K & D INDUSTRIAL SERVICES, INC.

24-HOUR SERVICE

6470 BEVERLY PLAZA
ROMULUS, MICHIGAN 48174

TELEPHONE
729-3350

US EPA RECORDS CENTER REGION 5
482116

RECEIVED
APR 8 19..
Water Qual. Control

April 4, 1980

Mr. Pete Ollila
Department of Natural Resources
Stephens T. Mason Building
P.O. Box 30028
Lansing, Michigan 48909

Dear Pete:

Enclosed you will find a copy of the analysis given to me by C. F. Meir. I hope that they will be of help. Please keep me informed as to the progress on this project.

Best regards,

David Billings
General Manager

DB/dmb

enclosure

CIS CHEMICAL INDUSTRIAL SERVICES INC.
2616 CLIFFORD - DETROIT, MICHIGAN 48201 - 313-964-3119

MEMBERSHIPS IN:
AMERICAN CHEMICAL SOCIETY (ACS)
AMERICAN SOCIETY OF LUBRICATING ENGINEERS (ASLE)
ASSOCIATION OF ANALYTICAL CHEMISTS (ANACHEMS)
SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

20 YEARS EXPERIENCE IN
INDUSTRIAL TESTING
ON SITE SAMPLING
CONSULTING
EXPERT TESTIMONY

REPORT NUMBER	P.O. NUMBER	DATE RECEIVED	REPORT DATE
380-188		3-14-80	3-21-80

C. F. Meir Company
9141 E. Jefferson
Detroit, Michigan 482

Attn: Mr. C. F. Meir

Services Requested: The client requested Chemical Industrial Services, Inc. to inspect and sample various storage tanks located on Lycaste corner of Freud, Detroit, Michigan.

Samples were taken from various tanks and the material returned to the laboratory for analyses.

Results:

	Tank 10 & 11	Tank 14 & 15	Tank 7 & 8	Tank 1 & 2
Aromatics (Total	25%	20%	30%	35%
Aliphatics (Total)	Balance	Balance	Balance	Balance
Chlorinated Solvents	2.2%	1.8%	3.5%	2.5%
P C B	42 ppm	44 ppm	25 ppm	22 ppm
Alcottols	5%	10%	5%	5%
Ketones	10%	10%	5%	5%
Flash Point	70°F	75°F	80°F	80°F

C. F. MEIR CO.
Report # 380-188

Results(continued) WATER PHASE (Results in ppm

	Tank 10 & 11	Tank 14 & 15	Tank 7/8	Tank 1 &2
Lead	22	176	202	210
Cadmium	31	202	311	360
Phosphorous	1485	1780	1650	1980
Phenols	100	385	200	280
Chromium (Hexvalent)	135	154	140	150
Chromium (Total)	430	560	288	310
P C B	5.5	10	12	14

CHEMICAL INDUSTRIAL SERVICES, INC.

Caulton Ray, Jr.
Manager

CR:mr

CIS CHEMICAL INDUSTRIAL SERVICES

Results(continued) WATER PHASE (Results in ppm

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CHEMICAL INDUSTRIAL SERVICES, INC.

Caulton Ray, Jr.
Manager

CR:mr

LIWH

NATURAL RESOURCES COMMISSION
CARL T. JOHNSON
E. M. LAITALA
DEAN PRIDGEON
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING, BOX 30028, LANSING, MICHIGAN 48909
HOWARD A. TANNER, Director

March 31, 1980

Came back unclaimed.

CERTIFIED MAIL

Transenvrionmental Corporation
Attn: John R. Mateyko
P. O. Box 24030
Cincinnati, Ohio 45224

Dear Sir:

Our records show that you were licensed to haul liquid industrial waste for 1979. Be advised that this license expired on February 29, 1980. Section 2, Act 136, of Public Acts of 1969, states, "a person shall not engage in or carry on a business of removing liquid industrial waste from the premises of another person unless he is duly licensed." Therefore, if you are hauling liquid industrial waste, you must cease and desist from doing same until such time as you become properly licensed.

If you should have any questions regarding this matter, please feel free to contact me or any other staff members of the Oil & Hazardous Materials Control Section at (517) 373-2794.

Failure to comply will result in enforcement action under the penalty provisions of the act.

Very truly yours,

WATER QUALITY DIVISION

Tomas Leep

Tomas Leep
Water Quality Specialist
Oil & Hazardous Materials Control Section

TL:dg
cc: Tom Leep
Environmental Enforcement
Files

MICHIGAN
THE GREAT LAKE STATE

R1026 10/76

file Transenvironmental - KOI Petroleum

K & D INDUSTRIAL SERVICES, INC.

24-HOUR SERVICE

6470 BEVERLY PLAZA
ROMULUS, MICHIGAN 48174

TELEPHONE
729-3350

April 4, 1980

RECEIVED
APR 8 1980
Water Qual. Control

Mr. Pete Ollila
Department of Natural Resources
Stephens T. Mason Building
P.O. Box 30028
Lansing, Michigan 48909

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Best regards,

David Billings

David Billings
General Manager

DB/dmb

enclosure

CIS CHEMICAL INDUSTRIAL SERVICES INC.

2616 CLIFFORD - DETROIT, MICHIGAN 48201 - 313 - 964-3119

MEMBERSHIPS IN:
AMERICAN CHEMICAL SOCIETY (ACS)
AMERICAN SOCIETY OF LUBRICATING ENGINEERS (ASLE)
ASSOCIATION OF ANALYTICAL CHEMISTS (ANACHEMS)
SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

20 YEARS EXPERIENCE IN
INDUSTRIAL TESTING
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EXPERT TESTIMONY

REPORT NUMBER	P.O. NUMBER	DATE RECEIVED	REPORT DATE
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C. F. Meir Company
9141 E. Jefferson
Detroit, Michigan 482

Attn: Mr. C. F. Meir

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Aromatics (Total	25%	20%	30%	35%
Aliphatics (Total)	Balance	Balance	Balance	Balance
Chlorinated Solvents	2.2%	1.8%	3.5%	2.5%
P C B	42 ppm	44 ppm	25 ppm	22 ppm
Alcottols	5%	10%	5%	5%
Ketones	10%	10%	5%	5%
Flash Point	70°F	75°F	80°F	80°F

PLEASE PROVI[illegible] ALL INFORMATION REQUESTED BELOW, T[illegible] RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY _____ PLANT LOCATION

STREET _____ NAME OF PERSON TO CONTACT

CITY _____ STATE _____ ZIP _____

YOUR CODE OR DESCRIPTION OF MATERIAL Cyclizer Waste (020) TELEPHONE NO. ( )

VOLUME 18-36 drums/mo. CONTAINER drums

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☐ Semisolid ☒

PRODUCT PHASES OR LAYERS – None ☒ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☐ 5-20% ☐ >20% ☒ Weight ☒ or Volume ☐

SOLIDS COMPOSITION octadecene, Ksalts, siloxanes

SPECIFIC GRAVITY @ 60°F. – _____

<0.8 ☐ 0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☒

HEAT VALUE (BTU/LBX10 3) –

<1 ☐ 1-5 ☒ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☒ NO ☐

BOUND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☐ Low ☐ Unknown ☒

VISCOSITY @ 70°F. – Low ☐ Medium ☐ High ☒

COMPOSITION OF LAYERS –

Top _____% Bottom

_____%

_____%

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20

COMPOSITION octadecene, ksalts, siloxanes

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☒ Nor

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-1

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☒ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics

ANALYSIS OF WASTE STREAM(S)

WT. % _____ WT. % _____

WT. % _____ WT. % _____

WT. % _____ WT. % _____

WT. % _____ WT. % _____

WT. % _____ WT. % _____

COMMENTS

Consists of pumpings from cyclizers. Primarily octadecene, KOH, K salts, and siloxanes. Should burn when incinerated.

DANGER: CAUSES BURNS
see attached label

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL.

SIGNATURE _____ TITLE _____

PHONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

DATE _____ _____

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM-DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

ANY _____ PLANT LOCATION

T _____ NAME OF PERSON TO CONTACT

STATE _____ ZIP _____

CODE OR DESCRIPTION OF MATERIAL MTES (100°C-) Waste (040) TELEPHONE NO. ( )

IME 6 drums/month CONTAINER drums

CHECK APPROPRIATE BLOCKS

CAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

UCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

ENDED SOLIDS — <5% ☒ 5-20% ☐ >20% ☐ Weight ☒ or Volume ☐

S COMPOSITION _____

FIC GRAVITY @ 60°F. — _____

0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

VALUE (BTU/LBX10 3) —

1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

THE MATERIAL BURN — YES ☒ NO ☐

ID SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

CITY — High ☐ Medium ☐ Low ☐ Unknown ☒

SITY @ 70°F. — Low ☒ Medium ☐ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom _____ %

_____ % _____ %

_____ % _____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☒ 5-20 ☐ >20% ☐

COMPOSITION _____

FLASH POINT (OC) — <80°F. ☒ 80-150°F. ☐ >150°F. ☐ None ☐

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH — 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

le Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

YSIS OF WASTE STREAM(S)

_____ WT. % _____

WT. % _____

WT. % _____

_____ WT. % _____

_____ WT. % _____

COMMENTS

A mixture consisting primarily of ethanol (70%), hexane (20%) and MTES (10%).

DANGER! EXTREMELY FLAMMABLE
see attached label

ICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

COVERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

SE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

IE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

ATURE _____ TITLE _____

E NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

MPANY _____ PLANT LOCATION _____

REET _____ NAME OF PERSON TO CONTACT _____

TY _____ STATE _____ ZIP _____

UR CODE OR DESCRIPTION OF MATERIAL ES-40 Lites Waste (040) TELEPHONE NO. ( )

LUME 2 drums/year CONTAINER drums

CHECK APPROPRIATE BLOCKS

YSICAL STATE @ 70°F. – Solid ☐ Liquid ☒ Semisolid ☐

ODUCT PHASES OR LAYERS – None ☒ Bilayered ☐ Multilayered ☐

SPENDED SOLIDS – <5% ☒ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

LIDS COMPOSITION _____

ECIFIC GRAVITY @ 60°F. – _____

☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

AT VALUE (BTU/LBX10 3) –

☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☒ 16-20 ☐

L THE MATERIAL BURN – YES ☒ NO ☐

UND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

XICITY – High ☐ Medium ☐ Low ☐ Unknown ☒

COSITY @ 70°F. – Low ☒ Medium ☐ High ☐

COMPOSITION OF LAYERS –

Top _____ % Bottom _____

_____ % _____

_____ % _____

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >2

COMPOSITION _____

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☒ >150°F. ☐ No

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >

pH – 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐ 10-

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

atile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxi

LYSIS OF WASTE STREAM(S)

% _____ WT. % _____

_____ WT. % _____

_____ WT. % _____

_____ WT. % _____

_____ WT. % _____

COMMENTS

Ethyl silicate.

WARNING! FLAMMABLE.

see attached label

ICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER: _____

COVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

E ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHE

E BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

TURE _____ TITLE _____

NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE _____

PLEASE PROVIDE AL' 'FORMATION REQUESTED BELOW, THEN F 'RN THIS FORM TO:

CHEM - DYNE Corporation

503 Ford Boulevard
Hamilton, Ohio 45011

ANY _____ PLANT LOCATION _____

T _____ NAME OF PERSON TO CONTACT _____

_____ STATE _____ ZIP _____

R CODE OR DESCRIPTION OF MATERIAL Band Ply Lube Waste (040) TELEPHONE NO. ( )

IME 13 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

ICAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

UCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

ENDED SOLIDS — <5% ☐ 5-20% ☒ >20% ☐ Weight ☒ or Volume ☐

DS COMPOSITION inert fillers

IFIC GRAVITY @ 60°F. — _____

0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☒ 1.4-1.7 ☐ >1.7 ☐

VALUE (BTU/LBX10 3) —

1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

THE MATERIAL BURN — YES ☒ NO ☐

D SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

CITY — High ☐ Medium ☐ Low ☐ Unknown ☒

SITY @ 70°F. — Low ☐ Medium ☒ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom _____ %

_____ % _____ %

_____ % _____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☒ 5-20 ☐ >20% ☐

COMPOSITION _____

FLASH POINT (OC) — <80°F. ☐ 80-150°F. ☐ >150°F ☒ None ☐

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH — 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

le Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

YSIS OF WASTE STREAM(S)

_____ WT. % _____

_____ WT. % _____

_____ WT. % _____

_____ WT. % _____

WT. % _____

COMMENTS

Consists of a blend of inert fillers and water with small amounts of silicone fluids and biodegradable surfactants. Contains approximately 45% mica

ICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER: _____

COVERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

E ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

E BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL.

YURE _____ TITLE _____

E NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE _____

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM-DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

ANY _____ PLANT LOCATION

ET _____ NAME OF PERSON TO CONTACT

STATE _____ ZIP _____

CODE OR DESCRIPTION OF MATERIAL Tire Paint Waste (040) TELEPHONE NO. ( )

ME 12-14 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

CAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

UCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

NDED SOLIDS — <5% ☐ 5-20% ☒ >20% ☐ Weight ☒ or Volume ☐

S COMPOSITION _____

FIC GRAVITY @ 60°F. — _____

0.8-1.0 ☐ 1.0-1.2 ☒ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

VALUE (BTU/LBX10 3) —

1-5 ☒ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

E MATERIAL BURN — YES ☐ NO ☒

D SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

ITY — High ☐ Medium ☐ Low ☐ Unknown ☒

ITY @ 70°F. — Low ☐ Medium ☒ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom _____ %

_____ % _____ %

_____ % _____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☒ 5-20 ☐ >20% ☐

COMPOSITION _____

FLASH POINT (OC) — <80°F. ☐ 80-150°F. ☐ >150°F. ☐ None ☒

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH — 1-4 ☐ 4-7 ☐ 7 ☒ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Organics ☒ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

IS OF WASTE STREAM(S)

WT. % _____

WT. % _____

WT. % _____

WT. % _____

WT. % _____

COMMENTS

Consists of an inert blend of fillers, water and organic rubber blended with small percentages of chlorinated solvents. ≈35%-40% solids as talc and carbon black.

E DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER: _____

VERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY: _____

E ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET.

BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL.

RE _____ TITLE _____

NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE _____

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

:PANY _____ PLANT LOCATION

:EET _____ NAME OF PERSON TO CONTACT

Y _____ STATE _____ ZIP _____

UR CODE OR DESCRIPTION OF MATERIAL HCR Mineral Spirit Waste (060) TELEPHONE NO. ( )

LUME 2-4 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

VSICAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

ODUCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

SPENDED SOLIDS — <5% ☒ 5-20% ☐ >20% ☐ Weight ☒ or Volume ☐

LIDS COMPOSITION _____

ECIFIC GRAVITY @ 60°F. — _____

☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

AT VALUE (BTU/LBX10 3) —

☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☒

L THE MATERIAL BURN — YES ☒ NO ☐

UND SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

XICITY — High ☐ Medium ☐ Low ☐ Unknown ☒

COSITY @ 70°F. — Low ☒ Medium ☐ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom

_____ %

_____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☒ 5-20 ☐

COMPOSITION ODORLESS SPIRITS, SILICONE BA

FLASH POINT (OC) — <80°F. ☐ 80-150°F. ☐ >150°F. ☒

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐

pH — 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☒ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous

ALYSIS OF WASTE STREAM(S)

:% _____ WT. % _____

:% _____ WT. % _____

:% _____ WT. % _____

:% _____ WT. % _____

:% _____ WT. % _____

COMMENTS

Odorless spirits are used to clean mi
Therefore, the waste is primarily odo
spirits with traces of silicone base,
compound and colorants.

CAUTION! COMBUSTIBLE

see attached label

RVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

RECOVERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

EASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS

THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MA

NATURE _____ TITLE _____

ONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

ITE _____

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

:PANY _____ PLANT LOCATION

:EET _____ NAME OF PERSON TO CONTACT

Y _____ STATE _____ ZIP _____

UR CODE OR DESCRIPTION OF MATERIAL Spent Toluene Waste (040) TELEPHONE NO. ( )

LUME 18 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

:SICAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

)DUCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

:PENDED SOLIDS — <5% ☒ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

.IDS COMPOSITION _____

:CIFIC GRAVITY @ 60°F. — _____

☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

AT VALUE (BTU/LBX10 3) —

☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☒ 16-20 ☐

.L THE MATERIAL BURN — YES ☒ NO ☐

UND SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

XICITY — High ☐ Medium ☐ Low ☐ Unknown ☒

:COSITY @ 70°F. — Low ☒ Medium ☐ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom

_____ %

_____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☒ 5-20 ☐

COMPOSITION

FLASH POINT (OC) — <80°F. ☒ 80-150°F. ☐ >150°F. ☐

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐

pH — 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☒

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

:atile Organics ☒ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/To

:ALYSIS OF WASTE STREAM(S)

.% _____ WT. % _____

.% _____ WT. % _____

.% _____ WT. % _____

.% _____ WT. % _____

.% _____ WT. % _____

COMMENTS

Primarily toluene containing silicone materials.

WARNING! HARMFUL IF INHALED
FLAMMABLE
see attached label

RVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

RECOVERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

EASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS S

) THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATER

ONATURE _____ TITLE _____

IONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

ATE _____

PLEASE PROVIDE INFORMATION REQUESTED OW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

OMPANY _____ PLANT LOCATION

TREET _____ NAME OF PERSON TO CONTACT

ITY _____ STATE _____ ZIP _____

ODE OR DESCRIPTION OF MATERIAL SWS-960 Waste (050) TELEPHONE NO. ( )

OLUME 1 drum/month CONTAINER

CHECK APPROPRIATE BLOCKS

HYSICAL STATE @ 70°F. — Solid ☐ Liquid ☒ Semisolid ☐

RODUCT PHASES OR LAYERS — None ☒ Bilayered ☐ Multilayered ☐

USPENDED SOLIDS — <5% ☒ 5-20% ☐ >20% ☐ Weight ☒ or Volume ☐

OLIDS COMPOSITION _____

PECIFIC GRAVITY @ 60°F. — _____

.8 ☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

EAT VALUE (BTU/LBX10 3) —

☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☒

ILL THE MATERIAL BURN — YES ☒ NO ☐

OUND SULFUR (WT. %) — None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

OXICITY — High ☐ Medium ☐ Low ☐ Unknown ☒

ISCOSITY @ 70°F. — Low ☐ Medium ☒ High ☐

COMPOSITION OF LAYERS —

Top _____ % Bottom _____

_____ %

_____ %

DISSOLVED SOLIDS BY WEIGHT — <5% ☐ 5-20

COMPOSITION

FLASH POINT (OC) — <80°F. ☐ 80-150°F. ☐ >150°F.

BOUND CHLORINE CONTENT (WT. %) —

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐

pH — 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

olatile Organics ☒ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardo

NALYSIS OF WASTE STREAM(S)

T. % _____	WT. % _____
T. % _____	WT. % _____
T. % _____	WT. % _____
T. % _____	WT. % _____
T. % _____	WT. % _____

COMMENTS

A silicone sealant consisting of 60% fluids, 10% fillers, and 30% naptha. exposure to air, changes to a rubber solid.

WARNING! FLAMMABLE, CAUSES EYE IRRA
see attached label

ERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

RECOVERY — WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

LEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS

O THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACC ATE DESCRIPTION OF THIS WASTE MAT

GNATURE _____ TITLE _____

ONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

ATE _____

4

PLEASE PROVIDE ALL INFORMATION REQUESTED BEL THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

MPANY _____ PLANT LOCATION

TREET _____ NAME OF PERSON TO CONTACT

TY _____ STATE _____ ZIP _____

OUR CODE OR DESCRIPTION OF MATERIAL Emulsion & RA Waste (040) TELEPHONE NO. ( )

OLUME 12 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

YSICAL STATE @ 70°F. – Solid ☐ Liquid ☐ Semisolid ☒
ODUCT PHASES OR LAYERS – None ☒ Bilayered ☐ Multilayered ☐
SPENDED SOLIDS – <5% ☐ 5-20% ☐ >20% ☒ Weight ☒ or Volume ☐
ILIDS COMPOSITION _____
ECIFIC GRAVITY @ 60°F. – _____
☐ 0.8-1.0 ☐ 1.0-1.2 ☒ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐
EAT VALUE (BTU/LBX10 3) –
☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐
LL THE MATERIAL BURN – YES ☐ NO ☒
OUND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐
OXICITY – High ☐ Medium ☐ Low ☐ Unknown ☒
SCOSITY @ 70°F. – Low ☐ Medium ☐ High ☒

COMPOSITION OF LAYERS –
Top _____% Bottom _____
_____%
_____%
DISSOLVED SOLIDS BY WEIGHT – <5% ☒ 5-20 ☐
COMPOSITION _____
FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐
BOUND CHLORINE CONTENT (WT. %) –
None ☒ Trace ☐ 1-10% ☐ 10-30% ☐
pH – 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐
TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

latile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/To

ALYSIS OF WASTE STREAM(S)

.% _____ WT. % _____
.% _____ WT. % _____
.% _____ WT. % _____
.% _____ WT. % _____
.% _____ WT. % _____

COMMENTS

Consists primarily of inert silicone fluids, fillers, biodegradable surfacta and preservatives in a large percentage water. Should burn when incinerated.

RVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER: _____

RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

ASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHE
THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIA

NATURE _____ TITLE _____

ONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

_____

PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

600 Ford Boulevard
Hamilton, Ohio 45011

COMPANY S.W.S. Silicone

PLANT LOCATION Adrian, Mich

STREET

CITY Adrian STATE Mich ZIP 49221

NAME OF PERSON TO CONTACT Lou Marsey

TRADE CODE OR DESCRIPTION OF MATERIAL Mica & Talc Waste (040)

TELEPHONE NO. (517) 263-

VOLUME 4 drums/month CONTAINER drum

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☒ Liquid ☐ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☐ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☐ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION

SPECIFIC GRAVITY @ 60°F. –

☒ 0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

☒ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☐ NO ☒

FOUND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☐ Low ☐ Unknown ☒

VISCOSITY @ 70°F. – Low ☐ Medium ☐ High ☐

COMPOSITION OF LAYERS –

Top _____ % Bottom _____

_____ % _____

_____ % _____

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pest[illegible], Carcinogens, [illegible]

ANALYSIS OF WASTE STREAM(S)

%	WT. %
%	WT. %
%	WT. %
%	WT. %
%	WT. %

COMMENTS

Consists of a mixture of talc and mic
dry powder.

APPROVED TO TRANSPORT
MICHIGAN DEPARTMENT
NATURAL RESOURCES

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MAT

SIGNATURE _____ TITLE _____

PHONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

DATE _____

: LAMATION

PRODUCT SURVEY

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

OMPANY Anderson Development

TREET 1415 E. Michigan Street

ITY Adrian STATE Mich ZIP 49221

PLANT LOCATION Adrian Mich

NAME OF PERSON TO CONTACT Al Jackson

OUR CODE OR DESCRIPTION OF MATERIAL Waste Solvents TELEPHONE NO. (517) 263-6121

OLUME 90 drums/mo. CONTAINER Carbon Steel Drums

CHECK APPROPRIATE BLOCKS

HYSICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

RODUCT PHASES OR LAYERS – None ☑ Bilaycred ☐ Multilayered ☐

USPENDED SOLIDS – <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

OLIDS COMPOSITION

PECIFIC GRAVITY @ 60°F. –

.8 ☐ 0.8-1.0 ☑ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

EAT VALUE (BTU/LBX10 3) –

☐ 1-5 ☐ 5-9 ☐ 9-12 ☑ 12-16 ☐ 16-20 ☐

ILL THE MATERIAL BURN – YES ☑ NO ☐

OUND SULFUR (WT. %) – None ☑ Trace ☐ 0.5-5% ☐ >5% ☐

OXICITY – High ☐ Medium ☐ Low ☑ Unknown ☐

ISCOSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top ____ % Bottom ____

NA % NA

% ____

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20%

COMPOSITION None

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☑ >150°F. ☐ None

BOUND CHLORINE CONTENT (WT. %) –

None ☑ Trace ☐ 1-10% ☐ 10-30% ☐ >30%

pH – 1-4 ☐ 4-7 ☐ 7 ☑ 7-10 ☐ 10-13

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

olatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics

NALYSIS OF WASTE STREAM(S)

.% 17% H_2O	WT. %
.% 26% Toluene	WT. %
.% 55% Methanol	WT. %
.% 1-5% Butanol	WT. %
.%	WT. %

COMMENTS

Used in fuel program

RVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

ASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

NATURE ____ TITLE ____

NE NUMBER (Include Area Code) ____ CHEM-DYNE REPRESENTATIVE

PRODUCT SURVEY

PLEASE PROVIDE THE INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Anderson Development — PLANT LOCATION Adrian, Mic

STREET 1415 E. Michigan Street — NAME OF PERSON TO CONTACT / Jackson

CITY Adrian — STATE Mich — ZIP 49221

YOUR CODE OR DESCRIPTION OF MATERIAL Redox Solvent — TELEPHONE NO. 517, 263-2121

VOLUME 5 dr mo. — CONTAINER 55 gal Drum

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS <5% ☐ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION _____

SPECIFIC GRAVITY @ 60°F. – _____

<.8 ☐ 0.8-1.0 ☑ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

☐ 1-5 ☐ 5-9 ☐ 9-12 ☑ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☑ NO ☐

BOUND SULFUR (WT. %) – None ☐ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☐ Low ☑ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top _____ % Bottom _____

NA % NA

_____ % _____

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20%

COMPOSITION None

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ None

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >30%

pH – 1-4 ☐ 4-7 ☐ 7 ☑ 7-10 ☐ 10-13

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

ANALYSIS OF WASTE STREAM(S)

% 2% Redox — Pesticide

% 15-20% H_2O WT. %

% 50% Methanol WT. %

% 1-5% Butanol

% _____ WT. %

COMMENTS

Secure Landfill
Sheffield, Ill

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

RECOVERY - WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

APPROVED FOR TRANSPORT
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

SIGNATURE _____ TITLE _____

TELEPHONE NUMBER (Include Area Code) _____ CHEM DYNE REPRESENTATIVE

I POSAL/RECLAMATION

PRODUCT SURVEY

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

PANY Pennwalt Corporation

EET 4655 Biddle Ave

Y Wyandotte STATE Mich ZIP 48192

PLANT LOCATION Wyandotte, Mich.

NAME OF PERSON TO CONTACT Bill Hueke

JR CODE OR DESCRIPTION OF MATERIAL Waste Oil + Amine TELEPHONE NO. (313) 285-9200

UME 4500 gal Oil/wtr CONTAINER Plain Steel

CHECK APPROPRIATE BLOCKS Must heat to pump

SICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

DUCT PHASES OR LAYERS – None ☐ Bilayered ☑ Multilayered ☐

PENDED SOLIDS – <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

IDS COMPOSITION

CIFIC GRAVITY @ 60°F. –

☐ 0.8-1.0 ☐ 1.0-1.2 ☑ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

T VALUE (BTU/LBX10 3) –

1-5 ☐ 5-9 ☑ 9-12 ☐ 12-16 ☐ 16-20 ☐

L THE MATERIAL BURN – YES ☑ NO ☐

ND SULFUR (WT. %) – None ☑ Trace ☐ 0.5-5% ☐ >5% ☐

ICITY – High ☐ Medium ☐ Low ☑ Unknown ☐

OSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top Soapy Phase % Bottom Oil %

% %

% %

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20% ☐

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ None ☐

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH – 1-4 ☐ 4-7 ☐ 7 ☑ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

tile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

LYSIS OF WASTE STREAM(S)

WT. %

WT. %

WT. %

WT. %

WT. %

COMMENTS

Trial Code G

VICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

ECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

SE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

HE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

ATURE TITLE

NE NUMBER (Include Area Code) CHEM-DYNE REPRESENTATIVE

PLEASE PROVIDE AL' 'FORMATION REQUESTED BELOW, THEN R' IN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

MPANY Pennwalt Corporation

IEET 4655 Biddle Ave

Wyandotte STATE Mich ZIP 48192

PLANT LOCATION Wyandotte, Mich

NAME OF PERSON TO CONTACT Bill Hiscoke

JR CODE OR DESCRIPTION OF MATERIAL Endothal Filtrate TELEPHONE NO. (313) 285-9200

LUME 5000 gal/wk when pumping CONTAINER Plain Steel

CHECK APPROPRIATE BLOCKS

SICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

DUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

PENDED SOLIDS – <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

IDS COMPOSITION

CIFIC GRAVITY @ 60°F. –

☐ 0.8-1.0 ☑ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

T VALUE (BTU/LBX10 3) –

1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

L THE MATERIAL BURN – YES ☐ NO ☑

ND SULFUR (WT. %) – None ☑ Trace ☐ 0.5-5% ☐ >5% ☐

ICITY – High ☐ Medium ☑ Low ☐ Unknown ☐

OSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top N/A % Bottom N/A %

N/A % N/A %

N/A % N/A %

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20% ☐

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ None ☐

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

tile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

LYSIS OF WASTE STREAM(S)

19% Endothal

81% H_2O

WT. %

WT. %

WT. %

WT. %

COMMENTS

Deep Well, Ohio Liquid Disposal

Fremont, Ohio.

ICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

COVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

SE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

E BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

ATURE TITLE

E NUMBER (Include Area Code) CHEM-DYNE REPRESENTATIVE

ION

PRODUCT SURVE

PLEASE VIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Pennwalt Corporation

STREET 4655 Biddle Ave

CITY Wyandotte STATE Mich ZIP 48192

PLANT LOCATION Wyandotte, Mich

NAME OF PERSON TO CONTACT Dave Endicott, Prod. M

YOUR CODE OR DESCRIPTION OF MATERIAL Alkanolamine Acetate

TELEPHONE NO. (313) 285-9

VOLUME 5000 gal/wk CONTAINER Plain Steel Tanker

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION

SPECIFIC GRAVITY @ 60°F. –

0.8 ☐ 0.8-1.0 ☑ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

1 ☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☐ NO ☑

BOUND SULFUR (WT. %) – None ☑ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY High ☐ Medium ☑ Low ☐ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top N/A % Bottom N/A

%

%

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >

COMPOSITION None

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F ☐ N

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >3

pH – 1-4 ☐ 4-7 ☐ 7 ☑ 7-10 ☐ 10-

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxi

ANALYSIS OF WASTE STREAM(S)

WT. % Sol H_2O WT. %

WT. % WT. %

WT. % 14 DEEA WT. %

WT. % WT. %

WT. % WT. %

COMMENTS

TRICIL Code C

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

SIGNATURE TITLE

PHONE NUMBER (Include Area Code) CHEM DYNE REPRESENTATIVE

HODUCT SURVEY

PLEASE PRO ALL INFORMATION REQUESTED BELOW. RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

OMPANY Pennwalt Corporation

TREET 4655 Biddle Ave

ITY Wyandotte STATE Mich ZIP 48192

PLANT LOCATION Wyandotte, Mich.

NAME OF PERSON TO CONTACT Bill Hiesske K-38

OUR CODE OR DESCRIPTION OF MATERIAL Flare Knock-Down Waste TELEPHONE NO. (313) 285-9200

OLUME 200 x 55 gal Dr. on hand CONTAINER UAW

CHECK APPROPRIATE BLOCKS

HYSICAL STATE @ 70°F. – Solid ☐ Liquid ☒ Semisolid ☐

RODUCT PHASES OR LAYERS – None ☐ Bilayered ☒ Multilayered ☐

USPENDED SOLIDS – <5% ☒ 5-10 ☐ >20% ☐ Weight ☐ or Volume ☐

OLIDS COMPOSITION None

PECIFIC GRAVITY @ 60°F. –

.8 ☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

IEAT VALUE (BTU/LBX10 3) –

☐ 1-5 ☐ 5-9 ☒ 9-12 ☐ 12-16 ☐ 16-20 ☐

ILL THE MATERIAL BURN – YES ☒ NO ☐

OUND SULFUR (WT. %) – None ☐ Trace ☐ 0.5-5% ☐ >5% ☐

OXICITY – High ☐ Medium ☐ Low ☒ Unknown ☐

ISCOSITY @ 70°F. – Low ☐ Medium ☐ High ☐

COMPOSITION OF LAYERS –

Top oil phase % Bottom water phase

% %

% %

DISSOLVED SOLIDS BY WEIGHT ☒ 5-20 ☐ >20

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ Non

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30%

pH – 1-4 ☐ 4-7 ☒ 7 ☐ 7-10 ☐ 10-13

TOXICITY REFERENCES OR DATA

Smells as H_2S

PRIMARY STEAM COMPOSITION

olatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics

NALYSIS OF WASTE STREAM(S)

Wt.% Diethyl Thiourea

Wt.% Ethyl Butyl Thiourea

Wt.% Tert-Mono Polysulfides

Wt.% H_2O up to Wt.% 70%

Wt.% H_2S — Trace in H_2O

COMMENTS

Landfill, Sheffield, ILL.

ERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

LEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

NATURE _____ TITLE _____

INE NUMBER (Include Area Code) _____ CHEM DYNE REPRESENTATIVE

PRODUCT SURVEY

PLEASE PROVIDE ALL INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Pennwalt Corporation PLANT LOCATION Wyandotte, Mic

STREET 4655 Biddle Ave NAME OF PERSON TO CONTACT Chuc Gullickson, Tec

CITY Wyandotte STATE Mi ZIP 4819

YOUR CODE OR DESCRIPTION OF MATERIAL 1566 Residue Bottoms TELEPHONE NO. (313) 285-920

VOLUME 5000 gal wk wk CONTAINER Bulk Tank — load wagon

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☒ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☒ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☒ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION Tar

SPECIFIC GRAVITY @ 60°F. – 7.5 – 8 lb/gal

0.8 ☐ 0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

1 ☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☐ NO ☐

BOUND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☐ Low ☒ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☐ High ☒

COMPOSITION OF LAYERS –

Top _____ % Bottom

_____ %

_____ %

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ Non

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-1

TOXICITY REFERENCES OR DATA

No odor problem

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxi

ANALYSIS OF WASTE STREAM(S)

WT. % N-Propyl Diethanol Amine 90% +

WT. % _____ WT. % _____

WT. % H2O — None WT. % _____

WT. % _____ WT. % _____

WT. % High Polymers

COMMENTS

Incineration Trial

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHE

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIA

SIGNATURE _____ TITLE _____

PHONE NUMBER (Include Area Code) _____ CHEM-DYNE REPRESENTATIVE

PLEASE PROVIDE A IFORMATION REQUESTED BELOW, THEN R IRN THIS FORM TO

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

OMPANY Pennwalt Corporation

STREET 4655 Biddle Ave

CITY Wyandotte STATE Mi. ZIP 48192

PLANT LOCATION Wyandotte, Mi.

NAME OF PERSON TO CONTACT Chuck Gullickson, Tech. Ser

YOUR CODE OR DESCRIPTION OF MATERIAL Amyl Phenol Residue TELEPHONE NO. (313) 285-9200

VOLUME 12-15,000 gal/Mo. CONTAINER Bulk (Load at 80-100°C in insul

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☑ Liquid ☐ Semisolid ☐ (Sticky Solid At Room Temp.)

PRODUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS - <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION None

SPECIFIC GRAVITY @ 60°F. - 7.8 – 8.0 #/gal

0.8 ☐ 0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

1 ☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☑ NO ☐

BOUND SULFUR (WT. %) – None ☐ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY High ☐ Medium ☐ Low ☐ Unknown ☐

VISCOSITY @ 70°F. - Low ☐ Medium ☐ High ☐

COMPOSITION OF LAYERS –

Top NA % Bottom NA

%

%

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20

COMPOSITION None

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ Nor

BOUND CHLORINE CONTENT (WT. %) –

None ☒ Trace ☐ 1-10% ☐ 10-30% ☐ >30

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-

TOXICITY REFERENCES OR DATA

Non-Corrosive

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/To

ANALYSIS OF WASTE STREAM(S)

WT. % Trace – Meno Amyl Phenol

WT. % Di & Tri Amyl Phenol – 28%

WT. % Higher Polymers

WT. % _____ WT. % _____

WT. % _____ WT. % _____

COMMENTS Incineration

Tri 101 — Code A

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVER

APPROVED TO TRAN
MICHIGAN DEPARTM
NATURAL RESOU

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THI

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MA

SIGNATURE _____ TITLE _____

PHONE NUMBER (Include Area Code) _____ CHEM DYNE REPRESENTATIVE

SURVEY

PLEASE PROVIDE INFORMATION REQUESTED BELOW, THEN RETURN THIS FORM TO

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Oxy Metal Industries

STREET 21441 Hoover Rd.

CITY Warren STATE Mich ZIP 48089

PLANT LOCATION Warren, Mich.

NAME OF PERSON TO CONTACT Joe Young

YOUR CODE OR DESCRIPTION OF MATERIAL Waste Carbon TELEPHONE NO. (313) 497-9100

VOLUME 160 dr/year CONTAINER Stainless Drums

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☑ Liquid ☐ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☐ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION

SPECIFIC GRAVITY @ 60°F. –

<0.8 ☐ 0.8-1.0 ☐ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

0 ☐ 1-5 ☐ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☐ NO ☐

BOUND SULFUR (WT. %) – None ☐ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY High ☐ Medium ☐ Low ☐ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☐ High ☐

COMPOSITION OF LAYERS –

Top _____ % Bottom _____

_____ % _____

_____ % _____

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20% ☐

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ None ☐

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >30% ☐

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-13 ☐

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxics ☐

ANALYSIS OF WASTE STREAM(S)

% _____ WT. % _____

% _____ WT. % _____

% _____ WT. % _____

% _____ WT. % _____

% _____ WT. % _____

COMMENTS

Activated Carbon with 7% Saturation of Allyl Chloride

Secure landfill, Sheffield, ILL.

~~Burned HCl recovery~~ Plant, Cleveland O.

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

SIGNATURE _____ TITLE _____

PHONE NUMBER (Include Area Code) _____ CHEM DYNE REPRESENTATIVE

PRODUCT SURVEY

PLEASE PROV ILL INFORMATION REQUESTED BELOW, T RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Oxy Metal Industries

STREET 21441 Hoover Rd

CITY Warren STATE Mich ZIP 48089

PLANT LOCATION Warren, Mich

NAME OF PERSON TO CONTACT Joe Young

YOUR CODE OR DESCRIPTION OF MATERIAL Allyl Chloride TELEPHONE NO. (313) 497-910

VOLUME 2300 gal/mo. CONTAINER Stainless Steel

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☑ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☑ Bilayered ☐ Multilayered ☐

SUSPENDED SOLIDS – <5% ☑ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION

SPECIFIC GRAVITY @ 60°F. –

.8 ☐ 0.8-1.0 ☐ 1.0-1.2 ☑ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

☐ 1-5 ☐ 5-9 ☑ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☑ NO ☐

BOUND SULFUR (WT. %) – None ☑ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☑ Low ☐ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☑ High ☐

COMPOSITION OF LAYERS –

Top N/A % Bottom N/A %

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ N

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 1

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/To

ANALYSIS OF WASTE STREAM(S)

WT. % 70% Allyl Chloride

WT. %

WT. % 30% H_2O

WT. %

WT. %

WT. %

WT. %

WT. %

COMMENTS

Burned HCl recovery plant, clevel

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☐ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS S

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATE

SIGNATURE TITLE

PHONE NUMBER (Include Area Code) CHEM-DYNE REPRESENTATIVE

PLEASE PRO' ALL INFORMATION REQUESTED BELOW. RETURN THIS FORM TO:

CHEM - DYNE Corporation

500 Ford Boulevard
Hamilton, Ohio 45011

COMPANY Oxy Metal Industries

STREET 21441 Hoover Road

CITY Warren STATE Mich ZIP 48089

PLANT LOCATION Warren, Mich

NAME OF PERSON TO CONTACT Joe Young

YOUR CODE OR DESCRIPTION OF MATERIAL Allyl Alcohol

TELEPHONE NO. (313) 497-9100

VOLUME 1800 gal/wk

CONTAINER Plain Steel

CHECK APPROPRIATE BLOCKS

PHYSICAL STATE @ 70°F. – Solid ☐ Liquid ☒ Semisolid ☐

PRODUCT PHASES OR LAYERS – None ☐ Bilayered ☒ Multilayered ☐

SUSPENDED SOLIDS – <5% ☒ 5-20% ☐ >20% ☐ Weight ☐ or Volume ☐

SOLIDS COMPOSITION

SPECIFIC GRAVITY @ 60°F. –

0.8 ☐ 0.8-1.0 ☒ 1.0-1.2 ☐ 1.2-1.4 ☐ 1.4-1.7 ☐ >1.7 ☐

HEAT VALUE (BTU/LBX10 3) –

1 ☐ 1-5 ☒ 5-9 ☐ 9-12 ☐ 12-16 ☐ 16-20 ☐

WILL THE MATERIAL BURN – YES ☒ NO ☐

BOUND SULFUR (WT. %) – None ☒ Trace ☐ 0.5-5% ☐ >5% ☐

TOXICITY – High ☐ Medium ☒ Low ☐ Unknown ☐

VISCOSITY @ 70°F. – Low ☐ Medium ☒ High ☐

COMPOSITION OF LAYERS –

Top 28% Allyl Alcohol % Bottom H2O

%

%

DISSOLVED SOLIDS BY WEIGHT – <5% ☐ 5-20 ☐ >20

COMPOSITION

FLASH POINT (OC) – <80°F. ☐ 80-150°F. ☐ >150°F. ☐ No

BOUND CHLORINE CONTENT (WT. %) –

None ☐ Trace ☐ 1-10% ☐ 10-30% ☐ >30

pH – 1-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-1

TOXICITY REFERENCES OR DATA

PRIMARY STEAM COMPOSITION

Volatile Organics ☐ Non-Volatile Organics ☐ Acids or Alkalis ☐ Salts ☐ Metallics ☐ Cyanides, Pesticides, Carcinogens, Other Hazardous/Toxic

ANALYSIS OF WASTE STREAM(S)

WT. % 28% Allyl Alcohol

WT. % 0

WT. % 80% H2O

WT. %

WT. %

WT. %

WT. %

WT. %

COMMENTS Incineration

Teical Code "E"

APPROVED TO TRANSPORT BY MICHIGAN DEPARTMENT OF NATURAL RESOURCES

SERVICE DESIRED: RECOVERY ☐ DISPOSAL ☒ OTHER:

IF RECOVERY – WHAT COMPONENT(S) IS (ARE) TO BE CONSIDERED FOR RECOVERY:

PLEASE ATTACH RECLAIMED PRODUCTS SPECIFICATIONS AND ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE, THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS WASTE MATERIAL

SIGNATURE TITLE

PHONE NUMBER (Include Area Code) CHEM-DYNE REPRESENTATIVE

APPENDIX I

NFPA Buffer Zone Requirements for Tanks

Table 2-1

Stable Liquids (Operating Pressure 2.5 psig or Less)

Type of Tank	Protection	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way and Shall Be Not Less Than 5 Feet	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property and Shall Be Not Less Than 5 Feet
Floating Roof [See 2-2.1.1(a)]	Protection for Exposures*	½ times diameter of tank	⅙ times diameter of tank
	None	Diameter of tank but need not exceed 175 feet	⅙ times diameter of tank
Vertical with Weak Roof to Shell Seam (See 2-2.1.1)	Approved foam or inerting system on tanks not exceeding 150 feet in diameter**	½ times diameter of tank	⅙ times diameter of tank
	Protection for Exposures*	Diameter of tank	⅓ times diameter of tank
	None	2 times diameter of tank but need not exceed 350 feet	⅓ times diameter of tank
Horizontal and Vertical with Emergency Relief Venting To Limit Pressures to 2.5 psig	Approved inerting system on the tank or approved foam system on vertical tanks	½ times Table 2-6	½ times Table 2-6
	Protection for Exposures*	Table 2-6	Table 2-6
	None	2 times Table 2-6	Table 2-6

*See definition for "Protection for Exposures."

**For tanks over 150 ft. in diameter use "Protection for Exposures" or "None" as applicable.

Table 2-2

Stable Liquids (Operating Pressure Greater Than 2.5 psig)

Type of Tank	Protection	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property
Any Type	Protection for Exposures*	1½ times Table 2-6 but shall not be less than 25 feet	1½ times Table 2-6 but shall not be less than 25 feet
	None	3 times Table 2-6 but shall not be less than 50 feet	1½ times Table 2-6 but shall not be less than 25 feet

*See Definition for "Protection for Exposures."

Table 2-3

Boil-over Liquids

Type of Tank	Protection	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way and Shall Be Not Less Than 5 Feet	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property and Shall Be Not Less Than 5 Feet
Floating Roof [See 2-2.1.1(a)]	Protection for Exposures*	½ times diameter of tank	⅙ times diameter of tank
	None	Diameter of tank	⅙ times diameter of tank
Fixed Roof [See 2-2.1.4(a)]	Approved foam or inerting system	Diameter of tank	⅓ times diameter of tank
	Protection for Exposures*	2 times diameter of tank	⅔ times diameter of tank
	None	4 times diameter of tank but need not exceed 350 feet	⅔ times diameter of tank

*See definition for "Protection for Exposures."

Table 2-4 Unstable Liquids

Type of Tank	Protection	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property
Horizontal and Vertical Tanks with Emergency Relief Venting to Permit Pressure Not in Excess of 2.5 psig	Tank protected with any one of the following: Approved water spray, Approved inerting, Approved insulation and refrigeration, Approved barricade	Table 2-6 but not less than 25 feet	Not less than 25 feet
	Protection for Exposures*	2½ times Table 2-6 but not less than 50 feet	Not less than 50 feet
	None	5 times Table 2-6 but not less than 100 feet	Not less than 100 feet
Horizontal and Vertical Tanks with Emergency Relief Venting to Permit Pressure Over 2.5 psig	Tank protected with any one of the following: Approved water spray, Approved inerting, Approved insulation and refrigeration, Approved barricade	2 times Table 2-6 but not less than 50 feet	Not less than 50 feet
	Protection for Exposures*	4 times Table 2-6 but not less than 100 feet	Not less than 100 feet
	None	8 times Table 2-6 but not less than 150 feet	Not less than 150 feet

*See definition for "Protection for Exposures."

Table 2-5

Capacity Gallons	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property
12,000 or less	5	5
12,001 to 30,000	10	5
30,001 to 50,000	10	10
50,001 to 100,000	15	10
100,001 or more	15	15

Table 2-6

Reference Table for Use in Tables 2-1 to 2-4

Capacity Tank Gallons	Minimum Distance in Feet from Property Line Which Is or Can Be Built Upon, Including the Opposite Side of a Public Way	Minimum Distance in Feet from Nearest Side of Any Public Way or from Nearest Important Building on the Same Property
275 or less	5	5
276 to 750	10	5
751 to 12,000	15	5
12,001 to 30,000	20	5
30,001 to 50,000	30	10
50,001 to 100,000	50	15
100,001 to 500,000	80	25
500,001 to 1,000,000	100	35
1,000,001 to 2,000,000	135	45
2,000,001 to 3,000,000	165	55
3,000,001 or more	175	60

μσ1941.7

GPO 858-066