :** 6-23-09

Receiving Facility CES Environmental Services, Inc.
Per : Al Longoria **Signature :** [signature] **Date :** 6/24/09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

[illegible] Grade Road
[illegible]
[illegible]
[illegible]

Transportation Work Ticket

Former ID : Precision Flange (Hardy) Coolant/Oil

Date : [illegible]

Precision Flange

Manifest # :

Ticket : 88050

Phone : [illegible]

Consignee : CES Environmental Services, Inc

Transporter : CES Environmental Services, Inc

Signature : [signature]

Signature

Leave CES Yard :	11:15	Arrive At Destination	1:15
Arrive At Customer :	12:00 PM	Begin Unloading :	1:25
Begin Loading :	12:10 PM	Finish Unloading :	
Finish Loading :	12:30 PM	Leave Destination :	1:45
Leave Customer :	12:45 PM	Arrive At CES Yard :	~~1:15 PM~~

Customer PO #:

Total Hours: 2.5

CES Unload ~~X~~

Ending Odometer : 196282

Begining Odometer : 196250

Total Miles : 32

Tractor # :

Tote # :

Trailer # :

Box # :

Signature : Andres Soto

Oily Water from Totes

EPAHO045000176

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
1/12/2009	53187

COPY

Bill To: Precision Flange & Machine, Inc.
Attn: Accts Payable
13123 W Hardy Rd
Houston TX 77060

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	1/5/09			
4	Transportation services by CES @ $70.00 per hour		70.00	280.00
	12.5% Fuel Surcharge		35.00	35.00
1,000	Recycling of Hydrocarbon and water mixture @ $0.30 per gallon	BOL 78958	0.30	300.00
	.60% Energy Surcharge		1.80	1.80
	1% Compliance Fee		6.17	6.17
	CES Job#78958			

We appreciate your business!

Subtotal	$622.97
Sales Tax (8.25%)	$0.00
Total	$622.97

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

TRK #105

CES Environmental Services, Inc.

Bill Of Lading # : 78958

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Precision Flange
13123 West Hardy Road
Houston , TX 77060
(281) 447-8077

CES#
11a) HOU-1211
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	1,100	G	Recyclable hydrocarbon and water mixture

Shipper Precision Flange
Per : Eddie Swilds **Signature :** [signature] **Date :** 1/5/09

Carrier CES Environmental Services, Inc.
Per : J. Hernandez **Signature :** [signature] **Date :** 01-05-09

Receiving Facility CES Environmental Services, Inc.
Per : Marisa Wooley **Signature :** [signature] **Date :** 1-5-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Precision Flange (Hardy) Coolant/Oil

Date : 1/5/2009 **Manifest # :**

Client : Precision Flange **Ticket :** 78508

Phone : 2814478077 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X [signature] **Signature**

Leave CES Yard :	900	**Arrive At Destination**	
Arrive At Customer :	10:30 AM	**Begin Unloading :**	
Begin Loading :	10:40 AM	**Finish Unloading :**	1200
Finish Loading :	11:00 AM	**Leave Destination :**	
Leave Customer :	11:15 AM	**Arrive At CES Yard :**	1200

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	
Net Weight :		**Total Miles :**	

Driver : Hernandez, Joe **Tractor # :** ~~104~~ 105 **Tote # :**

Signature : J. Hernandez **Trailer # :** **Box # :**

Job Comments/Equipment : REMOVED OILY WATER FROM 4 TOTES AS DIRECTED FROM CUSTOMER.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Customer : Precision Flange
Address : 13123 West Hardy Road
City,State,Zip : Houston TX , 77060
CES Contact : () -

Driver : Hernandez, Joe
Helper :
Date : 1/5/2009 Time : [redacted] 2nd
Truck # [redacted] 105 Trailer #

Job Description :

Contact: Eddie @ 281-447-8077

Pump out oily water from 4 totes as directed

Return to CES

EX ALDMS. ←
HENRY →
PEAR →
K → HARDY

ID #: 78958

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Eddie	Name:	
Close:	05:00 PM	Number:	(281) 447-8077	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	CES	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard Hat, Safty Glasses

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☑ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

Closed from 12pm to 1pm

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
4/11/2008	44211

COPY

Bill To: Precision Flange & Machine, Inc.
Attn: Accts Payable
13123 W Hardy Rd
Houston TX 77060

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	04/07/08			
3.25	Transportation services by CES @ $70.00 per hour		70.00	227.50
	31.5% Fuel Surcharge		71.67	71.67
	Recycling of 750 gallons of hydrocarbon and water mixture @ $0.30 per gallon ($250.00 minimum)	BOL 61804	250.00	250.00
	CES job #61804			

We appreciate your business!

Subtotal	$549.17
Sales Tax (8.25%)	$0.00
Total	$549.17

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

(243)

CES Environmental Services, Inc.

Bill Of Lading # : 61804

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Precision Flange
13123 West Hardy Road
Houston , TX 77060
(281) 447-8077

CES#
11a) 1211
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5465 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	750	G	Recyclable hydrocarbon and water mixture

Shipper : Precision Flange
Per : X ARIZABALO **Signature :** X Roberto Arizabalo **Date :** 4-7-08

Carrier CES Environmental Services, Inc
Per : A. Garza **Signature :** [signature] **Date :** 4-7-08

Receiving Facility CES Environmental Services, Inc.
Per : Godfroy **Signature :** [signature] **Date :** 04-07-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000183

CES Environmental Services, Inc.

4904 Briggs Road
Houston, TX 77001
Tel: (713) 676-1450
Fax: (713) 676-1676

Transportation Work Ticket

Folder ID : Precision Flange (Hardy) Coolant/Oil

Date : 4/7/2008

Manifest # :

Client : Precision Flange

Ticket : 61804

Phone : 2814478077

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X Roberto Arizabalo

Signature

Leave CES Yard :	745	Arrive At Destination	10:00
Arrive At Customer :	8:30	Begin Unloading :	
Begin Loading :	8:35	Finish Unloading :	
Finish Loading :	9:10	Leave Destination :	
Leave Customer :	9:15	Arrive At CES Yard :	11:00

Customer PO #:

Total Hours: 325

CES Unload: ☐

Gross Weight :		Ending Odometer :	
Tare Weight :		Begining Odometer :	
Net Weight :		Total Miles :	

Driver : Garza, Alfredo

Tractor # : 233

Tote # :

Signature : A Gz

Trailer # : 243

Box # :

Job Comments/Equipment :

Office (CES Office) Yard (CES Office / Billing) Fax (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000184

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
12/31/2006	30912

COPY

Bill To: Precision Flange & Machine, Inc.
Attn: Accts Payable
13123 W Hardy Rd
Houston TX 77060

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	12/27/06			
4	Transportation services by CES @ $67.00 per hour		67.00	268.00
	16% Fuel Surcharge		42.88	42.88
	Recycling of 630 gallons of hydrocarbon and water mixture @ $0.30 per gallon	BOL 32637	250.00	250.00
	CES job #32637			

We appreciate your business!

Subtotal	$560.88
Sales Tax (8.25%)	$0.00
Total	$560.88

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

CES Environmental Services, Inc.

Bill Of Lading # : 32637

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Precision Flange
13123 West Hardy Road
Houston , TX 77060

CES#
11a) 1211
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. *This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract* between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5④ Implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	650	G	Recyclable hydrocarbon and water mixture

Shipper : Precision Flange
Per : Alfredo R. Tovar **Signature :** Alfredo R. Tovar **Date :** 12/27/06

Carrier CES Environmental Services, Inc
Per : Brent Sitting **Signature :** Brent Sitting **Date :** 12/27/06

Receiving Facility CES Environmental Services, Inc.
Per : Anthony Cuta (R) **Signature :** [signature] **Date :** 12/27/06

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000186

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Precision Flange (Hardy) Coolant/Oil

Date : 12/27/2006 **Manifest # :**

Client : Precision Flange **Ticket :** 32637

Phone : 2814478077 **Consignee :** CES Environmental Services, Inc.

Shipper : CES Environmental Services, Inc

Signature Alfredo V. Torres **Signature**

Leave CES Yard :	8:00	**Arrive At Destination**	10:15
Arrive At Customer :	8:45	**Begin Unloading :**	11:35
Begin Loading :	9:05	**Finish Unloading :**	11:50
Finish Loading :	9:25	**Leave Destination :**	12:00
Leave Customer :	9:30	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	193171
Net Weight :		**Total Miles :**	

Driver : Sittig, Brent **Tractor # :** 278 **Tote # :**

Signature : Brent Sittig **Trailer # :** 243 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Precision Flange (Hardy) Coolant/Oil

Customer : Precision Flange
Address : 13123 West Hardy Road
City,State,Zip : Houston TX , 77060
CES Contact : Gary Brauckman (713) 417 - 5737

Driver : Sittig, Brent
Helper :
Date : 12/27/2006 Time : 0600
Truck # 278 Trailer # 243

Job Description :

Report to Eddie 281-447-8077:

Vac. Out Totes tanks and drums of Coolant /oil [profile #1211]

Contact Gary if you have any questions.

ID #: 32637

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard Hat, Safty Glasses

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT: ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **11/21/2005**

Dear **Eddie**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 1211

Generator: Precision Flange
Address: 13123 West Hardy Road
Houston, TX 77060

Waste Information

Name of Waste:
TCEQ Waste Code #:
Container Type:
Detailed Description of Process Generating Waste:

Color: **Odor:** **pH:**
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 39048
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

SECTION 1: Generator Information

Company: Precision Flange & Machine, INC.
Address: 13123 W. Hardy Rd.
City, State, Zip: Houston, TX 77060
Contact: Mike Allen / Eddie **Title:** president
Phone No: 281-447-8077 **Fax No:** 281-447-8422
24/hr Phone: CES-713-676-1460
U.S. EPA I.D. No: NA
State I.D. NA **SIC Code:**

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Waste

Name of Waste: coolant/oil/[redacted] water machine cutting fluid
Detailed Description of Process Generating Waste: machining operations & equipment oil changes compressor condensate

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Brown **Odor:**

Specific Gravity (water=1): .90-1.0 **Density:** 8 lbs/gal

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size:

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:**
Texas State Waste Code No: NA - Recyclable oil/water mixture
Proper U.S. DOT Shipping Name: Non-RCRA; non-DOT Regulated material
Class: **UN/NA:** **PG:** **RQ:**

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
> 200	neutral	0 mg/l	0 mg/l	.05 %

EPAHO045000191

PFAM Oil/coolant

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500 mg/l	>1700 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Oil	40-80	%
Water	10-30	%
Coolant	20-50	%
Dirt/Shavings	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
Chlor-D-Tect

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: EC **Date:** 10/31/05

Printed Name/Title: Eddie Shields Controller

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Barbara R Thayer

Date: 11-21-05 (Approved) Rejected

Approval Number: 1211

Additional Information: _____

EPAHO045000192

PFAM - oil/coolant

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

EPAHO045000193

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

CES Environmental Services
4904 Griggs Rd
Houston, TX 77021

Phone: (713) 676-1460
Fax: (281) 676-1676

Attn: **Gary Brauckman**

- CERTIFICATE OF RESULTS -

MES Lab#: 5110168

Client Sample ID: Comp Oil / Coolant
Extended ID: PFAM

Sample Collect Date: 11/2/2005 @ 3:00:00 PM
Sample Receipt Date: 11/4/2005 @ 3:15:00 PM

Sample Type: Grab

Test Group / Method

Total Organic Halogens Method: SW-846 9020	MDL	Result	Units	Analyst: DCW Date / Time
Total Organic Halogens		**652**	**mg/kg**	11/18/2005 / 5:25 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

Monday, November 21, 2005
Holland D. Gilmore, Laboratory Director **Date**

EPAHO045000194

MES - CHAIN OF CUSTODY

1-800-771-4MES
(281) 476-4534
Mercury Environmental Services
6913 Hwy. 225 • Deer Park, TX 77536
Fax (281)-476-4406

1 COMPANY NAME: (BILL TO:) CEJ Environmental
COMPANY ADDRESS: 4904 Griggs
CITY Hy STATE TX ZIP 77021
CONTACT PERSON'S NAME: Gary Bruchmann
CONTACT PERSON'S PHONE: 713-417-5737 FAX #: 713-676-167

2

YOUR PROJECT NO.:	YOUR P.O. #:	YOUR PROJECT NAME:
PFAM	Via Gary	PFAM

PROJECT ADDRESS:

4 PARAMETERS FOR ANALYSIS

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX	Total Hydrocarbons TOX	NUMBER OF CONTAINERS	PRESERVATIONS
compoil/coolant	-	11-20-05	3:00	L	✓	1	NA

3

5 REMARKS
TURNAROUND TIME 3 d
DETECTION LIMITS SPECIAL LIMITS REQUIRED Yes No
Please circle one, if Yes, please describe below or include separate sheet detailing requirements.

ONICE
15°C

6

PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.):	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
a. Gary Bruchmann b.		11-20-05	3:00	Albert Mong

7

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)

METHOD OF PAYMENT	SHIPPED BY: (Signature)	COURIER (Signature)	RECEIVED FOR MES BY: (Signature)	DATE	TIME
			Albert Mong	11/21/05	1515

8 Sample Remainder Disposal
☐ Return Sample Remainder To Client Via _____
☐ I Request Lab To Dispose Of All Sample Remainders
(Signature) _____ (Date) _____

Form # MES - CCRI

WHITE & CANARY – Shipped with Sample PINK – Retained by Customer WHITE – Returned with Report

PAGE 02
MES
11/21/2005 13:11 -2814764406
EPAHO0450001195

TO: Gary
From: Clark
Date: 10/31/03
Re: PFAM 10/31/05

INSTRUCTIONS FOR
CLOR-D-TECT® 1000
Used Oil Screening Kit
Test kit for chlorine contamination in used oil

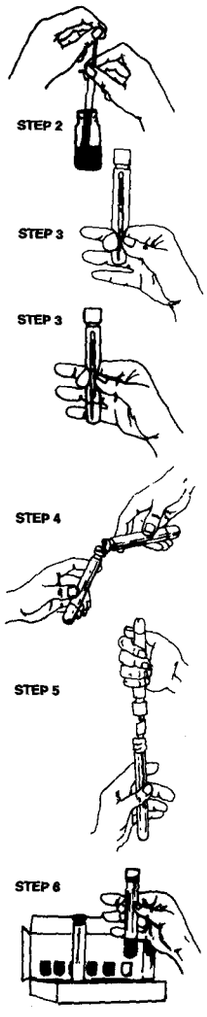
EACH KIT CONTAINS:

1. Tube #1 - A plastic test tube with a white dispensing cap containing a colorless ampule (bottom) and a yellow-dotted, gray ampule (top).
2. Tube #2 - A plastic test tube with yellow cap containing 7 ml of buffer solution, a yellow-dotted ampule (bottom) and a red-green ampule (top).
3. A 1 ml polypropylene sampling syringe and a tissue wipe.
4. A plastic filtration funnel.
5. A glass ampule contained in a cardboard sleeve and plastic tube designated as "Disposal Ampule".

Resets Kalb

READ CAUTION AND INFORMATION SECTIONS ON BACK BEFORE PERFORMING TEST. WEAR RUBBER GLOVES AND SAFETY GLASSES.

[redacted]



1. **PREPARATION** Remove contents from box. Check contents to ensure that all items are present and intact. Place the two plastic tubes into the holder at the front of the box.

2. **SAMPLE PREPARATION** Unscrew the white dispensing cap from Tube #1. Work the plunger on the empty sampling syringe a few times to ensure that it slides easily. Place the tip of the syringe into the oil sample to be tested and slowly pull back on the plunger until it reaches the stop and cannot be pulled further. Remove the syringe from the oil sample and wipe any excess oil from the outside of the syringe with the enclosed tissue. Place the tip of the syringe in Tube #1 and dispense the oil sample by depressing the plunger. Replace the white dispensing cap securely.

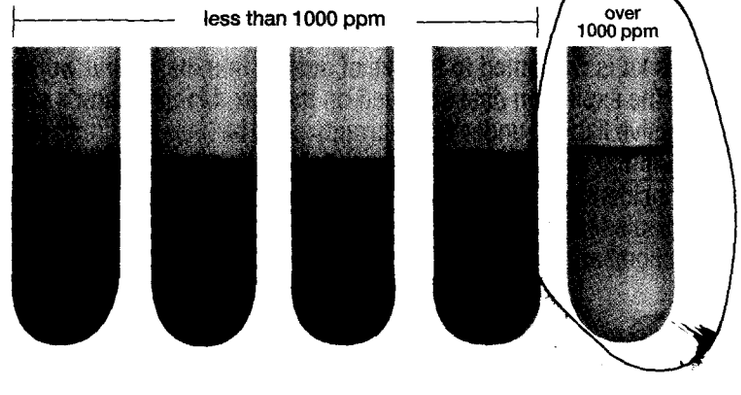
3. **REACTION** Break the bottom (colorless) ampule in the tube by compressing the sides of the tube. Mix thoroughly by shaking the tube vigorously for about 30 seconds. Break the top (gray) ampule in the tube and shake thoroughly for about 20 seconds. Allow the reaction to proceed for an additional 40 seconds (total of one minute), while shaking intermittently several times.

4. **EXTRACTION** Remove the caps from both tubes and pour the clear buffer solution from Tube #2 (yellow cap) into Tube #1. Replace the white cap tightly on Tube #1 and shake vigorously for about 10 seconds. Vent the tube carefully by partially unscrewing the dispensing cap. Close securely and shake well for an additional 10 seconds. Vent again, tighten cap and stand tube upside down on its cap. Allow the phases to separate for a full two minutes.

5. **ANALYSIS** Put the plastic filtration funnel into Tube #2. Position Tube #1 over funnel and open nozzle on the dispensing cap. Be sure to point the nozzle away from the operator while opening it, and check that the nozzle is open completely before dispersing the clear solution. Dispense 5 mls of the clear solution through the filter into Tube #2 (up to the 5 ml line) by squeezing the sides of Tube #1. Close the nozzle on the dispensing cap on Tube #1 and remove the filter funnel from Tube #2. Replace the yellow cap on Tube #2 and break the bottom (colorless, yellow-dot) ampule and shake for 10 seconds. Break the top (colored) ampule and shake for 10 seconds.

6. **RESULTS** Observe the resultant color immediately and compare to the color chart below for chlorine determination.

7. **DISPOSAL** Open the "Disposal Ampule" container and drop the ampule into Tube #2. Replace the cap on the test tube. Crush the ampule by squeezing the sides of the tube. Shake for 5 seconds. This reagent immobilizes the mercury so that the kit passes the EPA's TCLP test. See caution section below for additional information on disposal.



CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

COPY

Invoice

Date	Invoice #
5/9/2006	23975

Bill To: Precision Flange & Machine, Inc.
Attn: Accts Payable
13123 W Hardy Rd
Houston TX 77060

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	4/27/06			
4.75	Transportation services by CES @ $67.00 per hour		67.00	318.25
	14% Fuel Surcharge		44.56	44.56
1,200	Recycling of hydrocarbon and water mixture @ $0.30 per gallon	BOL 20714	0.30	360.00

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$722.81
Sales Tax (8.25%)	$0.00
Total	$722.81

CES Enviromental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1460
Fax: (713) 676-1676

Bill Of Lading # : 20714

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

CES#

SHIPPED FROM :
Precision Flange
13123 West Hardy Road
Houston , TX 77060

11a) 1211
11b)
11c)
11d)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5④ implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	01	TT	1200	G	Recyclable hydrocarbon and water mixture

Shipper : Precision Flange
Per: Eddie Shields **Signature :** [signature] **Date :** 4/27/06

Carrier CES Environmental Services, Inc
Per : Lonnie L Woodard **Signature :** [signature] **Date :** 04-27-06

Receiving Facility CES Environmental Services, Inc.
Per : ANTHONY CUTA **Signature :** [signature] **Date :** 04/27/06

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel: (713) 678-1460
Fax: (713) 678-1676

Transportation Work Ticket

Date : 4/27/2006 Manifest # :

Client : Precision Flange Ticket : 20714

Phone : 2814478077 Consignee : CES Environmental Services, Inc.

Shipper : CES Environmental Services, Inc

Description Used oil / oily water

Signature X ESL Signature

Leave CES Yard :	12:49	Arrive At Destination	15:45
Arrive At Customer :	13:45	Begin Unloading :	16:45
Begin Loading :	14:00	Finish Unloading :	17:20
Finish Loading :	14:50	Leave Destination :	—
Leave Customer :	14:55	Arrive At CES Yard :	17:30

4.75 hr CES Unload: ☐

Gross Weight :		Ending Odometer :	116666
Tare Weight :		Begining Odometer :	116618
Net Weight :		Total Miles :	48

Driver : Irvin Woodard Tractor # : 104 Tote # :

Signature : I. Woodard Trailer # : Box # :

Job Comments/Equipment : Removed oily water From 3.5 Totes And (42) 5 gallons Buckets - 1200 gallons Total

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000199

CES Enviromental Services, Inc
4904 Griggs Rd.
Houston, TX 77021
Office: (713) 676-1460
Fax: (713) 676-1676

Driver : Ivan Woodard

Service Request Form

Customer : Precision Flange
Address : 13123 West Hardy Road
City,State,Zip : Houston TX , 77060
Contact : Eddie 2814478077
Called In By : Eddie 2814478077
CES Contact : Gary Brauckman (713) 417 - 5737

Date : 4/27/2006
Time : 2nd Job

Job Description :

Report to Eddie 281-447-8077:

[redacted] vacuum out 3.5 totes and return to CES.

Contact Gary if you have any questions.

If totes have oily water

MERCURY ENVIRONMENTAL SERVICES, INC.
6913 HWY 225
DEER PARK, TX 77536
USA
Voice: 281-476-4534
Fax: 281-476-4406

Invoice

Invoice Number: 059770
Invoice Date: Dec 16, 2005
Page: 1

Sold To:

CES ENVIRONMENTAL SVS.
4904 GRIGGS RD
HOUSTON, TX 77021

Sample ID:

PFAM
11/02/05

Customer ID	Customer PO	Payment Terms	
CES ENVIRONMENTAL	VERBAL GARY	Net 30 Days	
Prepared By:	Sample Number:	Date Received:	Invoice Due:
	5110168	11/4/05	1/15/06

Quantity	Item	Description	Unit Price	Extension
1.00	TOX	TOX	75.00	75.00
0.20		20%DISCOUNT	75.00	-15.00

PFAM Analytical

received 1-19-06

Subtotal	60.00
Total Invoice Amount	60.00
TOTAL	60.00

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

RECEIVED
NOV 25 2005
BY:

CES Environmental Services
4904 Griggs Rd
Houston, TX 77021

Phone: (713) 676-1460
Fax: (281) 676-1676

Attn: **Gary Brauckman**

- CERTIFICATE OF RESULTS -

MES Lab#: 5110168
Client Sample ID: Comp Oil / Coolant
Extended ID: PFAM

Sample Collect Date: 11/2/2005 @ 3:00:00 PM
Sample Receipt Date: 11/4/2005 @ 3:15:00 PM
Sample Type: Grab

Test Group / Method

Total Organic Halogens Method: SW-846 9020	MDL	Result	Units	Analyst: DCW Date / Time
Total Organic Halogens		**652**	**mg/kg**	11/18/2005 / 5:25 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

Holland D. Gilmore, Laboratory Director

Monday, November 21, 2005
Date

EPAHO045000202

MES - CHAIN OF CUSTODY

Mercury Environmental Services
6913 Hwy. 225 • Deer Park, TX 77536
1-800-771-4MES
(281) 476-4534
Fax (281)-476-4406

1

COMPANY NAME: (BILL TO:) CES Environmental
COMPANY ADDRESS: 4904 Griggs
CITY Hi STATE TX ZIP 77021
CONTACT PERSON'S NAME: Gary Brauchman
CONTACT PERSON'S PHONE: 793-417-5737 FAX #: 713-676-1676

2

YOUR PROJECT NO.:	YOUR P.O. #:	YOUR PROJECT NAME:
PFAM	UBL Gary	PFAM

PROJECT ADDRESS:

3

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX	Total Halogen TOX							NUMBER OF CONTAINERS	PRESERVATIONS	REMARKS
compoil/coolant	-	11-2-05	3:00	L	✓							1	NA	
														ON ICE
														15°C

4 PARAMETERS FOR ANALYSIS

5 REMARKS

TURNAROUND TIME: 5 Std

DETECTION LIMITS SPECIAL LIMITS REQUIRED
Yes No
Please circle one, if Yes, please describe below or include separate sheet detailing requirements.

6

PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.):	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
a. Gary Brauchman b. [signature]	[signature]	11-4-05	3:15	Albert Mendy

7

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)

METHOD OF PAYMENT	SHIPPED BY: (Signature)	COURIER (Signature)	RECEIVED FOR MES BY: (Signature)	DATE	TIME
			Alberto Mendy	11/4/05	1515

8

Sample Remainder Disposal
☐ Return Sample Remainder To Client Via _____

☐ I Request Lab To Dispose Of All Sample Remainders
(Signature) _____ (Date) _____

Form # MES - CCRI

WHITE & CANARY – Shipped with Sample PINK – Retained by Customer WHITE – Returned with Report

EPAHO045000203

Copy original to M.P. 11-2(07

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 39048
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company: Precision Flange & Machine, INC.
Address: 13123 W. Hardy Rd.
City, State, Zip: Houston, TX 77060
Contact: Mike Allen / Eddie Title: President /
Phone No: 281-447-8077 Fax No: 281-447-8422
24/hr Phone: CES- 713-676-1460
U.S. EPA I.D. No: NA
State I.D. NA SIC Code:

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: Title:
Phone No: Fax No:

SECTION 3: General Description of the Waste

Name of Waste: coolant/oil/[redacted] water machine cutting fluid
Detailed Description of Process Generating Waste: machining op[redacted] & equipment oil changes compressor condensate

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Brown Odor: ____

Specific Gravity (water=1): .90-1.0 Density: 8 lbs/gal

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size: ____ ____ ____ ____

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 Other: ____
Texas State Waste Code No:
Proper U.S. DOT Shipping Name: NA - Recyclable oil/water mixture / NON-RCRA; NON-DOT Regulated material
Class: — UN/NA: — PG: — RQ: —

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	neutral	0 mg/l	0 mg/l	05 %

EPAHO045000204

PFAM Oil/coolant

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500 mg/l	>1700 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Oil	40-80	%
Water	10-30	%
Coolant	20-50	%
Dirt/Shavings	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
Chlor-D-Test

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 10/31/05

Printed Name/Title: Eddie Shields Controller

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____ Additional Information: _____

Date: _____ Approved Rejected _____

Approval Number: _____ _____

EPAHO045000205

PPAM - Oil/coolant

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

EPAHO045000206

Mercury Environmental Services, Inc.

6913 HWY 225. Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

CES Environmental Services
4904 Griggs Rd
Houston, TX 77021

Phone: (713) 676-1460
Fax: (281) 676-1676

Attn: **Gary Brauckman**

- CERTIFICATE OF RESULTS -

MES Lab#: 5110168
Client Sample ID: Comp Oil / Coolant
Extended ID: PFAM

Sample Collect Date: 11/2/2005 @ 3:00:00 PM **Sample Type:** Grab
Sample Receipt Date: 11/4/2005 @ 3:15:00 PM

Test Group / Method

Total Organic Halogens Method: SW-846 9020	MDL	Result	Units	Analyst: DCW Date / Time
Total Organic Halogens		**652**	**mg/kg**	11/18/2005 / 5:25 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

Monday, November 21, 2005
Holland D. Gilmore, Laboratory Director **Date**

EPAHO045000207

MES - CHAIN OF CUSTODY

MES
Mercury Environmental Services
6913 Hwy. 225 • Deer Park, TX 77536
1-800-771-4MES
(281) 476-4534
Fax (281)-476-4406

1 COMPANY NAME: (BILL TO:) CEJ Environmental
COMPANY ADDRESS: 4904 Griggs
CITY Ho STATE TX ZIP 77021
CONTACT PERSON'S NAME: Gary Druckman
CONTACT PERSON'S PHONE: 713-417-5771 FAX #: 713-676-1672

2 YOUR PROJECT NO.: PFRM | YOUR P.O. #: UBL Gary | YOUR PROJECT NAME: PFRM
PROJECT ADDRESS:

4 PARAMETERS FOR ANALYSIS: Total Halogen TOX

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	PRESERVATIVES
compoil/coolant	-	11-20-05	3:10	L.	1	NA

5 REMARKS
TURNAROUND TIME: 3 pd
DETECTION LIMITS SPECIAL LIMITS REQUIRED: Yes No
Please circle one. If Yes, please describe below or include separate sheet detailing requirements.

3

ONICE
15°C

6 PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.): a. Gary Druckman b.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
	11-20-05	3:10	Albert Mong

7

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)

METHOD OF PAYMENT	SHIPPED BY: (Signature)	COURIER (Signature)	RECEIVED FOR MES BY: (Signature)	DATE	TIME
			Albert Mong	11/21/05	1515

8 Sample Remainder Disposal
☐ Return Sample Remainder To Client Via _____
☐ I Request Lab To Dispose Of All Sample Remainders
(Signature) _____ (Date) _____

Form # MES - COR

WHITE & CANARY – Shipped with Sample PINK – Retained by Customer WHITE – Returned with Report

PAGE 02 MES 11/21/2005 13:11 -2814764406 EPAHO045000208

Precision Flange (Precision-Hardy)
Production Waste

GB
direct

EPAHO0450000209

Customer Special Requests/Requirements

E-mail for payment please see front flap

P.O. Required:	☐ Y	☑ N	Fuel Surcharge:	☑ Y	☐ N
4% City of Houston Fee:	☑ Y	☐ N	4-hr Minimum:	☑ Y	☐ N

Job Estimate

Item	CES Cost	Customer Charge
2/9/04 ANALYSIS -	295.00	429.00
1% Compliance fee	4.29	4.29
INV# 54659	299.29	433.29
	134.00	

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Name:	Precision Flange
Contact:	Eddie Shields
Address:	13123 West Hardy Road
	Houston, TX 77060
Phone:	281-447-8077
Fax:	

Salesperson:	Gary Brauckman
Assigned:	X **Unassigned:**

Folder I.D.#	Precision Flange (Precision Flange - Hardy) Production Waste

Job Contact:	Eddie Shields
Phone:	281-447-8077
Fax:	

P.O Required:	**Y:**		**N:**	X	**Fuel Surcharge:**	**Y:** X	**N:**
City of Houston:	**Y:**	X	**N:**		**4-hour Minimum:**	**Y:** X	**N:**

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Analytical	A&B			Cost + 20%
Transportation	CES			$70 / hr + CFSC
Management of Paint Related Material	Rineco	0903-04581	$125 / DM	$200 / DM
Management of Paint Filters	CES			$100 / Bag

Customer Special Request/Requirement
CONFIDENTIAL, 3/27/2009

TO: ALL PRECISION FLANGE & MACHINE VENDORS

FROM: VALERIE ORDAZ

DATE: JULY 13, 2009

SUBJECT: INVOICES

Precision Flange & Machine, Inc. is trying to implement a new accounts payable method. Please email all invoices to vallen@precisionflange.com , eshields@precisionflange.com and mallen@precisionflange.com . We are hoping that this will help eliminate any past due invoices due to the US Mail system. Also it would be greatly appreciated if your contact information is noted on the invoices where we will be able to contact the appropriate person at your facility if we have any concerns. If you have any questions, or if further information is required, please do not hesitate to contact me at 281-447-8077 or at vallen@precisionflange.com . Thank you in advance for your help.

Sincerely,

Waste Stream Approval Letter

CES ENVIRONMENTAL SERVICE
4904 GRIGGS ROAD
HOUSTON,TX 77021
TXD008950461

PCI

Pollution Control Industries

3/31/2009

JUANITA THOMAS
PRECISION FLANGE & MACHINE, INC
13123 WEST HARDY ROAD
HOUSTON,TX 77060

Dear CES ENVIRONMENTAL

Pollution Control Industries wishes to inform you that the waste stream below has been approved for shipment into PCI:

Rineco
#1165/DM

Regulatory Information

Waste Stream #:	343207	PAINT RELATED MATERIAL
Billing Code:	LP7	
D. O. T. Shipping desc:	RQ, WASTE PAINT RELATED MATERIAL	
N. O. S. Description:	XYLENE, METHYL ISOBUTYL KETONE	
Hazard Class /Packing Group:	3 PG:III	
RCRA Codes:	D001,D035,F003,F005	
UN or NA #:	UN1263	
EPA Management Method Code:	H141	

Pricing: $4.60 per lb. $1640.00 minimum per 55 Gallon Drum
Minimum charges and other analytical charges may apply.

Energy Assessment: A 7% energy assessment will be added to all non-transportation invoice line items.

Rejection Charge: Waste that does not conform to the approved profile or PCI's other acceptance requirements shall be subject to an additional charge of $300 per drum, or if shipped in bulk, per manifest, and such non-conforming waste will be processed or returned to you at PCI's sole option.

Terms: Net 30 days. Pricing and approval parameters subject to change.

In accordance with 40 CFR 264.12 "Required Notice" and State(s) equivilant regulations, Pollution Control Industries is informing the waste Generator that Pollution Control Industries' companies have the appropriate permit(s) for the above listed waste stream and will accept the waste stream as described by the Generator/Broker, including but not limited to the certification in the Generator's Waste Profile Submittal Report. This waste stream approval was founded on the information that the Generator/Broker provided pursuant to the Generator's compliance with 40 CFR 262.11 "Hazardous Waste Determination" and/or their State's regulatory equivilant. If at any time the waste is found to contain constituents, properties, or concentrations inconsistent with the information supplied by the Generator/Broker, title to such waste shall not pass to PCI, and, in addition to the Rejection Charge described above, you shall be liable for all direct, indirect, and consequential damages incurred by PCI as a result of non-conforming waste. PCI reserves the right, in its sole discretion, to utilize processes within RCRA environmental standards alternate to the billing code stated above to process the waste listed on this approval letter. No Purchase Order shall abrogate the terms of this Waste Stream Approval Letter.

To facilitate the expedited receipt and processing of the above waste, PCI requires that the above listed Waste Stream Number appear on each shipping document (Block 14 of the UHW manifest), and on each container (top and side).

As a final condition of PCI's acceptance, this approval letter must be signed and returned to PCI. This waste stream will not be valid for scheduling or acceptance at any PCI facility until a signed form is on file.

I agree with the terms as stated above and I certify that the information contained herein is accurate and in accordance with a system designed to assure that qualified personnel have properly gathered and evaluated the information submitted and that I am an authorized agent of the Generator:

BY: _____ DATE: _____

Pollution Control Industries
4343 Kennedy Avenue, East Chicago, IN 46312
(219)397-3951 FAX (219)397-6411
www.pollutioncontrol.com

RESPONSIBLE℠ RECYCLING
A commitment to our generators, our employees, and our community.

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/30/2009**

Dear **Eddie**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3252

Expiration Date 3/30/2011

Generator: Precision Flange
Address: 13123 West Hardy Road
Houston, TX 77060

Waste Information

Name of Waste: Paint Filters
TCEQ Waste Code #: CESQ3191
Container Type:
Detailed Description of Process Generating Waste:
Paint Filters from paint booth capturing overspray
Color: varies **Odor:** solvent **pH:** N/A
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3252 GB JR IS

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Precision Flange
Address: 13123 West Hardy Road
City: Houston **State:** TX **Zip:** 77060
Contact: Eddie **Title:**
Phone Number: 281-447-8077 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Pain Filters
Detailed Description of Process Generating Waste:

Paint Filters from paint booth capturing overspray.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** Solvent

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☑ Other (explain) BAG

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☑ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ3191

Proper US DOT Shipping Name: Non-Hazardous, Non-RCRA material (paint filters)

Class: N/A **UN/NA:** N/A **PG :** N/A **RQ:** N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		N/A		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>100	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Filters	95-99	%
Paint Residue	1-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ~~None~~ Analysis

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>140

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/4/9

Printed Name/Title: _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-30-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE O

1. Base Pricing (including freight):

<5% Liquid - $95 / DM, <50% Liquid ~~- $155 / DM~~, >50% processable solids -$185 / DM, >50 non-proc solids - $.65 / lb

#100 BAG

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk to Class 1 box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

ESL

Laboratory Analysis Report

Total Number of Pages: 13

Job ID : 09020226

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0209-16 PFAM Paint Filters

Report To :	Client Name:	CES Environmental	P.O.#.: 0209-16
	Attn:	Gary Brauckman	Sample Collected By: Gary Brauchman
	Client Address:	4904 Griggs Rd	Date Collected: 02/09/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Paint Filters	Solid	09020226.01

Released By: Sonia West
Title: Senior Project Manager
Date: 2/26/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 02/09/2009 15:30

EPAHO045000220

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09020226

Date: 2/26/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	*colony-forming units*	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	*surr*	*Surrogate*
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

D1	Sample required dilution due to matrix effects.
S4	Surrogate not available due to dilution of sample extract for quantification.

EPAHO045000221

LABORATORY TEST RESULTS

Job ID : 09020226

Date 2/26/2009

Client Name: CES Environmental
Attn: Gary Brauckman
Project Name: 0209-16 PFAM Paint Filters

Client Sample ID: Paint Filters
Date Collected: 02/09/09
Time Collected: 15:00
Other Information:

Job Sample ID: 09020226.01
Sample Matrix Solid

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				02/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		02/12/09 16:18	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		02/12/09 16:18	TK
	Barium	0.722	mg/L	1	0.04	100.0		02/12/09 16:18	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		02/12/09 16:18	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		02/12/09 16:18	TK
	Chromium	BRL	mg/L	1	0.04	5.0		02/12/09 16:18	TK
	Lead	BRL	mg/L	1	0.04	1.5		02/12/09 16:18	TK
	Nickel	BRL	mg/L	1	0.04	70		02/12/09 16:18	TK
	Selenium	BRL	mg/L	1	0.1	1.0		02/12/09 16:18	TK
	Silver	BRL	mg/L	1	0.04	5.0		02/12/09 16:18	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			02/12/09 10:00	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	2	50		D1	02/11/09 13:30	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		02/11/09 14:39	TK
SW-846 9045D	Corrosivity, pH								
	pH	6.50	s.u.					02/11/09 14:00	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	597	mg/Kg	10	147			02/11/09 10:01	WS
	>C12-C28	5515	mg/Kg	10	184			02/11/09 10:01	WS
	>C28-C35	3450	mg/Kg	10	191			02/11/09 10:01	WS
	Total C6-C35	9562	mg/Kg	10				02/11/09 10:01	WS
	1-Chlorooctane(surr)	N/A	%	10	50-149		S4	02/11/09 10:01	WS
	Chlorooctadecane(surr)	N/A	%	10	50-149		S4	02/11/09 10:01	WS

EPAHO045000222

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Corrosivity, pH **Method : SW-846 9045D** **Reporting Units : s.u.**

QC Batch ID : Qb09021106 **Created Date :** 02/11/09 **Created By :** Rkurup

Samples in This QC Batch : 09020226.01

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	6.49	6.50	s.u.	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO045000223

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals, Mercury **Method :** SW-846 7470A **Reporting Units :** mg/L

QC Batch ID : Qb09021203 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

Digestion :	PB09021204	**Prep Method :**	SW-846 7470A	**Prep Date :**	02/11/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021109	**Prep Method :**	SW-846 1311	**Prep Date :**	02/10/09 16:50	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0051	102						71-143	

QC Type: MS and MSD
QC Sample ID: 09020258.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0050	99.4	0.005	0.0050	99.6	0.2	35	61-175	

Refer to the Definition page for terms.

EPAHO045000224

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Reactive Sulfide **Method : SW-846 7.3** **Reporting Units : mg/Kg**

QC Batch ID : Qb09021215 **Created Date :** 02/11/09 **Created By :** Ksudha

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021218 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	680	560	82.4	680	520	76.5	7.4	20	40-120	

Refer to the Definition page for terms.

EPAHO045000225

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Reactive Cyanide **Method : SW-846 7.3** **Reporting Units : mg/Kg**

QC Batch ID : Qb09021216 **Created Date :** 02/12/09 **Created By :** Ksudha

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021219 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.14	42.8	5.0	2.17	43.4	1.4	20	40-120	

Refer to the Definition page for terms.

EPAHO045000226

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals **Method :** SW-846 6010C **Reporting Units :** mg/L

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

Digestion :	PB09021235	**Prep Method :**	SW-846 3010A	**Prep Date :**	02/12/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021109	**Prep Method :**	SW-846 1311	**Prep Date :**	02/10/09 16:50	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.03	102	2	2.01	101	1	20	80-120	
Arsenic	2	2.03	102	2	2.00	100	1.5	20	80-120	
Barium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Beryllium	2	1.98	99	2	1.95	97.5	1.5	20	80-120	
Cadmium	2	1.81	90.5	2	1.79	89.5	1.1	20	80-120	
Chromium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Lead	2	1.85	92.5	2	1.83	91.5	1.1	20	80-120	
Nickel	2	1.84	92	2	1.82	91	1.1	20	80-120	
Selenium	2	2.01	101	2	1.97	98.5	2	20	80-120	
Silver	2	1.97	98.5	2	1.94	97	1.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.02	100						70-130	
Arsenic	BRL	2	2.02	101						45-138	
Barium	0.722	2	2.47	87.4						39-135	
Beryllium	BRL	2	1.94	97						70-130	
Cadmium	BRL	2	1.75	87.3						56-125	
Chromium	BRL	2	1.84	91.8						52-125	
Lead	BRL	2	1.74	87						55-125	

Refer to the Definition page for terms.

EPAHO045000227

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	BRL	2	1.77	87.3						70-130	
Selenium	BRL	2	2.01	100						70-130	
Silver	BRL	2	1.97	98.5						26-148	

Refer to the Definition page for terms.

EPAHO045000228

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/Kg

QC Batch ID : Qb09021236 **Created Date :** 02/12/09 **Created By :** Dshen

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021234 **Prep Method :** TX 1005 **Prep Date :** 02/10/09 08:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	454	90.8	500	415	83	9	20	75-125	
>C12-C28	500	498	99.6	500	449	89.8	10.3	20	75-125	
>C28-C35	500	422	84.4	500	388	77.6	8.4	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09020193.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	426	85.2						75-125	
>C12-C28	BRL	500	459	91.6						75-125	
>C28-C35	BRL	500	393	77.3						75-125	

Refer to the Definition page for terms.

EPAHO045000229

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09021733 **Created Date :** 02/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09020226.01

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	85	102	0	20	75-125	

Refer to the Definition page for terms.

EPAHO045000230

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # CA020224

5. Project # PFAM Paint Filters

6. Project Name/Location: PFAM

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Gary Brauckman

Sampler's Signature & Date: [signature]

1. REPORT TO:
Company: CES Environmental
Address: 4904 Griggs H, TX 77021
Contact: Gary Brauckman
Phone: Cell 713-417-5737
Fax: ☐
E-mail: ☐ gbrauckman@cesenvironmental.com

2. INVOICE TO:
Company:
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0209-16

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☑ ~~7 Days~~ - Standard

13. 14. Containers* 4
15. Preservatives**
16. PH-Lab Only
17.

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	No. of Containers	Analyses/Methods: TCLP (11) metals	TPH	RCI	18. REMARKS
010	Paint Filters	2-9-09	3:00		✓						✓		✓	✓	✓	

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	2-9-09	3:30			
2					
3					

21. RECEIVED BY LABORATORY [signature] 2/9/09 3:30

*Containers: VOA - 40 ml vial; ~~A/G - Amber/Glass 1 Liter~~; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: ~~C - Cool~~; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

22. KNOWN HAZARDS/COMMENTS

Temperature: °C

Intact: Y or N Initials

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

Page 12 of 13

EPAHO045000231

Sample Condition Checklist

Date : **02/26/09**

A&B JobID : **09020226**	Date Received : **02/09/2009**	Time Received : **3:30PM**
Client Name : **CES Environmental**		
Temperature : **24.58°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☑ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Ruwadia

Check in by/date : Kisom / 02/09/2009

Quote #: 7618, Rev. 1
Date: 3/24/2009

RINECO
Innovative waste management

Quotation for Disposal

Dana Carter
CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021

RE: Precision Flange and Machine, Inc., 13123 West Hardy Road, Houston, TX 77060
Thank you for considering Rineco Chemical as your waste management company. Based on the information provided, Rineco is pleased to offer the following quotation for your approval. The disposal price is based on 55-gallon steel drums unless otherwise noted. Prices subject to change with 30 day notice.

If material is non-conforming, does not blend with fuel stock or causes production or processing problems, additional charges may be incurred.

Transportation Cancellation Policy: Rineco requires 24 hour notice prior to the scheduled pick-up date/time to make any changes. Failure to notify Rineco within this time period may result in "Equipment Order Not Used" charges of Cost + 10%.

**Until the national fuel crisis subsides, Rineco has implemented a fuel surcharge based on the National Average Diesel price as published by the U.S. Department of Energy. For your reference, the matrix for the applicable fuel surcharge percentage is attached. Please note, the prices above do not reflect this surcharge.*

DIRECT-TO-OUTLET WASTE
Rineco's intent is to ship the following wastestream(s) direct from your facility to the outlet(s) mentioned below.

Profile #:	0903-04581
Material Name:	DIRECT ONLY: Paint Related Material (Clean Harbors Deer Park CH359729)
Outlet:	Clean Harbors Deer Park LP,
Outlet Approval #:	CH359729
Disposal:	NF 55 Gal. $125.00/Each

At no extra charge, RINECO will prepare manifest and labels, which will be shipped overnight. We appreciate the opportunity to service your waste disposal needs. If you have any questions, please call 800-377-4692.

Michael Jaskowiak
Territory Manager
South Texas Territory

Generator Signature: Jennifer Rest as agent
Precision Flange and Machine, Inc.

Date of Acceptance: 3-27-9

EPAHO045000233

Rineco

819 Vulcan Road -- Haskell

P.O. Box 729, Benton, AR

Office (501) 778-9089 Fax (501) 776-2864

Prepared by: Misty Duncan

FOR OFFICE USE ONLY

Account Rep:	Michael Jaskowiak	**Walk Through:**	No
Region:	S02	**Special Instructions:**	No
Profile #:	0903-04581	**Create Date:**	3/13/2009
Broker Rep #:		**Last Cert Date:**	3/13/2009
Broker Profile ID:	CES Environmental Serv	**Expiration Date:**	3/13/2010
Status:	Approved -- Direct Only		

I. WASTE MATERIAL PROFILE SHEET

In accordance with the Federal and State regulations, it is necessary for the Generator of hazardous waste to properly identify the waste for their records as well as to supply the disposal facility with the information necessary to handle the waste. The information outlined below must be complete, and signed by the generator. PLEASE PRINT LEGIBLY OR TYPE.

Generator Name: ***Precision Flange and Machine, Inc.***

USEPA I.D. No. ***TXCESQG36031***

State I.D. No.

Address: ***13123 West Hardy Road***

Phone: ***713-676-1460***

Fax: ***713-676-1676***

Houston, TX 77060

Title:

Technical Contact: ***Jenny Rust***

24 hour Phone: ***713-417-5737***

24 Hour Emergency Contact: ***Gary Braukman***

Is this material located or generated in a foreign country? No

Foreign Address:

II. GENERAL INFORMATION

Material Name: DIRECT ONLY: Paint Related Material (Clean Harbors Deer Park CH359729)

Source Code:

Yes A. Does waste exhibit the characteristic of ignitability as defined in 40 CFR 261.21?

No B. Does waste exhibit the characteristic of corrosivity as defined in 40 CFR 261.22?

No C. Does waste exhibit the characteristic of reactivity as defined in 40 CFR 261.23?

No D. Is waste a spent solvent as defined in 40 CFR 261.31?

No E. Is waste a discarded chemical product, off spec, container or spill residues as defined in 40 CFR 261.33?

Detailed description of process generating waste: painting operations

Anticipated Monthly Volume: 4 drums

Bulk: No Drum: Yes Other: No

III. MATERIAL COMPOSITION

COMPONENT	***See Attachment for full list***	Concentration Min	Max	Actual	PPM
Paint Containing: (45-55 %)					
2-Propanol,1-Methoxy-, Acetate				28.00	
Xylene				42.00	
Methyl N-Amyl Ketone				23.00	
Ethylbenzene				7.00	
Paint Thinner Containing: (45-55 %)					
Zinc Dust				20.00	
Ethylbenzene				4.00	
Xylene				23.00	
Methanol				1.00	
Ethanol				26.00	
Methyl isobutyl ketone				2.00	
Ethyl Silicate				5.00	
Quartz				9.00	

IV. PHYSICAL CHARACTERISTICS

Physical State:	Semi-Solid
Free Liquid:	Yes
Viscosity:	Medium
Layers:	Single
Odor:	Mild
Flash Point:	74-140F
BTU:	
pH Level:	NA
Actual pH:	
Density:	

V. OTHER CHARACTERISTICS

No	**Explosive**	No	**Dioxin**
No	**Radioactive**	No	**Shock Sensitive**
No	**Sulfide**	No	**PCB**
No	**Etiological**	No	**Cyanide**
No	**Pyrophoric**	No	**Water Reactive**

EPAHO045000234

VI. SHIPPING INFORMATION

Profile #: 0903-04581

DOT Hazardous Material: Yes

ER Guide #: 128

Proper Shipping Name: Waste Paint Related Material

Hazard Class and Division: 3

UN or NA: UN1263

Packaging Group: III

RQ: No If Yes:

Addl. Info:

USEPA HAZARDOUS WASTE: Yes

Waste I.D. Numbers: D001, F003, UNIV209H

VII. INDICATE IF THIS WASTE CONTAINS ANY OF THE FOLLOWING CHARACTERISTICS as defined by 40 CFR 261.24.
Check only if waste exceeds regulatory threshold levels and include analytical date if available.

Constituent		Regulatory level PPM	TCLP PPM	Total PPM	Know ledge	Constituent		Regulatory level PPM	TCLP PPM	Total PPM	Know ledge
D004	Arsenic	5.0				D024	m-Cresol	200.0			
D005	Barium	100.0				D025	p-Cresol	200.0			
D006	Cadmium	1.0				D026	Cresol	200.0			
D007	Chromium	5.0				D027	1,4,Dichlorobenzene	7.5			
D008	Lead	5.0				D028	1,2,Dichloroethane	0.5			
D009	Mercury	0.2				D029	1,1 Dichloroethylene	0.7			
D010	Selenium	1.0				D030	2,4 Dinitrotoluene	0.13			
D011	Silver	5.0				D031	Heptachlor	0.008			
D012	Endrin	0.02				D032	Hexachlorobenzene	0.13			
D013	Lindane	0.4				D033	Hexachlorobutadiene	0.5			
D014	Methoxychlor	10.0				D034	Hexachloroethane	3.0			
D015	Toxaphene	0.5				D035	Methyl Ethyl Ketone	200.0			
D016	2,4 Dichlorophenoxyacetic acid	10.0				D036	Nitrobenzene	2.0			
D017	2,4,5 TP Silvex	1.0				D037	Pentachlorophenol	100.0			
D018	Benzene	0.5				D038	Pyridine	5.0			
D019	Carbon Tetrachloride	0.5				D039	Tetrachloroethylene	0.7			
D020	Chlordane	0.03				D040	Trichloroethylene	0.5			
D021	Chlorobenzene	100.0				D041	2,4,5 Trichlorophenol	400.0			
D022	Chloroform	6.0				D042	2,4,6 Trichlorophenol	2.0			
D023	o-Cresol	200.0				D043	Vinyl Chloride	0.2			

VIII. Benzene Waste Operations NESHAP Generator Certification. Complete only if D018 and/orU019 appear in section 6 (shipping information).

1. Is this waste generated by an industry with any of the following SIC Codes: 2911,2800-2899,3312 or 4953?
2. Does this stream have Benzene concentration of 10ppm or more?
3. Does this stream contain greater than 10% moisture?
4. Is this company's Total Annual Benzene (TAB) of 10Mg or greater per year?
5. Is NESHAP form required?

GENERATOR CERTIFICATION: THIS CERTIFICATION IS REQUIRED FOR EACH PROFILE.

This above information is to be held confidential and is true and accurate to the best of my knowledge.

Signature: Jennifer Rust Date: 3-27-09

Print Name: Jennifer Rust Title Inside Sales

Attachment

Full Profile Component Listing

Profile #: 0903-04581

COMPONENT	Minimum Concentration	Maximum Concentration	Actual Concentration	PPM
Paint Containing: (45-55 %)				
2-Propanol,1-Methoxy-, Acetate			28.00	
Xylene			42.00	
Methyl N-Amyl Ketone			23.00	
Ethylbenzene			7.00	
Paint Thinner Containing: (45-55 %)				
Zinc Dust			20.00	
Ethylbenzene			4.00	
Xylene			23.00	
Methanol			1.00	
Ethanol			26.00	
Methyl isobutyl ketone			2.00	
Ethyl Silicate			5.00	
Quartz			9.00	

EPAHO045000236

Sent 3/20

PCI

GENERATOR'S WASTE PROFILE SHEET

COMPLETE - PRINT - SIGN - FAX (219) 397-6411

$4.00/lb, $1640/min
4-55gal D

A. GENERATOR INFORMATION

Generator Name Precision Flange & machine, Inc.
Facility Address 13123 W. Hardy Rd. City Houston State TX Zip 77090
Customer Name CES Environmental
Customer Phone 713-800-7913 Customer FAX 713-748-8664
Generator USEPA/Federal ID# N/A
Is the Generator a "Conditionally Exempt Small Quantity Generator"? ○ Yes ⊖ No
Generator's S.I.C. Code (4 Digit)

BILLING INFORMATION (Check HERE if billing information is the same as above information) ☐

Billing Name CES Environmental Services, Inc.
Billing Address 4904 Griggs City Houston State TX Zip 77021
Billing Contact Name Juanita Thomas
Billing Phone 713-676-1400 Billing FAX 713-676-1676
PCI Sales Rep.

B. WASTE STREAM INFORMATION

Name of the Waste Paint Related material
Original Process Generating Waste painting operations
Is a representative sample provided? ☐ Yes ☑ No Is a MSDS attached? ☑ Yes ☐ No
Is there any analytical attached? ☐ Yes ☑ No

C. GENERAL CHARACTERISTICS

Color ~~Select~~ varies Odor ~~Select~~ Solvent / paint smell
Physical State @ 70 F 100 ~~Select~~ %Liquid Select %Sludge Select %Solid Select %Powder
Select %Gas (Aerosol) Select %Gas (Other) Select %Other

Phases Single Layer ○ Multi Layer ✓ How Many
Btu/lb <3,000 ○ 3,000-5,000 ○ 5,000-10,000 ✓ >10,000 ○
PH <2.0 ○ 2.0 to 4.0 ○ 4.0 to 10.0 ✓ 10.0 to 12.5 ○ >12.5 ○
Liquid Flash Point <73 F ○ 73 to 99 F ○ 100 to 139 F ✓ 140 to 200 F ○ >200 F ○ None ○
Specific Gravity 5-7 % Total Halogens Select

D. CHEMICAL COMPOSITION (Total of Maximum concentration must > or = to 100%)

Constituents	Min%	Max%	Constituents	Min%	Max%
20-50% Inc Dust	Select	Select		Select	Select
50-80% Rubber	Select	Select		Select	Select
	Select	Select		Select	Select

E. OTHER WASTE STREAM INFORMATION

Is this waste a "USED OIL" per 40CFR PART 279? Yes ○ No ✓

If "Yes", does the total halogen content exceed 1,000 ppm? Yes ○ No ○

If "Yes", can you identify the "Chlorinated Constituent" present in the oil? Yes ○ No ○

If "Yes", can you rebut the presumption that this material is a "Hazardous Waste"? Yes ○ No ○

Does the Waste have any of the following characteristics? (Please select all that apply)

○ Oxidizer ○ Organic Peroxide ○ Water Reactive ○ Air Reactive ○ Pyrophoric ○ Dioxin
○ Radioactive ○ Infectious ○ Pathogen ○ Carcinogen ○ Etiological ○ Aerosols
○ Explosive ○ Shock Sensitive ○ Undergo Hazardous Polymerization ○ Cylinder

Does the Waste contain any of the following?

	None	or	LESS THAN	or	ACTUAL		None	or	LESS THAN	or	ACTUAL
PCB'S	○		<50ppm ✓		ppm	Sulfides	○		<50ppm ✓		ppm
Cyanides	○		<50ppm ✓		ppm	Phenolics	○		<50ppm ✓		ppm

Does the waste represented by this profile contain benzene? Yes ○ No ✓

If "Yes", please list concentration in _ppm.

Is the Waste subject to the benzene waste operations NESHAP? (40CFR Part 61, Subpart FF) Yes ○ No ✓

Answer "Yes" if your waste contains benzene and if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Is the Waste subject to RCRA Subpart CC controls? (40 CFR 265 SUBPART CC) Yes ○ No ✓

If "No", does the Waste meet the organic LDR exemption for UHC'S? (40 CFR 268.48, 268.7) Yes ○ No ✓

If "No", does the Waste contain <500ppmw volatile organic(VO)? (40 CFR 265 SUBPART CC) Yes ○ No ✓

Does the Waste contain any Class I or Class II ozone-depleting substances? Yes ○ No ✓

If PCB'S are present, is the waste regulated by TSCA per 40 CFR 761? Yes ○ No ✓

F. SHIPPING INFORMATION:

Method of Shipment Drum

Bulk Liquid(> 500 Gallons) ☐ Bulk Solids(roll-off box, vacuum box, etc) ☐ Lab Pack ☐

Cubic Yard Boxes ☐ Totes ☐ (Please specify size)

Drums (Select size) ~~Select~~ 55gal Other (Please specify)

Shipping Frequency

Number of Units 4 Month Quarter ✓ Year Other

G. R.C.R.A. CHARACTERIZATION:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? Yes ○ No ✓ If "No", Please skip to section H.

Is this a "Universal Waste" per 40CFR part 273? Yes ✓ No ○

Is this a "Characteristic Waste"? Yes ✓ No ○

If "Yes", is it: ☑ D001 Ignitable ☐ D002 Corrosive ☐ D003 Reactive

Characteristic for Toxic Metals:

○ D004 ○ D005 ○ D006 ○ D007 ○ D008 ○ D009 ○ D010 ○ D011

✓ D035

G. R.C.R.A. CHARACTERIZATION: (Cont.)

Is this an "F" or "K" Listed waste or mixed with one? Yes (✓) No ( )

If "Yes", Please list all applicable code(s) from 40CFR261.31 and/or 261.32: ~~F003~~ F003, F005

Is this a commercial chemical product or spill cleanup that would carry a "U" or "P" waste code under 40CFR 261.33 (e) or (f) Yes ( ) No (✓)

If "Yes", Please list all applicable waste code(s)

Is this a state regulated waste? Yes (✓) No ( )

If "Yes", Please list all codes. UN1V209H

H. DOT SHIPPING INFORMATION:

Is this a U.S. Dept. of Transportation (USDOT) Hazardous Material? Yes (✓) No ( )

Proper Shipping Name per 49CFR 172.101 Hazardous Materials Table: RQ, Waste Paint Related Material

"Reportable Quantity" (if any) 10 ~~100~~ lbs

Hazard Class or Division No. 3 UN/NA # UN1263 Packing Group [ ] I [ ] II [✓] III

Is this a "Poison Inhalation Hazard"? Yes ( ) No (✓)

If "Yes", Please indicate Hazard Zone [ ] Zone A [ ] Zone B [ ] Zone C [ ] Zone D [ ] Other

List two primary hazardous constituents: 1 2

I. GENERATOR CERTIFICATION:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazards have been disclosed. I also certify that the obtained sample is representative of the waste material described above and give PCI permission and consent to make amendments and corrections.

Name Eddie Shields Title Accountants

Signature _____ Date _____

Submit **Clear** **New**

THIS SPACE IS FOR PCI APPROVALS DEPARTMENT USE

Date Received APPROVER'S INITIALS _____ PROFILE NUMBER 1

PROCESS CODE PRICE TRANS

PROPER WASTE CODES

PROPER D.O.T. SHIPPING NAME

HAZARD CLASS UN NA PACKING GROUP I II III

N.O.S DESCRIPTIONS

YARD INSTRUCTIONS

NO LANDFILL CUSTOMER RUN SALES ANALYTICAL MSDS ATTACHED

NO SAMPLE APPROVAL N/H FOR METALS PER GEN. SEE ATTACHED ANALYTICAL

RUN OX. SCREEN ON INCOMING RUN COMP. ON INCOMING

FORM CODE W SYSTEM CODE H

Class I

FCO #70/hr

PCI GENERATOR'S WASTE PROFILE SHEET

COMPLETE - PRINT - SIGN - FAX (219) 397-6411

A. GENERATOR INFORMATION

Generator Name Precision Flange & machine, Inc.
Facility Address 13123 W. Hardy Rd City Houston State TX Zip 77090
Customer Name CES Environmental
Customer Phone 713-800-7913 Customer FAX 713-748-8004
Generator USEPA/Federal ID# N/A
Is the Generator a "Conditionally Exempt Small Quantity Generator"? ○ Yes ✓ No
Generator's S.I.C. Code (4 Digit)

BILLING INFORMATION (Check HERE if billing information is the same as above information) ☐
Billing Name CES Environmental Services, Inc.
Billing Address 4904 Griggs City Houston State TX Zip 77021
Billing Contact Name Juanita Thomas
Billing Phone 713-676-1460 Billing FAX 713-676-1676
PCI Sales Rep.

B. WASTE STREAM INFORMATION

Name of the Waste Paint Related material
Original Process Generating Waste painting operations
Is a representative sample provided? ☐ Yes ☑ No Is a MSDS attached? ☑ Yes ☐ No
Is there any analytical attached? ☐ Yes ☑ No

C. GENERAL CHARACTERISTICS

Color ~~Select~~ Varies Odor ~~Select~~ Solvent / paint smell
Physical State @ 70 F 100 ~~Select~~ %Liquid Select %Sludge Select %Solid Select %Powder
Select %Gas (Aerosol) Select %Gas (Other) Select %Other
Phases Single Layer ○ Multi Layer ✓ How Many
Btu/lb <3,000 ○ 3,000-5,000 ○ 5,000-10,000 ✓ >10,000 ○
PH <2.0 ○ 2.0 to 4.0 ○ 4.0 to 10.0 ✓ 10.0 to 12.5 ○ >12.5 ○
Liquid Flash Point <73 F ○ 73 to 99 F ○ 100 to 139 F ✓ 140 to 200 F ○ >200 F ○ None ○
Specific Gravity 5-7 % Total Halogens Select

D. CHEMICAL COMPOSITION (Total of Maximum concentration must > or = to 100%)

Constituents	Min%	Max%	Constituents	Min%	Max%
20-50% Zinc Dust	Select	Select		Select	Select
50-80% Reducer	Select	Select		Select	Select
	Select	Select		Select	Select

E. OTHER WASTE STREAM INFORMATION

Is this waste a "USED OIL" per 40CFR PART 279? Yes ○ No ✓

If "Yes", does the total halogen content exceed 1,000 ppm? Yes ○ No ○

If "Yes", can you identify the "Chlorinated Constituent" present in the oil? Yes ○ No ○

If "Yes", can you rebut the presumption that this material is a "Hazardous Waste"? Yes ○ No ○

Does the Waste have any of the following characteristics? (Please select all that apply)

○ Oxidizer ○ Organic Peroxide ○ Water Reactive ○ Air Reactive ○ Pyrophoric ○ Dioxin
○ Radioactive ○ Infectious ○ Pathogen ○ Carcinogen ○ Etiological ○ Aerosols
○ Explosive ○ Shock Sensitive ○ Undergo Hazardous Polymerization ○ Cylinder

Does the Waste contain any of the following?

	None	or	LESS THAN	or	ACTUAL		None	or	LESS THAN	or	ACTUAL
PCB'S	○		<50ppm ✓		ppm	Sulfides	○		<50ppm ✓		ppm
Cyanides	○		<50ppm ✓		ppm	Phenolics	○		<50ppm ✓		ppm

Does the waste represented by this profile contain benzene? Yes ○ No ✓

If "Yes", please list concentration in _____ppm.

Is the Waste subject to the benzene waste operations NESHAP? (40CFR Part 61, Subpart FF) Yes ○ No ✓

Answer "Yes" if your waste contains benzene and if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Is the Waste subject to RCRA Subpart CC controls? (40 CFR 265 SUBPART CC) Yes ○ No ✓

If "No", does the Waste meet the organic LDR exemption for UHC'S? (40 CFR 268.48, 268.7) Yes ○ No ✓

If "No", does the Waste contain <500ppmw volatile organic(VO)? (40 CFR 265 SUBPART CC) Yes ○ No ✓

Does the Waste contain any Class I or Class II ozone-depleting substances? Yes ○ No ✓

If PCB'S are present, is the waste regulated by TSCA per 40 CFR 761? Yes ○ No ✓

F. SHIPPING INFORMATION:

Method of Shipment Drum

Bulk Liquid(> 500 Gallons) ☐ Bulk Solids(roll-off box, vacuum box, etc) ☐ Lab Pack ☐

Cubic Yard Boxes ☐ Totes ☐ (Please specify size)

Drums (Select size) ~~Select~~ 55gal Other (Please specify)

Shipping Frequency

Number of Units 4 Month Quarter ✓ Year Other

G. R.C.R.A. CHARACTERIZATION:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? Yes ○ No ✓ If "No", Please skip to section H.

Is this a "Universal Waste" per 40CFR part 273? Yes ✓ No ○

Is this a "Characteristic Waste"? Yes ✓ No ○

If "Yes", is it: ☑ D001 Ignitable ☐ D002 Corrosive ☐ D003 Reactive

Characteristic for Toxic Metals:

○ D004 ○ D005 ○ D006 ○ D007 ○ D008 ○ D009 ○ D010 ○ D011

✓ D035

G. R.C.R.A. CHARACTERIZATION: (Cont.)

Is this an "F" or "K" Listed waste or mixed with one? Yes (1) No ( )

If "Yes", Please list all applicable code(s) from 40CFR261.31 and/or 261.32: ~~F003~~ F003, F005

Is this a commercial chemical product or spill cleanup that would carry a "U" or "P" waste code under 40CFR 261.33 (e) or (f) Yes ( ) No (1)

If "Yes", Please list all applicable waste code(s)

Is this a state regulated waste? Yes (1) No ( )

If "Yes", Please list all codes. UN1V209H

H. DOT SHIPPING INFORMATION:

Is this a U.S. Dept. of Transportation (USDOT) Hazardous Material? Yes (1) No ( )

Proper Shipping Name per 49CFR 172.101 Hazardous Materials Table: RQ, Waste Paint Related Material

"Reportable Quantity" (if any) 10 ~~100~~ lbs

Hazard Class or Division No. 3 UN/NA # UN1263 Packing Group [ ] I [ ] II [1] III

Is this a "Poison Inhalation Hazard"? Yes ( ) No (1)

If "Yes", Please indicate Hazard Zone [ ] Zone A [ ] Zone B [ ] Zone C [ ] Zone D [ ] Other

List two primary hazardous constituents: 1 2

I. GENERATOR CERTIFICATION:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazards have been disclosed. I also certify that the obtained sample is representative of the waste material described above and give PCI permission and consent to make amendments and corrections.

Name Eddie Shields Title Accountants

Signature E Sl Date 3/23/09

Submit Clear New

THIS SPACE IS FOR PCI APPROVALS DEPARTMENT USE

Date Received APPROVER'S INITIALS _____ PROFILE NUMBER 1

PROCESS CODE PRICE TRANS

PROPER WASTE CODES

PROPER D.O.T. SHIPPING NAME

HAZARD CLASS UN NA PACKING GROUP I II III

N.O.S DESCRIPTIONS

YARD INSTRUCTIONS

NO LANDFILL CUSTOMER RUN SALES ANALYTICAL MSDS ATTACHED

NO SAMPLE APPROVAL N/H FOR METALS PER GEN. SEE ATTACHED ANALYTICAL

RUN OX. SCREEN ON INCOMING RUN COMP. ON INCOMING

FORM CODE W SYSTEM CODE H

MATERIAL SAFETY DATA SHEET

B69D11
05 '00

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

B69D11

HMIS CODES

Health	2
Flammability	0
Reactivity	1

PRODUCT NAME

ZINC CLAD* Zinc Dust (Part F)

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.

(216) 566-2917

DATE OF PREPARATION

29-SEP-06

INFORMATION TELEPHONE NO.

(216) 566-2902

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
100	7440-66-6	Zinc		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

Section 3 -- HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of dust.
EYE or SKIN contact with the product or dust.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

Section 4 -- FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

Continued on page 2

EPAHO045000244

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
Not Applicable	N.A.	N.A.

FLAMMABILITY CLASSIFICATION

Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam. Do not use water.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dry zinc dust will not ignite spontaneously. In contact with atmospheric moisture, zinc dust can form an explosive mixture with air. When dampened in confined spaces, explosive concentrations of hydrogen may form.

SPECIAL FIRE FIGHTING PROCEDURES

Do not use water. Full protective equipment including self-contained breathing apparatus should be used.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Sweep up material taking care not to generate airborne dust.

Section 7 -- HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Use entire container at one time. Do not reseal opened containers containing Zinc dust. Do not transfer Zinc dust to other containers.

Keep container closed when not in use. Do not take internally. Keep out of the reach of children.

Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid generating or breathing airborne dust. Wash hands after using.

This product may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

Continued on page 3

RESPIRATORY PROTECTION

.If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	58.60 lb/gal	7021 g/l
SPECIFIC GRAVITY	7.05	
BOILING POINT	Not Applicable	
MELTING POINT	Not Available	
VOLATILE VOLUME	0 %	
EVAPORATION RATE	N.A.	
VAPOR DENSITY	N.A.	
SOLUBILITY IN WATER	N.A.	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.00 lb/gal	0 g/l	Less Water and Federally Exempt Solvents
0.00 lb/gal	0 g/l	Emitted VOC

Section 10 -- STABILITY AND REACTIVITY

STABILITY -- Stable

CONDITIONS TO AVOID

Avoid contamination of Zinc dust or Zinc-containing mixtures with water. Avoid excess dusting of Zinc dust portions.

INCOMPATIBILITY

Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION

Will not occur

Section 11 -- TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

TOXICOLOGY DATA

CAS No.	Ingredient Name				
7440-66-6	Zinc				
		LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available

Continued on page 4

MATERIAL SAFETY DATA SHEET

B69V3
12 00

DATE OF PREPARATION
Sep 23, 2008

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B69V3

PRODUCT NAME
ZINC CLAD™ II Ethyl Silicate (Part E), Binder

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
4	100-41-4	**Ethylbenzene**		
		ACGIH TLV	100 PPM	7.1 mm
		ACGIH TLV	125 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
23	1330-20-7	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
1	67-56-1	**Methanol**		
		ACGIH TLV	200 ppm (Skin)	92 mm
		ACGIH TLV	250 ppm (Skin) STEL	
		OSHA PEL	200 ppm (Skin)	
		OSHA PEL	250 ppm (Skin) STEL	
26	64-17-5	**Ethanol**		
		ACGIH TLV	1000 PPM	44 mm
		OSHA PEL	1000 PPM	
2	108-10-1	**Methyl Isobutyl Ketone**		
		ACGIH TLV	50 PPM	16 mm
		ACGIH TLV	75 PPM STEL	
		OSHA PEL	50 PPM	
		OSHA PEL	75 PPM STEL	
5	78-10-4	**Ethyl Silicate**		
		ACGIH TLV	Not Available	1 mm
		OSHA PEL	100 PPM	
9	14808-60-7	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
Contains alcohols and acetates which can be absorbed through the skin.

HMIS Codes

Health	3*
Flammability	3
Reactivity	0

EPAHO045000247

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
60° F PMCC	1.0	36.5	RED LABEL -- Flammable, Flash below 100° F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

EPAHO045000248

VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT
Use of barrier cream on exposed skin is recommended.

OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	8.17 lb/gal	978 g/l
SPECIFIC GRAVITY	0.98	
BOILING POINT	148 - 335° F	64 - 168° C
MELTING POINT	Not Available	
VOLATILE VOLUME	76%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

5.24lb/gal	628g/l	Less Water and Federally Exempt Solvents
5.10lb/gal	612g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID
None known.

INCOMPATIBILITY
None known.

HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.
Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

EPAHO045000249

TOXICOLOGY DATA

CAS No.	Ingredient Name			
100-41-4	Ethylbenzene			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	Xylene			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
67-56-1	Methanol			
		LC50 RAT	4HR	64000 ppm
		LD50 RAT		5630 mg/kg
64-17-5	Ethanol			
		LC50 RAT	4HR	Not Available
		LD50 RAT		7060 mg/kg
108-10-1	Methyl Isobutyl Ketone			
		LC50 RAT	4HR	Not Available
		LD50 RAT		2080 mg/kg
78-10-4	Ethyl Silicate			
		LC50 RAT	4HR	Not Available
		LD50 RAT		6270 mg/kg
14808-60-7	Quartz			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

1 Gallon and Less may be Classed as CONSUMER COMMODITY, ORM-D
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Ethyl benzene 1000 lb RQ
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG II, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, (ERG#128)

IMO

UN1263, PAINT, CLASS 3, PG II, (16 C c.c.), EmS F-E, S-E

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	4	
1330-20-7	Xylene	23	
67-56-1	Methanol	1	
108-10-1	Methyl Isobutyl Ketone	2	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

EPAHO045000250

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

EPAHO045000251

[redacted]

Precision Fluids (Houston, TX)
waste @ Dresser

DB

direct

EPAHO04500025 2

Customer Special Requests/Requirements

P.O. Required:	☐ Y	☐ N	Fuel Surcharge:	☐ Y	☐ N
4% City of Houston Fee:	☐ Y	☐ N	4-hr Minimum:	☐ Y	☐ N

Job Estimate

	Item	CES Cost	Customer Charge	
4/8/08	Trans		250.00	
	31.5% Fc		78.75	
	Disposal - CES 4013951 (coolant/water) ITP		450.00	
	(degreaser/water) ITP		100.00	
	Inv. # 44651		878.75	
5/4/09	Trans 1 load		250.00	
	Loading demurrage 125 hrs		8625	
	95% Fc		3195	
	Disposal - CES 5594812 - 2800	196.00	784.00	.08
	10% Compliance fee	1153	1153	
	INV # 56268	207.53	1163.73	
	Due $23.91	956.20		

DSP

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	Precision Fluids
Contact:	Shelly Minton
Address:	523c Braithmoore
	Houston, Tx 77073
Phone:	713-896-0000
Fax:	713-896-0011

Salesperson:	Dm
Assigned:	Unassigned: X
Folder I.D.#	
Job Contact:	Jay Kearney
Phone:	713-824-4380
Fax:	

P.O Required:	Y:	N:	Fuel Surcharge:	Y:	N:
City of Houston:	Y:	N:	4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Trans			—	$250
waste water			—	$450/Tote
coolant & oil				
waste water			—	$100/Tote
Degreaser & water				
-SC			—	Std Rates

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO045000254

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
5/13/2009	56268

copy

Bill To: Precision Fluids
Attn: Accts Payable
5230 Brittmore
Houston, TX77003

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	05/04/09			
1	Transportation services by CES @ $250.00 per load		250.00	250.00
1.25	Loading demurrage @ $69.00 per hour		69.00	86.25
	9.5% Fuel Surcharge		31.95	31.95
2,800	Disposal of Non RCRA / Non DOT regulated wastewater @ $0.28 per gallon	5594812JJK	0.28	784.00
	1% Compliance Fee		11.53	11.53
	CES job #85555			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

Subtotal	$1,163.73
Sales Tax (8.25%)	$0.00
Total	$1,163.73

104

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	1	(713) 896-0606	005594812 JJK

GENERATOR

5. Generator's Name and Mailing Address
Precision Fluids
5230 Brittmoore
Houston, TX 77003
Generator's Phone: (713) 896-0606
State ID:

Generator's Site Address (if different than mailing address)
Precision Fluids
5230 Brittmoore
Houston , TX 77003
(713) 896-0606

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	2200	G	CESQ1192
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Precision Fluids (Houston, TX)
NH Wastewater
1) HOU-3197 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85555

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: CARLOS HERNANDEZ | Signature | Month 05 | Day 04 | Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Andres SOTO | Signature | Month 5 | Day 4 | Year 09

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: SAM BROWN | Signature | Month 5 | Day 4 | Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

104

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone: (713) 896-0606

4. Manifest Tracking Number: 005594812 JJK

5. Generator's Name and Mailing Address
Precision Fluids
5230 Brittmoore
Houston, TX 77003
Generator's Phone: (713) 896-0606
State ID:

Generator's Site Address (if different than mailing address)
Precision Fluids
5230 Brittmoore
Houston, TX 77003
(713) 896-0606

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	2800	G	CESQ1192
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: Precision Fluids (Houston, TX)
NH Wastewater
1) HCU-3197 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 85555

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: CARLOS HERNANDEZ
Signature: [signature]
Month 05 Day 04 Year 09

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Andres Soto
Signature: Andres Soto
Month 5 Day 4 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Sam Brown
Signature: [signature]
Month 5 Day 4 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO045000257

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Precision Fluids (Houston, TX)
NH Wastewater

Date : 5/4/2009 **Manifest # :**

Client : Precision Fluids **Ticket :** 85555

Phone : 7139960606 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature CARLOS HERNANDEZ **Signature**

Leave CES Yard :		**Arrive At Destination**	
Arrive At Customer :	1:35 PM	**Begin Unloading :**	
Begin Loading :	1:50 PM	**Finish Unloading :**	
Finish Loading :	3:30 PM	**Leave Destination :**	
Leave Customer :	3:45 PM	**Arrive At CES Yard :**	4:30 PM

225 - 100

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	193054
Tare Weight :		**Begining Odometer :**	192996
Net Weight :		**Total Miles :**	60

Driver : Soto, Andre **Tractor # :** 104 **Tote # :**

Signature : Andres Soto **Trailer # :** **Box # :**

Job Comments/Equipment :

PUMP OUT WESTE WATER FROM THE POLY TANK AND DRUMS

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000258

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
4/22/2008	44651

PAID

Bill To: Precision Fluids
Attn: Accts Payable
5230 Brittmore
Houston, TX77003

P.O. No.	Terms	Project
	Net 30	Dresser

Quantity	Description	Manifest #	Rate	Amount
	4/8/08			
	Transportation services by CES @ $250.00 trip fee		250.00	250.00
	31.5% Fuel Surcharge		78.75	78.75
1	Disposal of Non RCRA wastewater (coolant/water mixture) @ $450.00 per tote	4013951JJK	450.00	450.00
1	Disposal of Non RCRA wastewater (degreaser/water mixture) @ $100.00 per tote	4013951JJK	100.00	100.00
	CES Job#61703			

We appreciate your business!

Subtotal	$878.75
Sales Tax (8.25%)	$0.00
Total	$878.75

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TCESQG
2. Page 1 of: 1
3. Emergency Response Phone: (713) 824-4380
4. Manifest Tracking Number: 004013951 JJK

GENERATOR

5. Generator's Name and Mailing Address
Dresser
1210 West Sam Houston Parkway
Houston, TX 77003
Generator's Phone: (713) 824-4380

Generator's Site Address (if different than mailing address)
Dresser
1210 West Sam Houston Parkway
Houston, TX 77003
(713) 824-4380

6. Transporter 1 Company Name: CES Environmental Services, Inc.
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	Non-RCRA/Non DOT regulated wastewater(coolant/water mixture)	1	TP	330	G	CESQ1191		
	Non-RCRA/Non DOT regulated wastewater(degreaser/water mixture)	1	TP	330	G	CESQ1191		
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Folder ID : Precision Fluids (Houston, TX)
Waste @ Dresser
CES Job # - 61703
11a) 2685 11b) 2685 11c) 11d)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X IRRON R. COLLINS III
Signature: [signature]
Month: 4 Day: 8 Year: 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: J. HERNANDEZ
Signature: [signature]
Month: 4 Day: 8 Year: 08
Transporter 2 Printed/Typed Name: J. Hernandez
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: SAM BROWN
Signature: [signature]
Month: 4 Day: 8 Year: 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO045000260

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Precision Fluids (Houston, TX) Waste @ Dresser

Date : 4/8/2008 **Manifest # :**

Client : Dresser **Ticket :** 61703

Phone : 7138244380 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	1:30 pm	**Arrive At Destination**	
Arrive At Customer :	2:00 pm	**Begin Unloading :**	
Begin Loading :	2:05 pm	**Finish Unloading :**	
Finish Loading :	2:15 pm	**Leave Destination :**	
Leave Customer :	2:30 pm	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	
Net Weight :		**Total Miles :**	

Driver : **Tractor # :** 102 **Tote # :**

Signature : J. HERNANDEZ **Trailer # :** **Box # :**

Job Comments/Equipment : PICKED UP 2 FULL TOTES AS DIRECTED.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000261

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
4/22/2008	44651

Bill To: Precision Fluids
Attn: Accts Payable
5230 Brittmore
Houston, TX77003

COPY

P.O. No.	Terms	Project
	Net 30	Dresser

Quantity	Description	Manifest #	Rate	Amount
	4/8/08			
	Transportation services by CES @ $250.00 trip fee		250.00	250.00
	31.5% Fuel Surcharge		78.75	78.75
1	Disposal of Non RCRA wastewater (coolant/water mixture) @ $450.00 per tote	4013951JJK	450.00	450.00
1	Disposal of Non RCRA wastewater (degreaser/water mixture) @ $100.00 per tote	4013951JJK	100.00	100.00
	CES Job#61703			

We appreciate your business!

Subtotal	$878.75
Sales Tax (8.25%)	$0.00
Total	$878.75

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TCESQG | 2. Page 1 of 1 | 3. Emergency Response Phone: (713) 824-4380 | 4. Manifest Tracking Number: 004013951 JJK

GENERATOR

5. Generator's Name and Mailing Address
Dresser
1210 West Sam Houston Parkway
Houston, TX 77003
Generator's Phone: (713) 824-4380

Generator's Site Address (if different than mailing address)
Dresser
1210 West Sam Houston Parkway
Houston , TX 77003
(713) 824-4380

6. Transporter 1 Company Name: CES Environmental Services, Inc. | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460

U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	Non-RCRA/Non DOT regulated wastewater(coolant/water mixture)	1	TP	330	G	CESQ1191		
	Non-RCRA/Non DOT regulated wastewater(degreaser/water mixture)	1	TP	330	G	CESQ1191		
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Folder ID : Precision Fluids (Houston, TX)
Waste @ Dresser
CES Job # - 61703

11a) 2685 11b) 2685 11c) 11d)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: TERRON R. COLLINS III | Signature | Month 4 | Day 8 | Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: J. HERNANDEZ | Signature | Month 4 | Day 8 | Year 08

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: SAM BROWN | Signature | Month 4 | Day 8 | Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO045000263

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CESQG
2. Page 1 of
3. Emergency Response Phone: (713) 824-4380
4. Manifest Tracking Number: **004013951 JJK**

5. Generator's Name and Mailing Address
Dresser
[illegible]
Houston, TX 77003
Generator's Phone: (713) 824-4380

Generator's Site Address (if different than mailing address)
Dresser
[illegible]
Houston, TX 77003
(713) 824-4380

6. Transporter 1 Company Name: CES Environmental Services, Inc.
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Gregg Rd
Houston, TX 77011
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater (coolant/water mixture)	1	TP	330	G	CESQ1191
	2. Non-RCRA/Non DOT regulated wastewater (degreaser/water mixture)	1	TP	330	G	CESQ1191
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: Precision Fluids (Houston, TX)
Waste ID Dresser
(713) 2685 (713) 2685

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X [illegible] Collins III
Signature: [illegible] III
Month: 4 Day: 8 Year: 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: J. Hernandez
Signature: [signature]
Month: 4 Day: 8 Year: 08
Transporter 2 Printed/Typed Name: [illegible]
Signature:
Month: Day: Year:

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: [illegible]
Signature: [signature]
Month: Day: Year:

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO045000264

CES Environmental Services, Inc.

4904 Briggs Road
Houston, TX 77021
Tel: (713) 676-1460
Fax: (713) 676-1676

Transportation Work Ticket

Former ID : Precision Fluids (Houston, TX) Waste @ Dresser

Date : 4/8/2008

Manifest # :

Client : Dresser

Ticket : 61703

Phone : 7138244380

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature: [signature]

Signature

Leave CES Yard :	1:30 pm	Arrive At Destination	
Arrive At Customer :	2:00 pm	Begin Unloading :	
Begin Loading :	2:05 pm	Finish Unloading :	
Finish Loading :	2:15 pm	Leave Destination :	
Leave Customer :	2:30 pm	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	
Tare Weight :		Begining Odometer :	
Net Weight :		Total Miles :	

Driver :

Tractor # : 102

Tote # :

Signature : J. HERNANDEZ

Trailer # :

Box # :

Job Comments/Equipment : PICKED UP 2 FULL TOATES AS DIRECTED.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / Office) Golden Rod (Customer)

EPAHO045000265

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2008**

Dear **Shelly Minton**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2686

Expiration Date 4/4/2010

Generator: Dresser
Address: 1210 West Sam Houston Parkway
Houston, TX 77003

Waste Information

Name of Waste: Non hazardous wastewater
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
Degreaser used to clean out machines prior to use in machining operations
Color: varies **Odor:** none **pH:** 7-9
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

MP may require lead test OK

DB

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

SECTION 1: Generator Information

Company:	Dresser		
Address:	1210 West Sam Houston Pkwy		
City, State, Zip:	Houston, TX 77003		
Contact:	Jay Kozadoy	**Title:**	Agent for Dresser
Phone No:	713-824-4380	**Fax No:**	
24/hr Phone:	713-824-4380		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	NA

SECTION 2: Billing Information – ☐ Same as Above

Company:	Precision Fluids		
Address:	5230 Brittmoore		
City, State, Zip:	Houston, TX 77003		
Contact:	Shelly Minton	**Title:**	Accts Payable
Phone No:	713-896-0606	**Fax No:**	713-896-0610

SECTION 3: General Description of the Waste

Name of Waste: Non Hazardous Waste Water
Detailed Description of Process Generating Waste: Degreaser (MSDS Attached) Used to clean out machines prior to use in machining operations.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** None

Specific Gravity (water=1): .9-1.1 **Density:** 8-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☐ **Single-phase** ☒ **Multi-phase**

Container Type:	☐	**Drum**	☒	**Tote**	☐	**Truck**	☐ **Other (explain)**
Container Size:		____		275		____	____

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☒ **Yearly**
Number of Units (containers): 1 **Other:** ____
Texas State Waste Code No: CESQ1191
Proper U.S. DOT Shipping Name: Non-RCRA, Non-DOT Regulated Waste Water

Class:	NA	**UN/NA:**	Na	**PG:**	Na	**RQ:**	Na

EPAHO045000267

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200.	7-9	0mg/l	0mg/l	0-3%

Oil&Grease	TOC	Zinc	Copper	Nickel
<100mg/l	<5000mg/l	3.475mg/l	3.196mg/l	.230mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The waste consists of the following materials	Ranges are acceptable	or %
Water	90-95	%
Heavy Duty Degreaser (MSDS Attached)	5-10	%
Dirt, dust	~~2~~ 0-3	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
In House Tests

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: Ran In House
TCLP Volatiles: ____
TCLP Semi-Volatiles: ____
Reactivity: Ran In House
Corrosivity: Ran In House
Ignitability: Ran In House

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/26/08

Printed Name/Title: Jay Kozodey / VENDOR / AGENT FOR DRESCH / Gimpel

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 4-4-08 Approved Rejected

Approval Number: 2686

EPAHO045000268

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☑ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO045000269

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☑ Oils Subcategory

☒ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO045000270

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$100/tote
Trans $250 plus FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

None

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

~~None~~ Run pH, % solids, phenolics, metals;

5. **Treatment and Handling Protocol:**

Treat water in waste water treatment, will probably need to be processed in the heat tank.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ✓ ☐ Subcategory C

EPAHO045000271

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT INFORMATION

Name: TORNADO
Subtitle: HEAVY DUTY DEGREASER
Supplier's Name: Precision Fluids, Inc.
Supplier's Address: 5230 Brittmoore Rd. * Houston, TX 77041
ShippingName: Cleaning Compound, Liquid NOS
HazardClass: NON REGULATED

ChemicalFamily: N/A
Formula: N/A
Phone Number: (713) 896-0606

NPCA Hazardous Materials Identification System

Health	2
Flammability	0
Reactivity	0
Maximum Personal Protection	B

SECTION 2 - INGREDIENTS

NAME	CAS#	Wt%	PEL	TWA-TLV	STE-TLV	CARCINOGEN
Potassium Hydroxide 45%	1310-58-3	0 to 5	N/E	2mg/m3	N/E	No
Sodium Metasilicate	6834-92-0	10 to 15	2mg/m3	2mg/m4	N/E	No
2-Butoxyethanol	111-76-2	5 to 10	25 ppm	25 ppm	N/E	No

NO OTHER HAZARDOUS INGREDIENTS ARE CONTAINED IN THIS PRODUCT

SECTION 3 - PHYSICAL DATA

Boiling Range: 212+
Specific Gravity: 1.07
Vapor Pressure: 20
Vapor Density: >1
% Volatile: >71
pH: 12.0+
Solubility: 100%
Evaporation Rate: <1
Physical Description: Clear purple liquid with mild butyl scent.

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point (Method Used TCC): N/A
Upper Explosive Limit: N/A
Lower Explosive Limit: N/A
Extinguishing Media: N/A
Special Fire Fighting Procedures: Not Flammable
Unusual Fire & Explosion Hazards: N/A

SECTION 5 - REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur
Incompatibility (Materials to Avoid): Strong Acids
Hazardous Decomposition Products: Alkaline vapors in a fire

SECTION 6 - STORAGE AND HANDLING INFORMATION

Precautions to be taken in Handling & Storage: Keep out of reach of children. For use by trained personnel only. Keep container closed during storage. For institutional and industrial use only.

SECTION 7 - HEALTH HAZARDS

EFFECTS OF OVEREXPOSURE

Primary Route of Entry:

Skin:
Skin irritant. Prolonged or repeated exposure may cause moderate reddening or swelling.

Eyes:
Severe eye irritant. Liquid and mists can cause corneal injury.

Inhalation:
Vapors may be irritating to mucous membranes of the nose, throat and lungs.

Ingestion:
May be irritating to the mouth, throat, esophagus and gastrointestinal system. Vomiting and diarrhea expected with large doses.

FIRST AID PROCEDURES

Skin:
Remove contaminated clothing. Flush exposed area with large quantities of water. Seek medical attention if irritation persists.

Eyes:
Flush eyes with large quantities of water. Seek medical attention if irritation persists.

Inhalation:
Get to fresh air. Seek medical attention if symtoms persist.

Ingestion:
Drink two glasses of water. Seek medical attention immediately.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Information: Use with adequate ventilation.
Protective Gloves: Waterproof recommended
Other Protective: N/A
Ventilation: Provide local exhaust to keep TLV of Section 2 ingredients below acceptable limit.
Eye Protection: Safety glasses

SECTION 9 - SPILL OR LEAK PROCEDURE

Steps to be taken in case Material is Released or Spilled:
Mop up or otherwise absorb and hold for disposal
Waste Disposal Method:
Any method in accordance with local applicable law

Prepared According to 29 CFR 1910.1200

EPAHO045000273

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2008**

Dear **Shelly Minton**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2685

Expiration Date 4/4/2010

Generator: Dresser
Address: 1210 West Sam Houston Parkway
Houston, TX 77003

Waste Information

Name of Waste: Waste coolant and mixture
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
Used coolant and oil from machining operations
Color: varies **Odor:** none **pH:** 7-9
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GP cannot test for lead. May require heat treat OK

DB

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company:	Dresser		
Address:	1210 West Sam Houston Pkwy		
City, State, Zip:	Houston, TX 77003		
Contact:	Jay Kozadoy	**Title:**	Agent for Dresser
Phone No:	713-824-4380	**Fax No:**	
24/hr Phone:	713-824-4380		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	NA

SECTION 2: Billing Information – ☐ Same as Above

Company:	Precision Fluids		
Address:	5230 Brittmoore		
City, State, Zip:	Houston, TX 77003		
Contact:	Shelly Minton	**Title:**	Accts Payable
Phone No:	713-896-0606	**Fax No:**	713-896-0610

SECTION 3: General Description of the Waste

Name of Waste: Waste Coolant and Oil Mixture
Detailed Description of Process Generating Waste: Used coolant and oil from machining operations

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** None

Specific Gravity (water=1): .9-1.1 **Density:** 8-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type:	☐	Drum	☒	Tote	☐	Truck	☐ Other (explain)
Container Size:		____		275		____	____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 1 **Other:** ____

Texas State Waste Code No: CESQ1191

Proper U.S. DOT Shipping Name: Non-RCRA, Non-DOT Regulated Waste Water

Class: NA **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	7-9	0mg/l	0mg/l	0-3%

Oil&Grease	TOC	Zinc	Copper	Nickel
<100mg/l	7050mg/l	3.475mg/l	3.196mg/l	.230mg/l

SECTION 4: Physical and Chemical Data

The waste consists of the following materials	Ranges are acceptable	or %
Coolant	5-10	%
Oil	2	%
Water	88-93	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
In House Tests, Chlorinated Solvents negative

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: Ran In House
TCLP Volatiles: ____
TCLP Semi-Volatiles: ____
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/26/08

Printed Name/Title: Jay Kozobay / VENDOR / AGENT FOR DRESCH / Gimpel

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 4-4-08 Approved Rejected

Approval Number: 2685

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
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Oils Subcategory: Subpart B

- ☐ Used oils
- ☑ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO045000277

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☐ Metals Subcategory

☑ Oils Subcategory

☒ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$425/tote
Trans $250 plus FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

None

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

Flash, metals esp. chrome & lead; test for % solids, phenolics, % water

5. **Treatment and Handling Protocol:**

Treat water phase- put oil phase in with class 1 solids and solidify; may require heat tank.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dan Bowman
Cc: Gary Lenertz, Gary Peterson, Bo Cumberland

Date: 02/19/08

From: Miles Root

Lab Memo: 08-023

Subject: **Precision Fluids Evaluations - # 0208-04 and 05**

Two samples from Precision Fluids, 1210 West Sam Houston Pkwy, have been evaluated as potential sources for CES processing. The first, 0208-04 is degreaser water used to clean metal cutting machines. The second, 0208-05, is a mix of coolant, water and oil from the same type of process. A summary of the testing is found in the table below.

	0208-04	0208-05
Solids, vol%	1.5	0.5
Chlor-d-tect		>4000
% Oil		2
TOC	1420	7050
Flash Point	>140	
pH	10	7
Metals		
Cd	0.029	0.013
Cr	0.000	0.000
Cu	0.224	3.196
Ni	0.126	0.230
Zn	0.330	3.475

Dresser
1210 West Sam Houston Pkwy
Houston, TX, 77003
Precision Fluids
Att Shelly Minton

As can be seen in the summary, the chlor-d-tect on the coolant/oil stream is too high for acceptance. The metals on this stream in the water phase are also high in Cu and Zn, and would need to be diluted with special handling. The water processing assumes the oil could be accepted with a rebuttal provided by the supplier to account for the high chlorides. The degreaser water sample is good for us to receive and will process with no issues. Of the two samples, only evaluation 0208-04, the degreaser water, currently meets the requirements for our processing.

ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 8030313 1of 1

Customer: **CES Env. Svcs.** Sample ID: **0308-2X** Environ ID: **8030313**
Project ID: **0308-2X** Sampled: **03-10-08 11:50**
Project Loc: **Precision Fluid, Hou., TX** Matrix: **Waste Water** Received: **03-10-08**
Charge/P.O.: Type: **Grab** Reported: **03-12-08**
Dilution: **20.0** Extracted: **03-11-08** Analyzed: **03-11-08 13:45**
Analyst: **JAC**

VOLATILE SOLVENT SCAN - EPA SW-846/8260B GCMS # 1

ANALYTE/ PARAMETER	RESULT (mg/kg)	MQL (mg/kg)	CAS #
Acetone	2,100	40 *	67-64-1
Bromodichloromethane	< 0.10	0.10	75-27-4
Bromoform (Tribromomethane)	< 0.10	0.10	75-25-2
Bromomethane (Methyl bromide)	< 0.20	0.20	74-83-9
2-Butanone (MEK)	0.27	0.50	78-93-3
Carbon tetrachloride	< 0.10	0.10	56-23-5
Chlorobenzene	< 0.10	0.10	108-90-7
Chloroethane	< 0.10	0.10	75-00-3
Chloroform (Trichloromethane)	< 0.10	0.10	67-66-3
Chloromethane	< 0.10	0.10	74-87-3
Dichlorodifluoromethane (Freon 12)	< 0.20	0.20	75-71-8
1,1-Dichloroethane	< 0.10	0.10	75-34-3
1,2-Dichloroethane (EDC)	< 0.10	0.10	107-06-2
1,1-Dichloroethene	< 0.10	0.10	75-35-4
1,2-Dichloropropane	< 0.10	0.10	78-87-5
cis-1,3-Dichloropropene	< 0.10	0.10	10061-01-5
trans-1,3-Dichloropropene	< 0.10	0.10	10061-02-6
2-Hexanone	< 0.50	0.50	591-78-6
Isobutanol (Isobutyl alcohol)	< 4.00	4.00	78-83-1
4-Methyl-2-pentanone (MIBK)	0.12	0.50	108-10-1
Methylene chloride (Dichloromethane)	< 4.00	4.00	75-09-2
1,1,1,2-Tetrachloroethane	< 0.10	0.10	630-20-6
1,1,2,2-Tetrachloroethane	< 0.20	0.20	79-34-5
Tetrachloroethene	< 0.10	0.10	127-18-4
1,1,1-Trichloroethane	< 0.10	0.10	71-55-6
1,1,2-Trichloroethane	< 0.10	0.10	79-00-5
Trichloroethene	< 0.10	0.10	79-01-6
Trichlorofluoromethane (Freon 11)	< 0.20	0.20	75-69-4
1,2,3-Trichloropropane	< 0.20	0.20	96-18-4
Vinyl chloride	< 0.20	0.20	75-01-4

QUALITY CONTROL -- SURROGATE RECOVERIES

SURROGATE	RESULT	% RECOVERY	RANGE
1,2-Dichloroethane-d4 (SS)	0.055	110	80-120
Toluene-d8 (SS)	0.047	94	80-120
4-Bromofluorobenzene (SS)	0.058	116	80-120

Key: EPA - Environmental Protection Agency
TCEQ - Texas Commission on Environmental Quality
MQL - Method Quantitation Limit *1000X Dilution 03-10-08 12:18
mg/l - Milligrams per Liter (PPM Volume)
mg/kg - Milligrams per Kilogram (PPM Weight)

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO045000282

CHAIN OF CUSTODY

Page 1 of 1

ENVIRON EXPRESS LABORATORIES, INC.
401 North 11th. St. / La Porte, Texas 77571-3115
(281) 471-0951 / (800) 880-0156
Fax: (281) 471-5821 / After Hours: (281) 844-2308
e-mail: environexp@aol.com

Results To: DAN BOWMAN	Invoice To: SAME
Company: CES	Company: Same
Address: 4904 GRIGGS ROAD	Address:
City: HOUSTON State: TX Zip: 77021	City: State: Zip:
Phone: (713)676-1460	Phone:
Fax: (713)676-1676	Fax:
e-Mail: dbowman@cesenvironment.com	PO#: Quote#:

TAT (WORKING DAYS) CIRCLE ONE: 1 2 3

LAB LOT #

COC Present? Yes No

Shipment Sealed? Yes No

Samples Sealed? Yes No

Received on Ice? Yes No

Samples Intact? Yes No

Cooler Temp. (°C)

Preservative Shown? Yes No NA

Hold Time OK? Yes No

Res. Cl2 Check OK? Yes No NA

pH Check OK? Yes No NA

COC & Labels Agree? Yes No

Remarks & Additional Analyses

Project Name: 0308-2X	Sampler Remarks:
Project Location: Houston	
Project No: Precision Fluid	
Sampler (Print): Dustin Tarlas	
Sampler (Sign):	

EEL USE ONLY (LAB NO.)	SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	(C)OMP / (G)RAB	BTEX (8021B)	TPH (TX1005.3)	RCI	PAH	TOTAL EPA TCLP VOLATILES	TOTAL EPA TCLP SEMI-VOLS	TOTAL EPA TCLP RCRA 8 METALS	TOTAL Solvent Scan
	[2] Cntr. Type			G								
	Number			1								
	Volume			300z								
	[3] Preservative			1								
8030313	1) 0308-2X	3/10@11:50	WW	G								X
	2)											
	3)											
	4)											
	5)											
	6)											
	7)											
	8)											
	9)											
	10)											

	Print Name:	Company:	Date:	Time:		Print Name:	Company:	Date:	Time:
Relinquished By:	Dustin Tarlas	CES	3/10/08	4:50	Received By:	Ronda Hargrave	Environ	3-10-08	4:50
Relinquished By:					Received By:				
Relinquished By:					Received By:				

[1] Matrix Key
S:Soil W:Water WW:Waste Water SL:Sludge SO:Solid SE:Sediment L:Leachate WI:Wipe OR:Organic OL:Oil DS:Drum Solid DL:Drum Liquid O:Other _____

[2] Container Type Key
P:Plastic G:Glass V:VOA Glass O:Other _____

[3] Preservative Key
1:Ice(<4°C) 2:HCL 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:None

Delivery of samples constitutes acceptance of Environ's terms and conditions in the Price Schedule.

3/ 3
;2814715821
3-26-08; 1:48PM;Environ
EPAHO045000283

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

SECTION 1: Generator Information

Company:	Dresser		
Address:	1210 West Sam Houston Pkwy		
City, State, Zip:	Houston, TX 77003		
Contact:	Jay Kozadoy	**Title:**	Agent for Dresser
Phone No:	713-824-4380	**Fax No:**	
24/hr Phone:	713-824-4380		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Precision Fluids		
Address:	5230 Brittmoore		
City, State, Zip:	Houston, TX 77003		
Contact:	Shelly Minton	**Title:**	Accts Payable
Phone No:	713-896-0606	**Fax No:**	713-896-0610

SECTION 3: General Description of the Waste

Name of Waste: Waste Coolant and Oil Mixture
Detailed Description of Process Generating Waste: Used coolant and oil from machining operations

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** None

Specific Gravity (water=1): .9-1.1 **Density:** 8-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☐ **Single-phase** ☒ **Multi-phase**

Container Type:	☐	**Drum**	☒	**Tote**	☐	**Truck**	☐ **Other (explain)**
Container Size:		____		275		____	____

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☒ **Yearly**

Number of Units (containers): 1 **Other:** ____

Texas State Waste Code No: CESQ1191

Proper U.S. DOT Shipping Name: Non-RCRA, Non-DOT Regulated Waste Water

Class: NA **UN/NA:** Na **PG:** Na **RQ:** Na

EPAHO045000284

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	7-9	0mg/l	0mg/l	0-3%

Oil&Grease	TOC	Zinc	Copper	Nickel
<100mg/l	7050mg/l	3.475mg/l	3.196mg/l	.230mg/l

SECTION 4: Physical and Chemical Data

The waste consists of the following materials	Ranges are acceptable	or %
Coolant	5-10	%
Oil	2	%
Water	88-93	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
In House Tests, Chlorinated Solvents negative

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: Ran In House
TCLP Volatiles: ____
TCLP Semi-Volatiles: ____
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/26/08

Printed Name/Title: _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: _____ Date: _____ Approved Rejected Approval Number: _____	

EPAHO045000285

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO045000286

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☒ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO045000287

ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 8030313 1of 1

Customer: CES Env.
Project ID: 0308-2x
Project Loc: Precision Fluid
Charge/P.O.:

Sample ID: 0308-2X
Matrix: Waste Water
Type:
RECEIVED BASIS

Environ ID: 8030313
Sampled: 03-10-08 11:50
Received: 03-10-08
Reported: 03-28-08

ANALYTE / PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	TEST BY	DATE	TIME
Ignitability	> 160	°F	> 140	–	SW846.1010M	LC	03-28-08	15:05

Definitions:
TCLP - Toxicity Characteristic Leaching Procedure
REG - Regulatory Limit (User Should Confirm Limits)
MQL - Method Quantitation Limit
PPM - Parts Per Million
mg/l - PPM by Volume, mg/kg - PPM by Weight

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO045000288

CHAIN OF CUSTODY

Page 1 of 1

ENVIRON EXPRESS LABORATORIES, INC.
401 North 11th. St. / La Porte, Texas 77571-3115
(281) 471-0951 / (800) 880-0156
Fax: (281) 471-5821 / After Hours: (281) 844-2308
e-mail: environexp@aol.com

Results To: DAN BOWMAN	Invoice To: SAME
Company: CES	Company: Same
Address: 4904 GRIGGS ROAD	Address:
City: HOUSTON State: TX Zip: 77021	City: State: Zip:
Phone: (713)676-1460	Phone:
Fax: (713)676-1676	Fax:
e-Mail: dbowman@cesenvironmental.com	PO#: Quote#:

TAT (WORKING DAYS) CIRCLE ONE: 1 2 (3) 5

LAB LOT #	COC Present? Yes No
Shipment Sealed? (Yes) No	Samples Sealed? (Yes) No
Received on Ice? (Yes) No	Samples Intact? (Yes) No
Cooler Temp. (°C) 1	Preservative Shown? Yes No (NA)
Hold Time OK? (Yes) No	Res. Cl2 Check OK? Yes No (NA)
pH Check OK? Yes No (NA)	COC & Labels Agree? (Yes) No

Remarks & Additional Analyses

Project Name: 0308-ZX	Sampler Remarks:
Project Location: Houston	
Project No: PRECISION FLUID	
Sampler (Print): DUNN TACKETT	
Sampler (Sign):	

EEL USE ONLY (LAB NO.)	SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	(C)OMP / (G)RAB	[2] Cntr. Type	Number	Volume	[3] Preservative	BTEX (8021B)	TPH (TX1005.3)	RCI	PAH	TOTAL EPA TCLP: VOLATILES	SEMI-VOLS	RCRA 8 METALS	X Solvent Scan	Flash per D. Bowman 3-26-08/RH
8030313	1) 0308-ZX	3/10@11:30	WW	G	G	1	32oz	1								X	X
	2)																
	3)																
	4)																
	5)																
	6)																
	7)																
	8)																
	9)																
	10)																

Relinquished By:	Print Name:	Company:	Date:	Time:	Received By:	Print Name:	Company:	Date:	Time:
	Dunn Tackett	CES	3/10/08	4:50	Ronda Hargrave	Ronda Hargrave	Environ	3-10-08	4:50
Relinquished By:	Print Name:	Company:	Date:	Time:	Received By:	Print Name:	Company:	Date:	Time:
Relinquished By:	Print Name:	Company:	Date:	Time:	Received By:	Print Name:	Company:	Date:	Time:

[1] Matrix Key
S:Soil W:Water WW:Waste Water SL:Sludge SO:Solid SE:Sediment L: Leachate WI:Wipe OR:Organic OL:Oil DS:Drum Solid DL:Drum Liquid O:Other _____

[2] Container Type Key
P:Plastic G:Glass V:VOA Glass O:Other _____

[3] Preservative Key
1:Ice(<4°C) 2:HCL 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:None

Delivery of samples constitutes acceptance of Environ's terms and conditions in the Price Schedule.

3/ 3
:2814715821
3-28-08; 4:23PM;Environ
EPAHO04500289

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$425/tote
Trans $250 plus FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

None

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

Flash

5. **Treatment and Handling Protocol:**

Treat water phase- put oil phase in with class 1 solids and solidify

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

EPAHO045000290

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

ENVIRON EXPRESS LABS
401 N. 11TH STREET
LA PORTE, TEXAS 77571
281-471-0951 (WORK)
281-471-5821 (FAX)

FACSIMILE COVER

COMPANY: CES ENVIRONMENTAL

PLEASE DIRECT FOLLOWING PAGE(S) TO: Dan Bowman

PAGES INCLUDING COVER LETTER: 3

Added Flash per Dan Bowman

FAX: 713-676-1676

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this message in error, **please notify us immediately by telephone** and return the original message to us at the above address via postal service, at our expense.

Machine Shop

Coolant & Oil - Machine Shop

Kozodoy
Tel. 713-824-4380

Precision Fluids

(Dresser)

Kelly - 713-319-4804
Olery

Shelly 4:30-5:00

713-896-0606

1210 West Sam Houston Pkwy

77003

Britmoore & Clay Rd
713-896-0610

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713 676-1676

Fax Transmittal

Total Number of Pages (Including cover sheet): _____

Date: 3/26/08

To: Jay _____ _____

713-896-0610

From: **Dan Bowman**
CES Environmental Services, Inc.
Mobile Phone: (713) 854-6150

Notes: _____

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dan Bowman
Cc: Gary Lenertz, Gary Peterson, Bo Cumberland

Date: 02/19/08

From: Miles Root

Lab Memo: 08-023

Subject: **Precision Fluids Evaluations - # 0208-04 and 05**

Two samples from Precision Fluids, 1210 West Sam Houston Pkwy, have been evaluated as potential sources for CES processing. The first, 0208-04 is degreaser water used to clean metal cutting machines. The second, 0208-05, is a mix of coolant, water and oil from the same type of process. A summary of the testing is found in the table below.

	0208-04	0208-05
Solids, vol%	1.5	0.5
Chlor-d-tect		>4000
% Oil		2
TOC	1420	7050
Flash Point	>140	
pH	10	7
Metals		
Cd	0.029	0.013
Cr	0.000	0.000
Cu	0.224	3.196
Ni	0.126	0.230
Zn	0.330	3.475

Dresser
1210 West Sam Houston Pkwy
Houston, TX, 77003
Precision Fluids
Att Shelly Minton

As can be seen in the summary, the chlor-d-tect on the coolant/oil stream is too high for acceptance. The metals on this stream in the water phase are also high in Cu and Zn, and would need to be diluted with special handling. The water processing assumes the oil could accepted with a rebuttal provided by the supplier to account for the high chlorides. The degreaser water sample is good for us to receive and will process with no issues. Of the two samples, only evaluation 0208-04, the degreaser water, currently meets the requirements for our processing.

3365
c/o Preston Environmental
Consultants, LLC.

EPAHO045000296

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **6/11/2009**

Dear **Robbie Preston**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3365

Expiration Date 6/11/2011

Generator: c/o Preston Environmental Consultants, LLC.
Address: various locations

Waste Information

Name of Waste: Oily water
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
coolant, used oil, and rainwater from operations
Color: grey/brown **Odor:** none **pH:** 4-10
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
std PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company: C/O Preston Environmental Consultants, LLC.
Address: Various Locations / PO Box 697
City, State, Zip: " " / Denham Springs, LA 70727
Contact: Robby Mersiovsky Title: Managing Partner PEC
Phone No: 713-882-7740 Fax: 832-344-5452
24 / HR Phone: 713-882-7740 → 832-344-5452
U.S EPA I.D No:
State I.D: SIC Code na

SECTION 2: Billing Information

Company: Preston Environmental
Address: PO Box 697
City, State, Zip: Denham Springs LA 70727
Contact: ~~Robbie Preston~~ Robby Mersiovsky Title: ~~Sales Rep~~ Managing Partner PEC
Phone No: (225) 664-7767 / 713-882-7740 Fax: (225) 664-8655 / 832-344-5452

SECTION 3: General Description of the Waste

Name of Waste: Oily Water

Detailed Description of the Process Generating Waste:
coolant, used oil, and rainwater from operations

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: grey / brown Odor: none

Specific Gravity (Water=1): 1 Density: 7.8-8.3 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers: ☐ Single-Phas ☑ Multi-Phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size: 6000

Number Of Units: 4

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	4-10	0 mg/l	0 mg/l	1-5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
coolant	5	%
Used oils	5	%
water	90	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

na

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

na

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

na

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

TCLP Volatilies : x

TCLP Semi-Volatiles : x

Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☑ Oil-water ~~emulsions~~ or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : [signature] **Date :** 6/10/09

Printed Name / Title : Robert Meriosky / Agent for Generator Managing Partner PEC

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :
discuss pricing w/ Joy

Compliance Officer : [signature]

Date : 6-12-09 **Status :** Approved Rejected

Approval Number :

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

.10/gal + Trans + FSC
$70/hr

2. Contamination Limit (maximum limit before surchages apply):

std per rate sheet

3. Surcharge Pricing:

std per rate sht / Charge .05/gal surcharge for emulsions requiring HEAT

4. Special Testing Requirements:

pH, TOC, pH, % oil, flash, Cl2 detect

5. Treatment and Handling Protocol:

recover oil if % is high enough, decant water to WWTP

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

[redacted] Preston Env (Nanya Plastics)

Oily Sludge

EPAHO04500304

CES Environmental Services, Inc.

CONFIDENTIAL — Profit & Loss Sheet — CONFIDENTIAL

Billing/AP Information	
Name:	Preston Environmental
Contact:	
Address:	
Phone:	
Fax:	

Salesperson:	Joy Baker
Assigned:	Unassigned:
Folder I.D.#	Preston Env (Nanya Plastics)
Job Contact:	Robby Mersiovsky
Phone:	
Fax:	

P.O Required:	Y:	N:	x	Fuel Surcharge:	Y:	x	N:
City of Houston:	Y:	N:		4-hour Minimum:	Y:	x	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Recycling Oily Sludge (up to 40% solids)	CES	1919		$0.25/gal
excess solids $0.01/% excess of 40%				
transportation				$70/hr
fsc				current

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO045000305

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **10/30/2008**

Dear

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-1919

Expiration Date 11/20/2008

Generator: Nan Ya Plastics
Address: Hwy 59 North
Wharton, TX

Waste Information

Name of Waste: Oily sludge
TCEQ Waste Code #: CESQ2051
Container Type:
Detailed Description of Process Generating Waste:
Sludge/water from separator system
Color: black **Odor:** none **pH:** 7
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
none

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Nan Ya Plastics
Address : Hwy 59 North
City, State, Zip : Wharton TX
Contact : Mike Wall/ Luis Martial Title :
Phone No : (979) 532-7394 Fax :
24 / HR Phone :
U.S EPA I.D No :
State I.D : SIC Code

SECTION 2: Billing Information

Company : Preston Environmental
Address : 7303 Red River Dr
City, State, Zip : Richmond, TX 77469
Contact : Title :
Phone No : Fax :

SECTION 3: General Description of the Waste

Name of Waste : Oily sludge

Detailed Description of the Process Generating Waste:

Sludge/water from separator system

Physical State : ☑ Liquid ☑ Sludge ☐ Powder
☑ Solid ☐ Filter Cake ☐ Combination

Color : black Odor : none

Specific Gravity (Water=1) : na Density : na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☐ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☐ Single-Phas ☑ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size : 6000

Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO045000307

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ2051

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	7	<20 mg/l	<20 mg/l	50 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	>1500 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
water	60-30	%
Oil	20-35	%
Solids	20-50	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
none

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
Sample provided to CES

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

gnitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

s this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

f 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Metals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

AS AGENT for generator

Authorized Signature : [signature] **Date :** 10/22/08

Printed Name / Title : Robert Mersiousky

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Prabhakar Thangudu

Date : 11/20/2006 **Status :** Approved Rejected

Approval Number : HOU-1919

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.25/gal

2. Contamination Limit (maximum limit before surchages apply):

Chlor-d-tect on oil phase (must pass)
flash on solids (≥140°F)

3. Surcharge Pricing:

4. Special Testing Requirements:

Oil: Chlor-d-tect on oil phase, black oil blendability, Base oil specs
Solids: flash point (must be >140°F)

5. Treatment and Handling Protocol:

Pump oil to ① Base oil ~~Specs~~ (if meets specs) or ② Black oil. Send solids to Class I Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

[redacted] Preston Env (Energy Transfer,
Pipeline filters

EPAHO04500031 3

Customer Special Requests/Requirements

P.O. Required:	☐ Y	☑ N	Fuel Surcharge:	☑ Y	☐ N
4% City of Houston Fee	☐ Y	☑ N	4-hr Minimum:	☐ Y	☑ N

Job Estimate

	Item	*CES Cost*	*Customer Charge*
5/29	TRANS - (Vidor) 2.75hrs		192.50
	34.5% FSC		66.42
	DISPOSE-CES 401811 Co. 4yds		340.00
			598.92
KP	Invoice #46314		
5/29	TRANS (Manville) 3.75hrs		262.50
	34.5% FSC		90.57
	DISPOSE-CES 401811 Co. 5yds		425.00
KP	Invoice #46495		778.07

CES Environmental Services, Inc.

CONFIDENTIAL — Profit & Loss Sheet — CONFIDENTIAL

Billing/AP Information	
Name:	Robby Preston
Contact:	Robby Meriovsky
Address:	
Phone:	
Fax:	

Salesperson:	Joy
Assigned:	Unassigned: X
Folder I.D.#	Preston (Energy Transfer) Pipeline filter
Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:	N: X	Fuel Surcharge:	Y: X	N:
City of Houston:	Y:	N: X	4-hour Minimum:	Y:	N: X

Base Oils | Black Oils | Light Ends | Glycols | Emulsion Oils (>70% oil) | Emulsion Oils (50%-70% oil)

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Disposal	CES			$ES/yd
Transportation				$70/hr
fuel surcharge				current
Washout (if needed)				$175 ea.
Liner				$35 ea

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO045000315

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

COPY

Date	Invoice #
6/9/2008	46314

Bill To: Preston Environmental Consultants, LLC
PO Box 697
Denham Springs, LA 70727

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	05/29/08			
2.75	Transportation services by CES @ $70.00 per hour		70.00	192.50
	34.5% Fuel Surcharge		66.42	66.42
4	Disposal of Non RCRA regulated waste solids (pipeline filters) from Energy Transfer - Vidor $85.00 per yard	4018160JJK	85.00	340.00
	CES Job #64948			

We appreciate your business!

Subtotal	$598.92
Sales Tax (8.25%)	$0.00
Total	$598.92

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

605

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone (713) 882-7740

4. Manifest Tracking Number 004018160 JJK

GENERATOR

5. Generator's Name and Mailing Address
Energy Transfer - Vidor
1870 Mykawa
Pearland, TX 77588
Generator's Phone: (713) 882-7740
State ID:

Generator's Site Address (if different than mailing address)
Energy Transfer - Vidor
4 mi west of Hwy 105 on FM 1131
Vidor , TX 77670
(713) 882-7740

6. Transporter 1 Company Name
CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated waste solids (pipeline filters)		~~RT~~ CM	4 yards	Y	~~CESQ4891~~
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Preston Env (Energy Transfer - Manville)
Pipeline Filters & Pigs
Terminals
CES Job # - 64948
11a) 2798 11b) 11c) 11d)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: David H Wigzell
Signature: David H Wigzell
Month 05 Day 29 Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Benjamin Mata
Signature: Benjamin Mata
Month 05 Day 29 Year 08
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Sam Brown
Signature
Month 5 Day 29 Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO045000317

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Manifest Tracking Number: 004018160 JJK

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.		CM			
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Texoma LAS

2755

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: David H Wiezell

Signature: David H Wiezell

Month Day Year: 05 29 05

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month Day Year

Transporter 2 Printed/Typed Name | Signature | Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month Day Year

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO045000318

CES Environmental Services, Inc.

Transportation Work Ticket

Manifest #: 004018160 JJK

Ticket:

Consignee: CES Environmental Services, Inc.

Transporter: CES Environmental Services, Inc.

Signature: Randy Ernst

Signature:

Leave CES Yard:	9:30 AM.	Arrive At Destination:	
Arrive at Customer:	11:30 AM.	Begin Unloading:	
Begin Loading:	11:35 AM.	Finish Unloading:	
Finish Loading:	12:10 PM.	Leave Destination:	
Leave Customer:	12:15 P.M.	Arrive At CES Yard:	

Customer Ex #:

Total Hours:

CES Unload:

Ending Odometer:	99366		
Beginning Odometer:	99265		
Total Miles:	101		

Driver: Tractor #: Tote #:

Signature: Benjamin Mata. Trailer #: Box #:

EPAHO045000319

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

COPY

Date	Invoice #
6/9/2008	46315

Bill To: Preston Environmental Consultants, LLC
PO Box 697
Denham Springs, LA 70727

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	05/29/08			
3.75	Transportation services by CES @ $70.00 per hour		70.00	262.50
	34.5% Fuel Surcharge		90.57	90.57
5	Disposal of Non RCRA regulated waste solids (pipeline filters) from Energy Transfer - Manville @ $85.00 per yard	4018161JJK	85.00	425.00
	CES job #64943			

We appreciate your business!

Subtotal	$778.07
Sales Tax (8.25%)	$0.00
Total	$778.07

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

625

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of 1
3. Emergency Response Phone
4. Manifest Tracking Number: 004018161 JJK

GENERATOR

5. Generator's Name and Mailing Address
Energy Transfer - Manville
1100 Uzzel Rd
Manville, TX 77578
State ID:
Generator's Phone:

Generator's Site Address (if different than mailing address)
Energy Transfer - Manville
1100 Uzzel Rd
Manville , TX 77578

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non-RCRA/Non DOT regulated waste solids (pipeline filters)		RT CM	5	Y	CESQ4891		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Manifest
Folder ID : Preston Env (Energy Transfer - Vidor)
Pipeline Filters & Pigs
CES Job # - 64943

11a) 2797 11b) 11c) 11d)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: David A Wiczey
Signature:
Month 05 Day 29 Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Benjamin Mata
Signature: Benjamin Mata
Month 05 Day 29 Year 08

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Sam Brown
Signature:
Month 5 Day 29 Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Manifest Tracking Number: **004018161 JJK**

5. Generator's Name and Mailing Address

Energy Transfer - Manville
1100 Uzzel Rd
Manville, TX 77578
State ID:
Generator's Phone:

Generator's Site Address (if different than mailing address)

Energy Transfer - Manville
1100 Uzzel Rd
Manville, TX 77578

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900

U.S. EPA ID Number: TXD008050461

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

CES Environmental Services, Inc.
9604 Griggs Rd
Houston, TX 77021
Facility's Phone: (713) 676-1460

State ID 30900

U.S. EPA ID Number: TXD008050461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non PCB (/Non DOT regulated waste solids (pipeline filters)		Cm	5	Y	CES Q4841
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Manuel

Folder ID: Preston Env (Energy Transfer - Vidor) CES Int. # 14945
Pipeline Filters & Pigs
(1a) 2797 (1b) (1c) (1d)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DAVID H WIGZELL

Signature: [signature]

Month 05 Day 29 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Benjamin Mado

Signature: Benjamin Mado

Month 05 Day 29 Year 08

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Sam Brown

Signature: [signature]

Month 5 Day 29 Year 08

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO045000322

CES Environmental Services, Inc.

4321 Briggs Road
Houston, TX 77021
Tel: (713) 676-1460
Fax: (713) 676-1678

Transportation Work Ticket

Folder ID : Preston Env (Energy Transfer - Vidor)
Pipeline Filters & Pigs

Date : 5/29/2008 Manifest # : 004018161 JJK

Energy Transfer - Manville

Client : Ticket : 64943

Phone : CES Environmental Services, Inc.

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature Signature

Leave CES Yard :	12:15 P.M.	Arrive At Destination	4:00 P.M.
Arrive At Customer :	2:45 P.M.	Begin Unloading :	
Begin Loading :	3:00 P.M.	Finish Unloading :	
Finish Loading :	3:15 P.M.	Leave Destination :	
Leave Customer :	3:20 PM.	Arrive At CES Yard :	

Customer PO #.

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	99509
Tare Weight :		Beginning Odometer :	99366
Net Weight :		Total Miles :	143

Driver : Mata, Benjamin Tractor # : 293 Tote # :

Signature : Benjamin Mata Trailer # : 250 Box # : C05

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO045000323

Praxair Inc (Praxair Inc - 1900 grant Ave)
Used Oil

VISA

4715 6341 9457
5522

6/10

Earl E Didone

409-948-6310

Customer Special Requests/Requirements

P.O. Required:	☒ Y	☐ N	Fuel Surcharge:	☒ Y	☐ N
4% City of Houston Fee:	☐ Y	☒ N	4-hr Minimum:	☐ Y	☒ N

Job Estimate

Item	CES Cost	Customer Charge
4/30 PO ~~#~~		
Trans 1 load		350.00
31.5% FSC		110.25
Recycle - CES BOL 63286 5 DM		250.00
		710.25

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	Praxair Inc
Contact:	Earl Didone
Address:	P.O. Box 1461
	Texas City TX 77592
Phone:	409-643-5635
Fax:	409-948-6310

Salesperson:	Dana Carter
Assigned:	X
Unassigned:	

Folder I.D.#	Praxair Inc (Praxair Inc - 1800 Grant Ave) Used Oil

Job Contact:	Earl Didone	
Phone:	409-643-5635	
Fax:	409-948-6310	

P.O Required:	Y:	X	N:		Fuel Surcharge:	Y:	X	N:	
City of Houston:	Y:		N:	X	4-hour Minimum:	Y:		N:	X

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Recycle Used oil	CES	2764		$50.00/drum
Transportation	CES			$350.00/load

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO045000327

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
5/13/2008	45329

Bill To: Praxair, Inc.
Attn: Earl Didone
PO Box 1461
Texas City, TX 77592

COPY

P.O. No.	Terms	Project
	Net 30	1800 Grant Ave.

Quantity	Description	Manifest #	Rate	Amount
	4/30/08			
1	Transportation services by CES @ $350.00 per load		350.00	350.00
	31.5% Fuel Surcharge		110.25	110.25
5	Recycling of Non RCRA/Non DOT regulated material (used oil) @ $50.00 per drum	BOL 63286	50.00	250.00
	CES Job#63286			

PAID
CK. NO. V15A
DATE 5-16-08

We appreciate your business!

Subtotal	$710.25
Sales Tax (8.25%)	$0.00
Total	$710.25

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

102

CES Environmental Services, Inc.

Bill Of Lading # : 63286

Folder ID :	Praxair, Inc. (1800 Grant Avenue) Recyclable Drums Used oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Praxair, Inc. (1800 Grant Avenue)
1800 Grant Avenue
Texas City , TX 77590
(409) 643-5635

11a) 2764
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment, Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(2) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	5	DM	[illegible]	G	Non-RCRA/Non-DOT Regulated Material(used oil)

Shipper : Praxair, Inc. (1800 Grant Avenue)
Per : Earl E. Ridone **Signature :** Earl E. Ridone **Date :** 7/30/08

Carrier CES Environmental Services, Inc.
Per : Jose Frias **Signature :** [signature] **Date :** 7/30/08

Receiving Facility CES Environmental Services, Inc.
Per : Sam Brown **Signature :** [signature] **Date :** 7-30-08

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO045000329

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1678

Transportation Work Ticket

Folder ID : Praxair, Inc. (1800 Grant Avenue) Recyclable Drums

Date : 4/30/2008 Manifest # :

Client : Praxair, Inc. (1800 Grant Avenue) Ticket : 63286

Phone : 4096435635 Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature Zach E. Dillon Signature

Leave CES Yard :	~~8:45~~ AM	Arrive At Destination	4:31 PM
Arrive At Customer :	~~3:00~~ PM	Begin Unloading :	
Begin Loading :	3:10 PM	Finish Unloading :	
Finish Loading :	3:35 PM	Leave Destination :	
Leave Customer :	3:45 PM	Arrive At CES Yard :	4:31 PM

Customer PO #:	Total Hours:	CES Unload: ☐

Gross Weight :		Ending Odometer :	
Tare Weight :		Begining Odometer :	161612
Net Weight :		Total Miles :	

Driver : Judd Ervin Tractor # : 102 Tote # :

Signature : Trailer # : Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/29/2008**

Dear **Earl Didone**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2764

Expiration Date 4/29/2010

Generator: Praxair, Inc. (1800 Grant Avenue)
Address: 1800 Grant Avenue
Texas City, TX 77590

Waste Information

Name of Waste: Used Oil
TCEQ Waste Code # Recycle
Container Type:
Detailed Description of Process Generating Waste:
used oil from machines in plant operations
Color: dark **Odor:** hydrocarbon **pH:** 6-10
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

OK DC

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company:	Praxair Inc (Texas City - 1800 Grant Avenue)		
Address:	1800 Grant Avenue		
City, State, Zip:	Texas City, TX		
Contact:	Earl Didone	**Title:**	Plant Tech.
Phone No:	409/643-5635	**Fax No:**	409/948-6310
24/hr Phone:	Cell # 281-802-2767		
U.S. EPA I.D. No:	TXCES QG		
State I.D.		**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:	Praxair, Inc		
Address:	P.O. Box 1461		
City, State, Zip:	Texas City, TX 77592		
Contact:	Same	**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Waste

Name of Waste: Used Oil
Detailed Description of Process Generating Waste: Used oil from machines in plant operations

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: dark **Odor:** hydrocarbon

Specific Gravity (water=1): .9 **Density:** 8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☒	**Drum**	☐ **Tote**	☐ **Truck**	☐	**Other (explain)**	
Container Size:		55 gal	____	____		____	

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly
Number of Units (containers): 5 **Other:** ____
Texas State Waste Code No: Recycle
Proper U.S. DOT Shipping Name: Non RCRA Non DOT Regulated Used Oil

Class:	NA	**UN/NA:**	NA	**PG:**	na	**RQ:**	na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
~~>150~~ >200	6-10	0mg/l	0mg/l	0-1%

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500mg/l	NAmg/l	NAmg/l	NAmg/l	NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Used Oil (motor)	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
None

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Earl E. Didone **Date:** 04-29-08

Printed Name/Title: Earl Didone

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Thyer

Date: 4/29/08 Approved Rejected

Approval Number: 2764

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO045000334

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO045000335

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$50.00/drum
$350.00/freight
Bring empty replacement drums - open top metal for used oil

2. **Contamination Limits (maximum limit before surcharges apply):**

None

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

chlor-d-tect, flash, % solids

5. **Treatment and Handling Protocol:**

check compatibility with black oils

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO045000336

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

see above

8. **Management for Product Recovered/Recycled (if applicable);**

mix with black oils

EPAHO045000337

TEXAS CITY CO2 FACILITY
1800 GRANT AVE.

Note - This facility is a Conditionally Exempt Small Quantity Generator (CESQG) and does not require an EPA I.D. Number or Solid Waste Registration Number. This facility must not generate more than 100 kilograms (approx. 1/2 drum) of hazardous wastes per month to remain in this CESQG status!

Facility Wastes

Waste	TNRCC Waste Code
Activated Alumina/Carbon	CESQ3102
Waste Oil	CESQ2062
Oil Absorbant Pads	CESQ4892
Petroleum Naphtha	CESQ203H
Plant Trash	CESQ9992

The Facility I.D. Number is CESQG.

The EPA I.D. Number to use is TXCESQG.