CO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
Air SURVEILLANCE SECTION
1445 Ross Ave.
Dallas, TEXAS 75202

DATE: 10/30/97

SUBJECT: **Transmittal Memo - Compliance Monitoring Reports**

FROM: for Mike Michaud, Chief 11/5
Surveillance Section (6EN-AS)

TO: Donna Ascenzi, Chief
Air Enforcement Section (6EN-AA)

THRU: Jeffrey Whitney (6EN-AS).

A compliance monitoring inspection was conducted on **09/04/97** at the following location:

FACILITY NAME: **Angus Chemical Company**

ADDRESS: **Louisiana Highway 2**

CITY: **Sterlington, Louisiana**

INSPECTOR: **Jeffrey Whitney**

TYPE FACILITY: FEDERAL ( ) INDUSTRIAL(X)

NSPS(X)-

NESHAP( )-

NESHAP For Source Categories( )-

SIP( )-

HON (X) -

PSD ( ) -

REVIEWER: Gerald Mokry

EPA REGION 6
SURVEILLANCE SECTION
AIR INSPECTION REPORT

INSPECTION DATE: September 4 & 5 , 1997

Company Name: ANGUS Chemical Company

Mailing Address: P.O. Box 1325
Louisiana Highway 2
Sterlington, Louisiana 71280

Physical Location: Louisiana Highway 2
Northwest Corner of Ouachita Parish
Adjacent to the Ouachita River

Type of Industry: Nitroparaffins and Derivatives

Company Personnel:

Name	Title	Phone
David Denner	Vice President, Operations	(318) 665 - 5500
John Sutton	Director, Regulatory Affairs	(318) 665 - 5353
Chet Chiles	Environmental Engineer	(318) 665 - 5355
Paul Langley	Team Incorporated	(800) 521 - 2689

State/Federal Regulatory Personnel:

Name	Title	Agency	Phone
Jeffrey Whitney	Environmental Protection Specialist	EPA, Region 6	(214) 665 - 7368
Paul Laird	Air Quality Regional Coordinator	LDEQ, Monroe	(318) 362 - 5439

INTRODUCTION

On September 4, 1997, an unannounced air inspection was conducted at ANGUS Chemical Company. The facility is located in Sterlington, (Ouachita Parish) Louisiana. The purpose of the inspection was to determine the facility's compliance status with the applicable provisions of the Federal New Source Performance Standards (NSPS), Federal Hazardous Organic National Emissions Standards for Hazardous Air Pollutants (HON) and the conditions of any permits issued to the facility by the Louisiana Department of Environmental Quality.

Mr. Paul Laird of the Louisiana Department of Environmental Quality Monroe Office observed the inspection.

FACILITY DESCRIPTION

ANGUS Chemical Company owns and operates an organic chemical manufacturing plant in Sterlington, Louisiana. The ANGUS plant is situated adjacent to the Ouachita River and Louisiana Highway 2 in Ouachita Parish. Sterlington is a small community located approximately 10 miles north of Monroe, Louisiana. A map of the site location is included in attachment 1. An overhead view (map) of the refinery is included in attachment 2.

The facility consists of six separate manufacturing plants listed as follows: a nitroparaffins plant, nitric acid plant, nitroparaffins derivatives plant, derivative crystal plant, pilot plant, and an isopropylhydroxylamine (IPHA) plant. In addition, ANGUS operates and maintains a shipping facility in support of the process plants for both the distribution of incoming raw materials and outgoing manufactured products.

Using ammonia from natural gas and propane as raw materials, ANGUS Chemical Company produces nitroparaffins and their derivatives at its Sterlington plant. These specialty chemicals serve in a broad range of industries including pharmaceuticals, personal care, metalworking, automotive, water treatment, coatings and inks. ANGUS is headquartered in Buffalo Grove, Illinois.

The first Sterlington plant dates back to 1922 with the operation of a carbon black unit. In 1975, International Metals and Chemicals Corporation (IMC) obtained the nitroparaffin division and its present plant as part of the acquisition of Commercial Solvents Corporation. Seven years later in 1982, Alberta Natural Gas and Pacific Gas Transmission Company bought the nitroparaffin business from IMC and established

ANGUS (Alberta Natural Gas United States) Chemical Company. Angus took over the operation of the Sterlington plant in February 1992 from its contract operator, IMC, and runs the plant with approximately 250 ANGUS employees.

The plant operates around the clock, 365 days per year. At full capacity it can produce 90 million pounds of basic nitroparaffins and 45 million pounds of nitroparaffin derivatives each year, as well as 150,000 pounds per hour of steam.

The four basic nitroparaffins are nitromethane, nitroethane, 1-nitropropane and 2-nitropropane. Nitroparaffins function as intermediates for the synthesis of useful derivatives, as fuels, as explosives, as solvents for coatings or industrial processes and other products. ANGUS produces nitroparaffin derivatives in four categories: nitro alcohols, amino alcohols, oxazolines, and oxazolidines.

A copy of the last state inspection report is included in attachment 3.

REGULATIONS AND PERMITS

Federal Regulations

New Source Performance Standards

Subpart VV [Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry]

Various equipment in VOC service located in the Nitroparaffins (Basics) Plant meets the applicability requirements of **40 CFR 60.480.**

Subpart Kb [Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984]

Tanks DT-13, DT-14, and DT-35 are subject to the requirements of 40 CFR 60.110b.

Subpart G [Standards of Performance for Nitric Acid Plants]

The nitric acid plant at this facility meets the applicability requirements of **40 CFR 60.70**.

National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories

Hazardous Organic NESHAP (HON) Subpart H [Equipment Leaks]

The nitroparaffins (Basics) unit (including the NPTOO unit and powerhouse) is a chemical manufacturing process unit which meets the applicability requirements of **40 CFR 63.100(b)** classifying the unit as a HON unit. Various equipment within this unit operates in hazardous air pollutant service and therefore meets the applicability requirements of **40 CFR 63.160**.

Hazardous Organic NESHAP (HON) Subpart G [Process Vents, Storage Vessels, Transfer Operations, and Wastewater]

ANGUS has several storage vessels and process vents which are located within the nitroparaffins unit making them subject to the requirements of HON Subpart G.

The wastewater treatment plant located at this facility will be required to comply with HON Subpart G on April 22, 1999.

The following permits have been issued to the facility by the LDEQ:

Permit #	Date Approved	Modification
1	04/18/73	Utilization of High Stack
503	10/29/75	225 T/D Nitric Acid Plant
549	02/10/76	Oxides of Nitrogen Abatement
2003	04/11/89	Expansion of TA and TN Drying
2011	10/16/89	AMP Expansion
2015	10/30/90	Nitroparaffins Dist. Modification
2011 (M-1)	12/01/90	Additional AMP Expansion
2160-00015-02	04/16/92	Nitroparaffins Refit
2011 (M-2)	12/01/92	General Amines Plant Mod.
2160-00015-03	01/18/94	Adjust Boiler Emissions and Replace 4 nitro-methane tanks
2011 (M-4)	02/11/94	Permit Production of MON-5744 in General Amines Plant

2011 (M-5)	05/16/94	Add Formaldehyde Storage to Existing Tank and Remove From Service 2 formaldehyde Storage Tanks
2160-00015-03	08/22/94	Correct O_2 Limits of Boilers No. 6 and 7
2310	04/11/95	Small Source Permit for Pilot Plant
2405	06/17/96	XT-36a
2426	09/20/96	IPHA Plant
2426 (M-1)	02/14/97	DT-35
2426 (M-2)	07/07/97	XT-36B

The facility contracted ERM Southwest to compile their Title 5 permit application. This permit application includes a summary of all state and federal regulation applicability for each area of the facility which is included in attachment 4.

OBSERVATIONS

The inspector arrived at the facility on the afternoon of September 4 and met with Chet Chiles and John Sutton of ANGUS. The inspector reviewed records and questioned facility personnel about processes and regulation applicability throughout the first day of the inspection. A cursory facility tour was also conducted. A further investigation of records and a more extensive tour of the facility was conducted on the second day of the inspection.

HON (Hazardous Organic NESHAPS) Subpart H

The Basic Nitroparaffins plant located at this facility manufactures 2-nitropropane as a primary product and meets the requirements of **40 CFR 63.100(b)** classifying the unit as a HON process unit. This unit is subject to HON Subpart H (equipment leaks) and various parts of Subpart G (process vents, storage vessels, transfer operations, wastewater). The unit produces four nitroparaffins (1-nitropropane, 2-nitropropane, nitromethane, and nitroethane. The four nitroparaffins are produced simultaneously in a relatively fixed ratio. The product with the greatest annual design capacity on a mass basis is 2-nitropropane, and is therefore the primary product. 2-Nitropropane is listed on table 1 and table 2 of HON Subpart F.

In 1994 ANGUS requested regulatory relief from the requirements of the NSPS Subpart VV standards which required a cap, blind flange, plug, or second valve on

certain detonable (nitromethane and nitroethane) liquid lines for safety reasons and what ANGUS explained to be a reduction in emissions. The request was tentatively denied by the EPA. However, subsequently amended HON regulations at **40 CFR 63.167(e)** exempted open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious over-pressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraph **(a)** through **(c)** of **40 CFR 63.167**. Therefore ANGUS withdrew its 1994 request for a concurrent determination for an equivalent emissions limitation.

40 CFR 63.160(c) states that if a process unit subject to the provisions of Subpart H has equipment to which Subpart H does not apply, but which is subject to a standard identified in paragraph **(c)(1)**, **(c)(2)**, or **(c)(3)** of **40 CFR 63.160**, the owner or operator may elect to apply Subpart H to all such equipment in the process unit. In this case, equipment in the nitroparaffins unit which was subject to NSPS Subpart VV (as referenced in **40 CFR 63.160(c)(1)**) is now treated as HON equipment. ANGUS chose to cover *all* equipment in the unit under HON Subpart H, including nitromethane and nitroethane lines. During field inspection of the plant, valves in nitromethane service were found to be clearly marked with purple paint.

Leak detection and repair at ANGUS is conducted by Team Environmental Services, Incorporated. Paul Langley, a representative from Team, was present during the second day of the inspection. Leak monitoring is conducted by 4 members of Team including Langley. Team's monitoring equipment consists of Century (Foxboro) OVA 108 and a Bachard TLV. ANGUS is using a plant-wide 500 ppm leak definition. Components in HON service are identified in the nitroparaffins unit by blue, circular tags. Immediately upon discovery of a leaking component, Team monitoring personnel perform a first attempt at repair (therefore, first attempts at repair are conducted within five days for all leaking components). Leaking components are then tagged as required by **40 CFR 63.162(f)(1)**. Leaker tags are fluorescent yellow and green tags. No leaking components were in the field at the time of the inspection. Facility personnel explained that the leaker rate at ANGUS is typically around 1%. Chiles explained that low emissions valves have been installed to replace continuous leakers over the past two years.

Visual inspection of pumps for indications of liquids dripping from the pump seal are conducted weekly as required by **40 CFR 63.163(e)(4)**.

ANGUS has not designated any components as unsafe to monitor.

ANGUS has designated 204 valves as difficult to monitor. Records of identification of these valves and plans for monitoring are kept as required by **40 CFR 63.181(b)(7)(I)**.

Per review of leaker logs (attachment 5) for the nitroparaffins unit, a problem was discovered. After Team is unsuccessful at a first attempt at repair, identifications of leaking components are given to Chiles. Chiles then gives a copy of the "working leaker log" to ANGUS operations personnel who, according to Sutton, **often repair the leaking components within 15 days. However, the leaker log given to the inspector during the inspection did not contain the actual dates of repair for components which were repaired by ANGUS personnel**. Also, ***every* component** which is not repaired on the first attempt is listed on the Team leaker log as a delayed repair component. **There is no designation of "Repair Delayed" as required by 40 CFR 63.181(d)(5)**. The date of repair listed is the date on which Team personnel remonitored the component during the following month's monitoring run. In these cases, "RTM (Repaired This Month)" is listed under the "Delay Reason" category.

Examples of the "working leaker log" (ECS Leaking Component Log) were mailed to the inspector after the inspection (attachment 6). The ECS logs raised additional areas of concern. These logs contained the actual dates of repair for several components. **Some components (for example valves 4224 and 1485 [found March 25, 1997]) were repaired within 15 days. These components, however, should not have been listed on the Team leaker log with a "Delay Reason"**.

One component in the nitroparaffins unit, valve # 3207, was found to be leaking on 07/09/96. According to Team leaker logs, the valve was put on a shutdown list and repaired on 08/08/96. However, according to the ECS logs, the valve was not repaired until 05/03/97.

Upon field inspection of the nitroparaffins unit, three unplugged open-ended valves were discovered. Open ended valves or lines are required by 40 CFR 63.167(a) to be equipped with a cap, blind flange, plug, or a second valve. These valves (valve #s 10258, 10265, and 33081) were all tagged as HON components. In a follow-up letter from Chiles (attachment 6), he explained that these valves were plugged immediately after the inspection. Chiles further explained that valve #33081 was a valve on a water discharge line and was improperly tagged as a HON component. Valve #s 10258 and 10265 were located in area SJ67B of the nitroparaffins unit.

The facility is required by **40 CFR 63.182(d)(1)** to submit a report semiannually containing the information in paragraphs **40 CFR 63.182(d)(2),(3), and (4)**. The latest required semiannual report was submitted on April 30, 1997 (attachment 7). This semiannual report covers the periods of January, February, and March of 1995 as well as October, November and December of 1996. **As explained in the cover letter, this was done to eliminate overlapping periods which resulted from ANGUS submitting its first HON Subpart H semiannual report 3 months late. ANGUS should have submitted an initial semiannual report which covered the first 6 months after the applicable compliance date specified in 40 CFR 63.100(k)(3)(ii) [January 23, 1995]. The first semiannual report submitted by ANGUS did not include January, February, or March of 1995**. These reports do contain all of the information required by **40 CFR 63.182(d)(1).**

HON Subpart G

The compliance date for HON Subpart G was April 22, 1997 as specified by **40 CFR 63.100(k)(2)**. All sources subject to the requirements of HON Subpart G are now required to be in compliance with all of the provisions of HON Subpart G.

Facilities with existing process units which have become subject to HON Subpart G must, within 150 days from April 22, 1997, submit a report which demonstrates compliance with this Subpart as required by **40 CFR 63.152(b)**. ANGUS submitted its notification of compliance status on September 17, 1997. The notification is included in attachment 8. In this notification, ANGUS indicated that 13 storage vessels at the facility were subject to the provisions of HON Subpart G. However, while at the facility and in subsequent telephone conversations with Chiles, facility personnel indicated that several other tanks at the facility were possibly subject to HON Subpart G. Among the tanks not included in the notification of compliance status were (see attachment 11):

Tank ID Number	Description of Tank
G-42	NIPAR NM/MEOH BLEND TANK
G-43N	NITROETHANE STORAGE TANK
G-43S	NITROETHANE STORAGE TANK
G-65-4	1-NP STORAGE TANK
G-78N	NITROETHANE STORAGE TANK
G-78S	NITROETHANE STORAGE TANK
G100	1-NP AND NE STORAGE TANK
XT-24A	NM UNDERGROUND STORAGE TANK

XT-24B	NM UNDERGROUND STORAGE TANK
XT-4A	2-NP TANK
XT-5A	NE TANK
XT-5B	NE TANK
XT-7A	1-NP TANK
XT-7B	1-NP TANK
XT-7C	1-NP TANK

According to plant personnel, these tanks are associated with the nitroparrafins (Basics) Unit (the HON CMPU). Chiles explained that ANGUS had not been able to determine if HON Subpart G was applicable to these tanks and that he would most likely be submitting an addendum to the notification of compliance status adding the tanks listed above and possibly others.

All tanks at this facility, including those for which a HON Subpart G applicability determination has not been made, are defined as Group 2 storage vessels (they do not meet the definition of a Group 1 storage vessel as defined in Table 5 of Appendix to Subpart G). Therefore all HON Subpart G tanks at ANGUS are required to only comply with the recordkeeping requirements of **40 CFR 63.123(a)** and no other provisions of **40 CFR 63.119 through 63.123**. Chiles explained that all tanks at ANGUS are designed to keep capacities low for various reasons including process safety, maintenance of minimal on-site inventories, reduced emissions, easier maintenance, and easier regulatory compliance.

Per records review and conversations with plant personnel, records of tank dimensions and capacity are kept on-site for the all tanks at ANGUS, regardless of regulatory requirements, for the life of each tank. Therefore, readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel are being kept as required by **40 CFR 63.123(a)**.

TRE index calculations showing all HON Subpart G process vents as Group 2 process vents (as defined in **40 CFR 63.111**) are included in the notification of compliance status (attachment 8).

The notification of compliance status also explains that due to the vapor pressure of 2-nitropropane (0.567 psia at 95 degrees F), ANGUS' loading rack is considered a Group 2 transfer rack as defined in **40 CFR 63.111**.

Federal New Source Performance Standards (NSPS) Subpart G

The nitric acid production unit within this facility meets the applicability requirements of **40 CFR 60.70(a) and (b)** and is subject to the provisions of NSPS Subpart G.

The unit was constructed between 1975 and 1976 and produces 64% nitric acid. The facility is using a 3.0 lb/ton NO_2 emissions limit as required by **40 CFR 60.72(a)(1)**.

The unit is equipped with a NOX continuous emissions monitor (Ametek) as required by **40 CFR 60.73(a)**. Calibration drift checks are performed automatically on the CEM every morning. Method 7E is conducted on the NOx CEM annually.

ANGUS is submitting quarterly excess emissions reports for the nitric acid plant as required by **40 CFR 60.7(c)**. A copy of the last quarterly report is included in attachment 9.

Upon field inspection of the unit, the NOx CEM was found to be reading 0 ppm.

NSPS Subpart Kb

Tanks DT-13, DT-14, and DT-35 are subject to the requirements of **40 CFR 60.110b**.

Per records review, records of the dimensions of each storage vessel along with an analysis showing the capacity of each storage vessel are being kept as required by **40 CFR 60.116b(b).**

State Permit Provisions

Fuel input to the four boilers (emission points B8004, B8005, B8006, and B8007) is limited so as not to exceed 3,354 MM scf in any twelve month period as required by specific condition 1 of state permit #2160-00015-03 (attachment 10). Fuel usage is recorded monthly.

The daily temperature of the final condenser effluent following vacuum steam jet exhausts is monitored and recorded (so as not to exceed 120 degrees F) as required by specific condition 3 of state permit #2160-00015-03. Upon field inspection, the

reflux 1 temperature was found to be 96 degrees F.

Continuous oxygen monitors (COMs) have been installed on boilers # 5, 6, and 7 as required by specific condition 5 of state permit #2160-00015-03. The required excess oxygen ranges for the boilers are as follows:

Boiler #5	3.8% - 10.0%
Boiler #6	4.3% - 10.0%
Boiler #7	5.5% - 10.0%

Upon field inspection of the facility, the following excess oxygen readings were observed:

Boiler #5	7.90%
Boiler #6	8.21%
Boiler #7	7.62%

All boilers were found to be within required ranges.

Review of Areas of Concern

HON Subpart G:

Facility personnel explained that ANGUS may have several additional tanks to which this Subpart is applicable which were not included in the facility's notification of compliance status submitted on September 17, 1997.

HON Subpart H:

Per review of leaker logs (attachment 5) for the nitroparaffins unit, a problem was discovered. After Team is unsuccessful at a first attempt at repair, identifications of leaking components are given to Chiles. Chiles then gives a copy of the "working leaker log" to ANGUS operations personnel who, according to Sutton, **often repair the leaking components within 15 days. However, the leaker log given to the inspector during the inspection did not contain the actual dates of repair for components which were repaired by ANGUS personnel**. Also, ***every* component** which is not repaired on the first attempt is listed on the leaker log as a delayed repair

component. **There is no designation of "Repair Delayed" as required by 40 CFR 63.181(d)(5)**. The date of repair listed is the date on which Team personnel remonitored the component during the following month's monitoring run. In these cases, "RTM (Repaired This Month)" is listed under the "Delay Reason" category. ANGUS personnel could not provide a copy of the "working leaker log" during the inspection.

The "working leaker log" (ECS Leaking Component Log) was mailed to the inspector after the inspection (attachment 6). The ECS logs raised additional areas of concern. These logs contained the actual dates of repair for several components. **Some components (for example valves 4224 and 1485 [found March 25, 1997]) were repaired within 15 days. These components, however, should not have been listed on the Team leaker log with a "Delay Reason"**.

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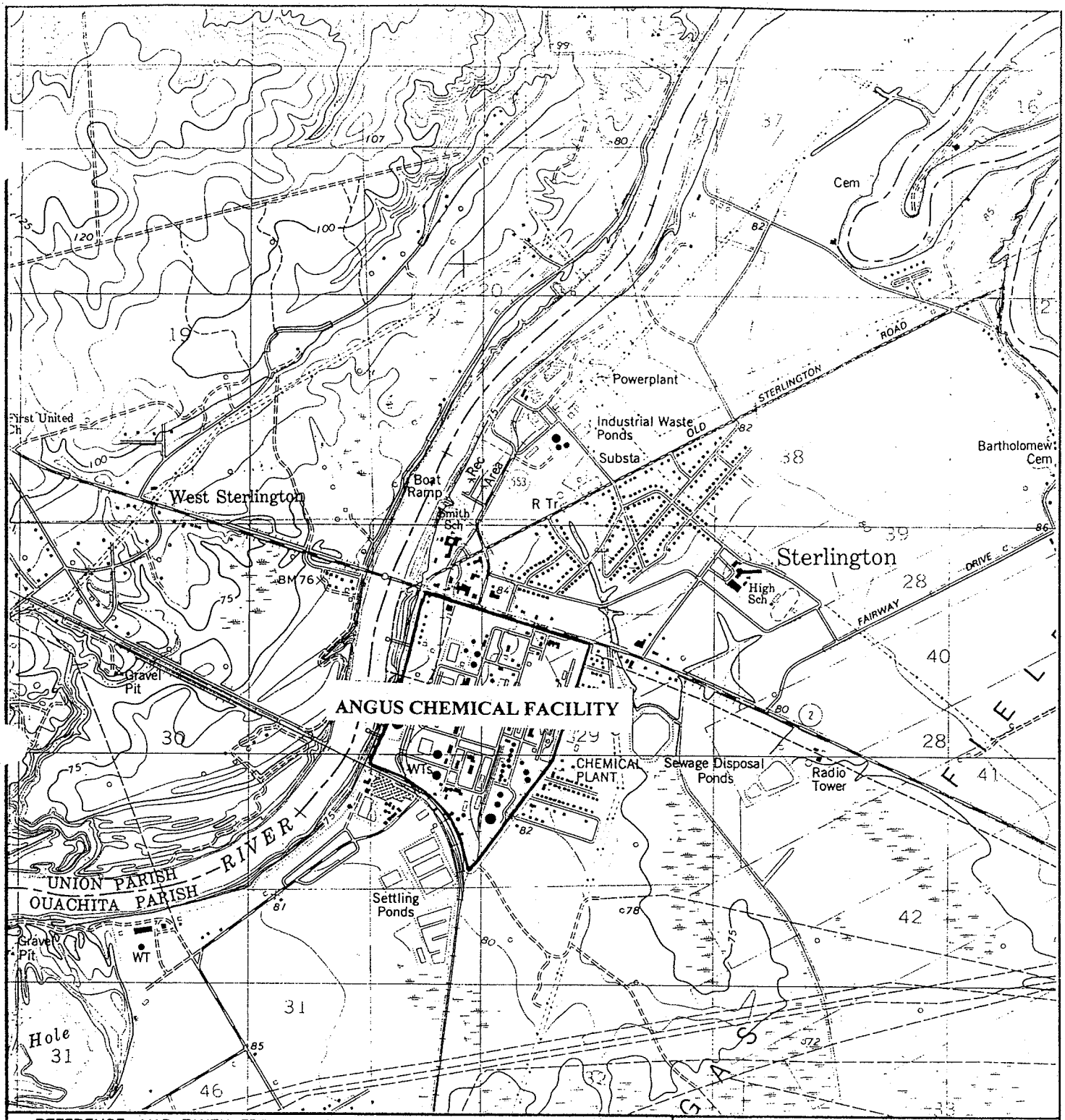
The facility is required by **40 CFR 63.182(d)(1)** to submit a report semiannually containing the information in paragraphs **40 CFR 63.182(d)(2),(3), and (4)**. The latest required semiannual report was submitted on April 30, 1997 (attachment 7). This semiannual report covers the periods of January, February, and March of 1995 as well as October, November and December of 1996. **As explained in the cover letter, this was done to eliminate overlapping periods which resulted from ANGUS submitting its first HON Subpart H semiannual report 3 months late. ANGUS should have submitted an initial semiannual report which covered the first 6 months after the applicable compliance date specified in 40 CFR 63.100(k)(3)(ii)**

[January 23, 1995]. The first semiannual report submitted by ANGUS did not include January, February, or March of 1995. These reports do contain all of the information required by **40 CFR 63.182(d)(1).**

LIST OF ATTACHMENTS

1. Site Location Map
2. Overhead view (map) of refinery
3. Copy of last LDEQ inspection report
4. Excerpt from Title V permit application
5. Copies of HON leaker logs
6. September 16, 1997 letter from Chiles including working leaker logs
7. Copy of last HON semiannual report
8. HON notification of compliance status
9. Copy of last quarterly excess emissions report
10. Copy of state permit #2160-00015-03.
11. Tank information for possible HON G tanks

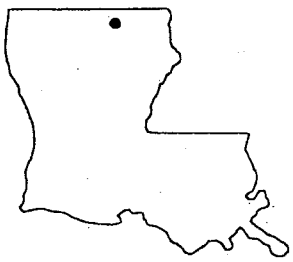
ATTACHMENT 1



REFERENCE: MAP TAKEN FROM U.S.G.S QUADRANGLES, 7.5 MINUTE SERIES, STERLINGTON, LOUISIANA, DATED 1982

APPROXIMATE SCALE

0 2000 4000



QUADRANGLE LOCATION

FIGURE 1

SITE LOCATION MAP

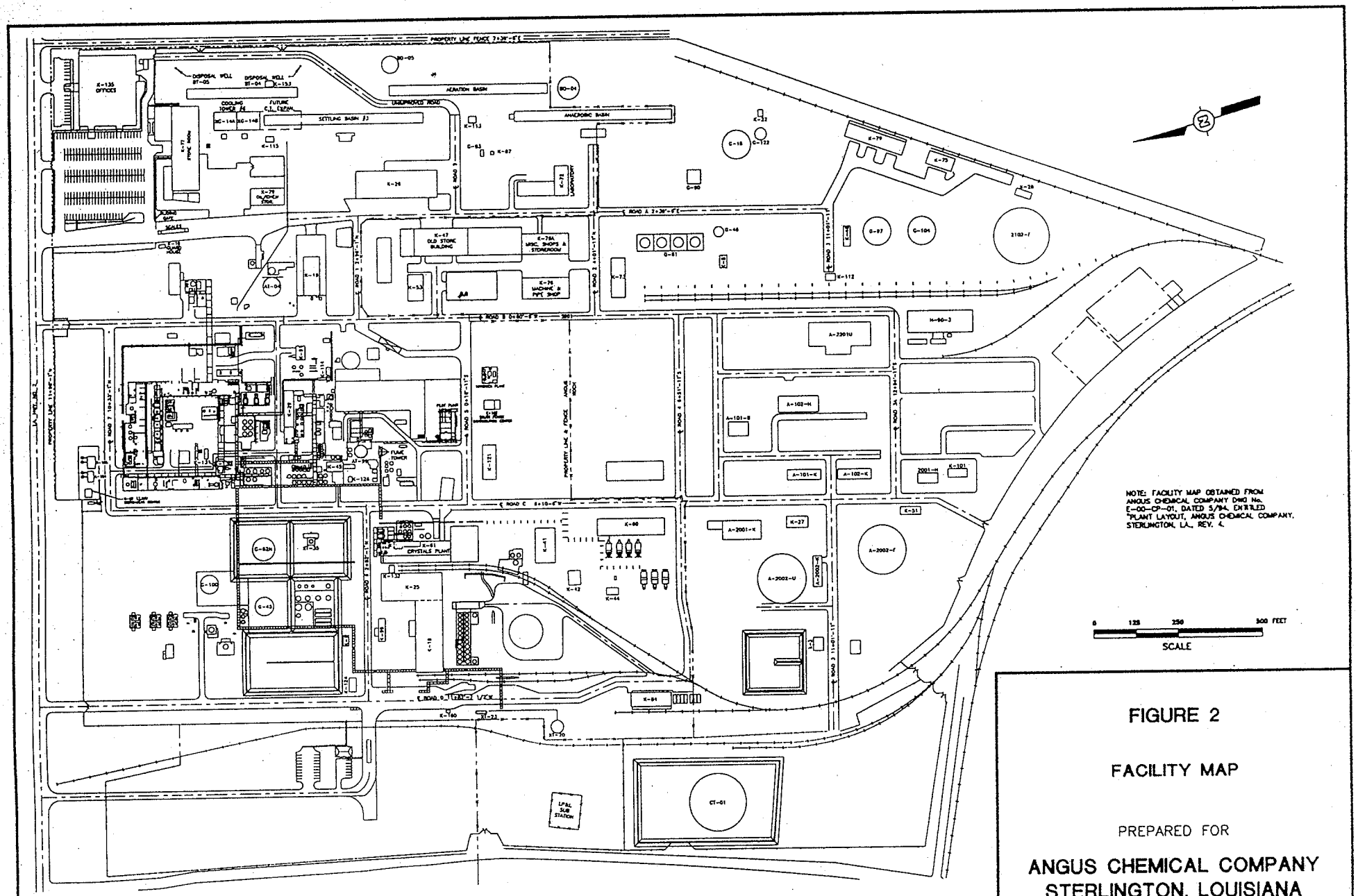
PREPARED FOR:

ANGUS CHEMICAL COMPANY
STERLINGTON, LOUISIANA

SEMS, Inc.

DRAWN BY	PAM 6/17/96	CHECKED BY BRS	DRAWING #
		APPROVED BY	106-1

ATTACHMENT 2



DRAWN BY	HLK 8/20/96	CHECKED BY / APPROVED BY	RES / [illegible]	DRAWING # B1TEMP

FIGURE 2

FACILITY MAP

PREPARED FOR

ANGUS CHEMICAL COMPANY
STERLINGTON, LOUISIANA

SEMS, Inc.

ATTACHMENT 3

State of Louisiana

Department of Environmental Quality

M.J. "MIKE" FOSTER, JR.
GOVERNOR

J. DALE GIVENS
SECRETARY

June 5, 1996

MEMO TO: Ben Potier, Assistant Administrator
Air Quality Compliance Division

FROM: Paul Laird, Environmental Quality Coordinator
Northeast Regional Office, AQC Division

SUBJECT: ANGUS Chemical Company
Sterlington Facility
Post Office Box 1325
Sterlington, Louisiana 71280
OUACHITA PARISH

On May 22, 1996, Mr. Lance Beauvais and I visited the ANGUS Chemical Company Sterlington Facility located on Louisiana Highway 2 in Sterlington, Louisiana. The purpose of this visit was for Mr. Beauvais and me to conduct an inspection of the facility which is subject to SIP and NSPS requirements.

Upon our arrival at the facility, Mr. Beauvais and I met with Mr. Chet Chiles, Environmental Engineer. We advised Mr. Chiles of the purpose of this visit and discussed the facility operations related to the Air Quality Program with him.

Plants located within this facility include a Weatherly Nitric Acid Plant, a nitroparaffin (NP) plant, a nitroparaffin derivatives plant, a general amines plant, and a TA crystals plant. Each of the plants is subject to SIP. The nitric acid plant is subject to NSPS Subpart G - Standards of Performance for Nitric Acid Plants. The NP distillation system in the NP plant is subject to NSPS Subpart VV - Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. The nitric acid plant, the NP plant, and the general amines plant are considered major sources under the Air Toxics Regulations.

Permits and exemptions that have been issued to the facility include:

PERMIT NUMBER	DATE ISSUED	ACTION PERMITTED
1	April 18, 1973	Utilization of high stack
503	October 29, 1975	225 T/D Nitric Acid Plant
Federal NSPS	N. A.	225 T/D Nitric Acid Plant
549	February 10, 1976	Oxides of Nitrogen Abatement Program
2003	April 11, 1989	Expansion of TA and TN Drying Capabilities
2011	October 16, 1989	AMP Expansion
2015	October 30, 1990	Nitroparaffins Distillation Modification
2011 (M-1)	December 1, 1990	Additional AMP Expansion
2160-00015-02	April 16, 1992	Nitroparaffins Refit
2011 (M-2)	December 1, 1992	General Amines Plant Modification
2011 (M-3)	May 7, 1993	General Amines Plant Modification
Exemption	October 18, 1993	Change condensers on butanol stripper vent TA Crystals Plant
2160-00015-03	January 18, 1994	Adjust boiler emissions and replace 4 nitro-methane storage tanks
2011 (M-4)	February 11, 1994	Permit production of MON-5744 in General Amines Plant

PERMIT NUMBER	DATE ISSUED	ACTION PERMITTED
2011 (M-5)	June 16, 1994	Add formaldehyde storage to an existing tank (Emission Point XT-03) and remove service two formaldehyde holding
from tanks		(Emission Points FT-03A/B)
2160-00015-03 O_2	August 22, 1994	Administrative amendment to correct limits of Boilers No.'s 6 & 7
2310	April 11, 1995	Small Source permit for pilot plant

Permit No 2160-00015-02 is a consolidated permit for the NP plant. The permit was issued for the re-building of the facility following a May 1991 explosion. Areas affected by this permit include the NP plant; the nitric acid plant; storage tanks for NP products, nitric acid, and NP heads; NP and nitric acid loading facilities; raw materials unloading and storage facilities; and boilers for both steam supply and waste combustion.

Permit No 2160-00015-03 was issued on January 18, 1994. This permit adjusted boiler emissions rates based on stack testing and allowed the replacement of four nitro-methane storage tanks. The August 22, 1994 Administrative Amendment changed excess oxygen limits of Boilers No. 6 and No. 7. Attached is a portion of that Amendment including the changes in Specific Condition 5. Each Specific Condition is addressed in the following.

Specific Condition No 1

The required boiler fuel usage report was submitted in a February 6, 1996 letter from ANGUS to the Assistant Secretary. The fuel usage was reported to have been 1,559.6 MMSCF during 1995. The permitted limit is 3,354 MM scf in any consecutive twelve month period. At the time of this inspection, boilers No. 5 and 7 were in operation. Fuel usage at that time was approximately one-third of the permitted limit.

Specific Condition No 2

The Nitroparrafins distillation system is subject to NSPS Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. Monthly leak checks are conducted on components which include pumps, valves, compressors and loading racks. Any repairs, which can be accomplished immediately, are completed. Other leaks are repaired during plant down times and at turnarounds. Quarterly reports on the monitoring are submitted to the Air Quality Program. No problems with the monitoring, reporting, or record keeping were noted during the inspection.

Specific Condition No 3

Condensers are used as process control equipment on columns within the facility. Those condensers using cooling water have a maximum effluent temperature of 120^0 F. Those using chilled water have a maximum effluent temperature of 80^0 F. Maintaining these temperatures should reduce emissions at the end of the process. A review of the records of these temperatures revealed average temperatures of approximately 112^0 and approximately 65^0 respectively. At the time of this inspection, the temperatures were near the averages.

Specific Condition No 4

The Nitric Acid Plant within the facility produces 64% strength nitric acid and is subject to NSPS Subpart G - Standards of Performance for Nitric Acid Plants. A new NO_x monitor was installed in 1992. Certification of the monitor was accomplished on November 12, 1992. The certification was observed by Mr. Beauvais and Mr. L. C. Ingles. During this inspection, the monitor calibration procedures and reporting requirements were reviewed. It appeared that these are being accomplished in a satisfactory manner.

Cursory NO_x emissions estimates, based on production rates and the conversion factor established during testing, were well below the 3.0 lb per ton limit. The Nitric Acid Plant was down for routine maintenance during this inspection.

Specific Condition No 5

The facility has four boilers used in steam production (Emission points B8005, B8006, and B8007 No.'s 4, 5, 6, and 7). The No. 4 boiler is used as a back-up for No. 7. All four boilers are natural gas fired. Boiler No. 7 is used to burn "heads" waste (which is considered hazardous) from the NP Plant. Boiler No. 6 burns wastes from the NP Derivatives Plant. These wastes are burned in No. 5 when No. 6 is not in operation. The boilers pre-date existing NSPS, but this Specific Condition in the August 22, 1994 Administrative Amendment requires the use of continuous oxygen monitors on No.'s 5, 6, and 7. Testing by ANGUS has demonstrated the O_2 ranges which minimize NO_X and CO formation. These ranges are: No. 5, between 3.8% and 10.0%; No. 6, between 4.3% and 10.0%; No. 7, between 5.5% and 10.0%.

At the time of this inspection, boilers No. 5 and 7 were in operation. The operations and maintenance of the oxygen monitor on each boiler were reviewed. It appeared that these were conducted in an acceptable manner. Boiler No. 5 was operating with an excess oxygen rate of approximately 6.3%, while No. 7 had a rate of approximately 7.2%. These are within the permitted limits. A records review indicated no periods of time when the permit limits were violated.

Specific Condition No 6

Records of operating parameters of each unit are maintained on site and were reviewed during this inspection. No discrepancies were noted.

Specific Condition No 7

The Abatement Tower, Emission Point XE01, has been included in the compliance plan analysis proposal required pursuant to LAC 33.II. Chapter 51.

Permit No 2011 (M-5) was issued on June 16, 1994. This is for the relocation of two formaldehyde storage tanks (Emission Points XT-13 and XT-14). Attached is a copy of the specific condition (which requires compliance with Subpart Kb for storage vessels) of that permit and a letter from ANGUS which outlines measures to be taken to minimize a formaldehyde release to the environment. Construction of the tanks was completed and they were placed in service in late January of 1996.

Small Source Permit No 2310 was issued on April 11, 1995. This permit is for a pilot plant to conduct studies on process improvement, waste minimization, yield improvement, and new processes. It is also for gathering data for the design of commercial scale plants and produces small quantities of various products for customer evaluation.

This small source permit has one specific condition which requires that the scrubber (Emission Point JE-03) be operated using water as the scrubbing agent with a minimum flow rate of 0.50 gpm. The flowrate is to be monitored and recorded every 24 hours. A report listing the hours that the scrubber operated out of the range specified shall be submitted to the Air Quality Division by February 15 for the preceding calendar year. Construction of the pilot plant was completed and it began operating in late January of 1996.

The NP plant produces four basic nitroparaffins simultaneously in a reaction between propane and nitric acid. The NP gas stream is processed through a series of distillation columns. Products are either loaded into tank trucks or drums for sale or used in the NP derivatives plant.

The NP plant is permitted to produce 90 million pounds per year of products. At the time of this inspection, the production rate was 140,000 pounds per day which is slightly over 51 million pounds annually. This rate is consistent with those of the past three years.

In an April 21, 1995, letter Mr. Hilry Lantz of the Permit Section had requested a separate Permit Application and Emission Inventory Questionnaire for Boilers No. 4 and 7; these are the two that burn hazardous waste. The documents were submitted on December 1, 1995. Mr. Childs indicated that he had not had any recent communication with the Permit Section on this.

The Air Toxics Compliance Plan for the facility was approved on December 16, 1994. Additional information regarding proposed MACT was submitted on January 31, 1996 and February 15, 1996. Mr. Chiles said that he is waiting to hear from the Air Toxics Section about the submittals.

Mr. Chiles stated that the company target date for submitting a Title V application is July 12, 1996. He was optimistic that this goal would be achieved.

Mr. Chiles advised Mr. Beauvais and me that compliance with Chapter 59, Chemical Accident Prevention, is in the works and should be completed in a timely manner.

Mr. Chiles accompanied Mr. Beauvais and me on an inspection tour of the facility. During this tour, we met with supervisors in each area of the facility.

Mr. Beauvais and I reviewed operating parameters and records in each area. We found no discrepancies when comparing each applicable permit specific condition and regulation with the operating parameters and records.

During the inspection tour, Mr. Beauvais and I visually evaluated emissions from the facility. We did not observe any visible emissions that exceeded 5% opacity, therefore we did not conduct official Method 9's.

No discrepancies with the Air Quality Regulations or Permit Specific Conditions were noted during this inspection. I will write a letter to Mr. John Sutton, Director of Regulatory Affairs with ANGUS, advising him of the results of this inspection. If you have any questions or comments on this matter, please let me know.

ATTACHMENT 4

58-170979M

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	NSPS Subpart G	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Waste Gas Disposal	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC TAP Control	CAA Accident Release	LAC Emissions Monitoring
Site General																
DF95									2					1		
DF97									2					1		
DR10										2	1			1		
DT35									2					1		
XT36																
F-7I											1			1		

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

WWTP

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	HON Subpart F	HON Subpart G	HON Subpart H	LAC Non-HON MACT	LAC Fugitive Emissions	LAC House-keeping	LAC TAP Control	LAC Storage of VOC	LAC Emissions Monitoring	LAC Particulate
WB01					1	1					1			
WB02 A/B					1	1					1			
WB03 A/B					1	1					1			
WB04 A/B					1	1					1			
WB05					1	1					1			
WB06 A/B					1	1					1			
WD02					1	1					1			
WD03					1	1					1			
WD04					1	1					1			

58 78M

DERIVATIVE

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	NSPS Subpart G	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Waste Gas Disposal	LAC VOC Loading	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC TAP Control	CAA Accident Release	LAC Control Equipment
Site General													1		1	1	
DE03										2		1			1		1
DE05										2		1			1		
DE09										2		1			1		
DE13										2		1			1		1
DE14										2		1			1		
DR01										2					1		
DR02A										2					1		
DR02B										2					1		
DR03										2					1		
DR04A										2					1		
DR04B										2					1		
DR05										2					1		
DR06										2					1		
DR07										2					1		
DR09										2					1		
DE04										2					1		
DE15										2					1		
DE16												1			1		
DF01												1			1		
DF05B												1			1		
DF06A												1			1		
DF06B												1			1		1
DF39										2					1		
DH01									2						1		
DT01									2						1		
DT02A									2						1		
DT02B									2						1		
DT03									2						1		
DT05									2						1		
DT06									2						1		
DT08A									2						1		
DT08C									2						1		
DT09A																	

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	NSPS Subpart G	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Waste Gas Disposal	LAC VOC Loading	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC TAP Control	CAA Accident Release	LAC Control Equipment
Site General													1		1	1	
DT09B									2						1		
DT09C									2						1		
DT11									2						1		
DT17									2						1		
DT18									2						1		
DT22									2						1		
DT27									2						1		
DT28									2						1		
DT30A									2			1	1		1		
DT31									2			1			1		
FT01									2			1			1		
FT02									2			1			1		
FT03B									2								1
DF02									2								
DF07									2								
DF12									2								
DF17A									2								
DF17B									2								
DF21									2								
DF25									2								
DF27									2								
DF28									2								
DF29									2								
DF30									2								
DF31									2								
DF36									2								
DF49									2								
DF57									2								
DF71									2								
DF72									2								
DF73									2								
DF77									2								
DF79									2								

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	NSPS Subpart G	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Waste Gas Disposal	LAC VOC Loading	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC TAP Control	CAA Accident Release	LAC Control Equipment
Site General													1		1	1	
DF85									2								
DF86									2								
DF87									2								
DF89A									2								
DF89B									2								
DF90A									2								
DF90B									2								
DT07									2								
DT10									2								
DT12									2								
DT15									2								
DT16									2								
DT19									2								
DT20									2								
DT23									2								
DT24									2								
DT25									2								
DT29									2								
DT30B									2								
DT32									2								
HT08									2								
HT09									2						1		
HT10									2								
TK-6									2								
TK-7											2						
L3											2						
L4												1					
F-7D																	

58-17\NPB\REG\9982M

Basics

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart G	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC Waste Gas Disposal	LAC TAP Control	CAA Accident Release	LAC Storage of VOC	LAC Control Equipment	LAC Particulate
Site General											1	1		1	1			
30M					1							1		1				
AB140					1							1		1			1	1
AJ150A/B	2												2	1				
AJ150C/D																		
AT01					1	1	2	1				1		1			1	
AT01A					1	1	2	1				1		1			1	
AT01B					1	1	2	1				1		1			1	
AT04														1				
AT05														1				
AT06					1	1	2	1						1				
AT129																		
~~G16~~				1	1	1	1	1				1		1				
XT99														1				
GB02						1		1				1		1				1
GB03						1		1				1		1				1
GF06B						1	2	1				1		1				
GF06C						1	2	1				1		1				
L1														1				
NF01A														1				
NF01B														1				
NF01C														1				
NT01A														1				
NT01B														1				
NT01C														1				
PE08					1	1		1				1		1				
PE09					1							1		1				
PE14					1							1		1				
PE17					1	1	1	1				1		1				
PE18					1	1	1	1				1		1			1	
PF08						1	2	1				1		1				
PF09						1	2	1				1		1				
PF-29A					1	1	1	1				1		1				

vent 5

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart G	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC Waste Gas Disposal	LAC TAP Control	CAA Accident Release	LAC Storage of VOC	LAC Control Equipment	LAC Particulate
PF-29B					1	1	1	1				1		1				
PF30A						1	1	1										
PF30B						1	1	1										
PF33						1	2	1				1		1				
PF35						1	2	1				1		1				
PF36A					1	1	1	1				1		1			1	
PF36B					1	1	1	1				1		1			1	
PF41A						1	2	1				1		1				
PF43C					1	1	1	1				1		1				
PF43D					1	1	1	1				1		1				
PF47B						1	2	1				1		1				
PF48A						1	2	1				1		1				
PF48B						1	2	1				1		1				
PF54A						1	2	2				1		1				
PF54B						1	2	2				1		1				
PF55						1	2	2				1		1				
PT01					1	1	2	1				1		1				
PT02					1	1	2	2				1		1				
PT03					1	1	2	2				1		1				
PT06A				1	1				1			1		1				
PT06B																		
RF02														1				
RF02A														1				
RF14														1				
RF14A														1				
RF16														1				
RF16A														1				
RJ-27					1	1	2	1						1				
RJ-67					1	1	2	1						1				
RJ29A																		
RJ29B																		
RT03														1				
SE01					1	1	1	1				1		1			1	

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart G	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC Waste Gas Disposal	LAC TAP Control	CAA Accident Release	LAC Storage of VOC	LAC Control Equipment	LAC Particulate
SE03					1	1	1	1				1		1				
SE05					1	1	1	1				1		1			1	
SE08					1	1	1	1				1		1			1	
SE12					1	1	1	1				1		1			1	
SE14					1	1	1	1				1		1				
SE15					1	1	1	1				1		1			1	
SE17					1	1	1	1				1		1			1	
SE18					1	1	1	1				1		1			1	
SE19					1	1	1	1				1		1			1	
SF06A						1	2	1	1			1		1				
SF06B						1	2	1	1			1		1				
SF08A								1				1		1				
SF08B						1		1				1		1				
SF10A						1	2	1				1		1				
SF10B						1	2	1				1		1				
SF-24A								1				1		1				
SF-24B								1				1		1				
SF-27								1				1		1				
SF-28						1	2	1				1						
SF42						1		1				1		1				
SF43						1		1				1		1				
SF59																		
ST02						1		1				1		1				
WT04A																		
WT04B																		
XE01					1	1	1	1				1	1	1				
XT31														1				
G123																		
UT03																		
CW6																		
F-7B																		

58-1709970M

PILOT

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	NSPS Subpart G	HON Subpart F	HON Subpart G	HON Subpart H	LAC VOC Storage	LAC Waste Gas Disposal	LAC Non-HON MACT	LAC House-keeping	LAC Fugitive Emission	LAC TAP Control	CAA Accident Release	LAC Emissions Monitoring	Permit Specific Conditions
Site General												1		1	1		
JR01										2	1			1			
JR02										2	1			1			
JR04										2	1			1			
JE03										2	1			1			1
F7									2		1			1			
F8											1			1			

58-17\9980M

APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Shipping

	NSPS Subpart K	NSPS Subpart Ka	NSPS Subpart Kb	NSPS Subpart VV	HON Subpart F	HON ~~NSPS~~ Subpart G	HON Subpart H	LAC VOC Storage	LAC Non-HON MACT	LAC Fugitive Emission	LAC House-keeping	LAC TAP Control	LAC Emissions Monitoring	CAA Accident Release	LAC Particulate Emissions	LAC Control Equipment
Site General											1	1		1		
A-1								2				1				
BT03								2								
DT13								2								
DT14								2				1				
G42					1	1	1	2		1		1				
G43N					1	1	1	2		1		1				
G43S					1	1	1	2		1		1				
G45					1	1	1	2		1		1				
G62-N					1	1	1	2		1		1				
G65-1								2				1				
G65-2								2				1				
G65-3								2				1				
G65-4					1	1	1	2		1		1				
G-100								2								
G-114																
L2 PROD LOAD					1	1	1			1		1				
XT04A					1	1	1	2		1		1				
XT05A/B								2								
XT06A/B					1	1	1	2		1		1				
XT07A/B/C								2								
XT22															1	1
XT24A/B								2								
XT29								2								
XT113								2								
G-43S								2								
G78 N/S								2								
SG31A/B					1	1	1	2				1				
XG65A/B					1	1	1	2				1				
XT01								2								
XT03								2								
XT02A/B								2								
XT04B								2								
XT09B/C								2								
XT10								2								
XT13								2				1				
XT14								2				1				
XT15								2				1				
XT17								2								
XT35								2								
F-7S										1		1				

ATTACHMENT 5

8/31/95
13:18:56
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0402

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 8/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0392	1	V CONT	CONT LOOP E OF PJ03A	M	L	18	08/16/95	8	06/13/95	2000		VP CONT	06/13/95	TP	2000		NNP	07/05/96	312	2
													07/18/95	TP	1000		NNP	08/02/95	401	1
													08/16/95	RPP	8	08/16/95	RTM		402	1
0459		PUMP	PJ72B	M	L	21	08/16/95	20	07/18/95	2000		P SEAL	07/18/95	ADJ	2000		CNI	08/02/95	401	1
													08/16/95	ADJ	20	08/16/95	RTM		402	1
0695		PUMP	PJ77	M	L	33	08/16/95	3500	08/16/95	3500		P SEAL	08/16/95	ADJ	3500		TA	07/05/96	402	1
1035		PUMP	SJ09	M	L	#71	08/16/95	3000	08/16/95	3000		P SEAL	08/16/95	ADJ	3000		TA	07/05/96	402	1
1304		PUMP	ON SJ68B	M	L	#77	08/16/95	1500	08/16/95	1500		P SEAL	08/16/95	ADJ	1500		TA	07/05/96	402	1
2369		PUMP	ON SJ90A	M	L	72	08/16/95	8	07/18/95	2000		P SEAL	07/18/95	ADJ	2000		CNI	08/02/95	401	1
													08/16/95	ADJ	8	08/16/95	RTM		402	1
2559		PUMP	SJ54A	M	L	68	08/16/95	8	07/18/95	1000		P SEAL	07/18/95	ADJ	1000		CNI	08/02/95	401	1
													08/16/95	ADJ	8	08/16/95	RTM		402	1
3695		COMP	IST STAGE RJ29	M	G	#104	08/16/95	10000	08/16/95	10000		V BON	08/16/95	TBB	10000		TA	07/05/96	402	1
3727		COMP	RJ29 2ND STAGE	M	G	#104	08/16/95	10000	06/15/95	10000		V BON	06/15/95	TFB	10000		CNI	07/05/96	312	4
													07/18/95	TFB	10000		FBF	08/02/95	401	1
													08/16/95	TBB	10000		TA	07/05/96	402	1
4147		PUMP	XJ39A	M	L	#83	08/16/95	200	07/18/95	12000		P SEAL	07/18/95	ADJ	12000		CNI	08/02/95	401	1
													08/16/95	ADJ	200	08/16/95	RTM		402	1
4168	2	V	E OF XJ39B	M	L	#83	08/16/95	2000	07/18/95	2000		VP	07/18/95	TP	2000		NNP	08/02/95	401	1
													08/16/95	TP	2000		TA	07/05/96	402	1
4224	2	V	LOADING RACKS	M	G	#100	08/16/95	8	06/15/95	10000		VP	06/15/95	TP	10000		NNP	07/05/96	312	4
													07/18/95	TP	10000		NNP	08/02/95	401	1
													08/16/95	RPP	8	08/16/95	RTM		402	1

TOTAL LEAKING COMPONENTS 12
TOTAL COMPONENTS MONITOR 144

TOTAL LEAKING VALVES 3
TOTAL NUMBER OF VALVES MONITORED 25
% OF VALVES LEAKING 12.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

9/28/95
12:27:39
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0403

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 9/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0695		PUMP	PJ77	M	L	33	09/12/95	8	08/16/95	3500		P SEAL	08/16/95	ADJ	3500		TA	07/05/96	402	1
													09/12/95	ADJ	8	09/12/95	RTM	09/12/95	403	1
1035		PUMP	SJ09	M	L	#71	09/13/95	150	08/16/95	3000		P SEAL	08/16/95	ADJ	3000		TA	07/05/96	402	1
													09/13/95	ADJ	150	09/13/95	RTM	09/13/95	403	2
1055	.50	V	S ON SF06A	M	L	#71	09/13/95	3000	09/13/95	3000		V SEAT	09/13/95	ASD	8	09/13/95			403	2
1173		PUMP	ON SJ52A	M	L	#74	09/13/95	1500	09/13/95	1500		P SEAL	09/13/95	ADJ	1500		CNI	07/05/96	403	2
1304		PUMP	ON SJ68B	M	L	#77	09/13/95	40	08/16/95	1500		P SEAL	08/16/95	ADJ	1500		TA	07/05/96	402	1
													09/13/95	ADJ	40	09/13/95	RTM	09/13/95	403	2
1469	1	V CONT	SE OF SE05	M	L	#66	09/13/95	800	09/13/95	800		VP CONT	09/13/95	TP	800		NNP	07/05/96	403	2
2292	1	V	ON SJ86A	M	L	65	09/13/95	10000	09/13/95	10000		V SEAT	09/13/95	CV	100	09/13/95			403	2
2585		PUMP	ON SJ54B	M	L	68	09/14/95	2000	09/14/95	2000		P SEAL	09/14/95	ADJ	2000		CNI	07/05/96	403	3
3458	.50	V	S OF GB03	M	G	#102	09/12/95	8000	09/12/95	8000		VP	09/12/95	TP	300	09/12/95			403	1
3516	1.50	V	IST LVL ON PE15	M	G	#105	09/12/95	10000	09/12/95	10000		VP	09/12/95	TP	8	09/12/95			403	1
3560	.50	V	W OF GC10	M	G	#101	09/12/95	10000	09/12/95	10000		V SEAT	09/12/95	ASD	8	09/12/95			403	1
3562	.50	V	W OF GC10	M	G	#101	09/12/95	10000	09/12/95	10000		V SEAT	09/12/95	CV	10000		NP	07/05/96	403	1
3590	.75	V	S OF RJ29	M	G	#104	09/14/95	5000	09/14/95	5000		VP	09/14/95	TP	8	09/14/95		09/14/95	403	3
3695		COMP	IST STAGE RJ29	M	G	#104	09/14/95	10000	08/16/95	10000		FLG	08/16/95	TBB	10000		TA	07/05/96	402	1
													09/14/95	TFB	10000		CNI	07/05/96	403	3
3727		COMP	RJ29 2ND STAGE	M	G	#104	09/14/95	10000	06/15/95	10000		FLG	06/15/95	TFB	10000		CNI	07/05/96	312	4
													07/18/95	TFB	10000		FBF	08/02/95	401	1
													08/16/95	TBB	10000		TA	07/05/96	402	1
													09/14/95	TFB	10000		CNI	07/05/96	403	3
3881	.50	V	CONT LOOP SE OF PE10	M	L	#81	09/12/95	2000	09/12/95	2000		V SEAT	09/12/95	CV	2000		NP	07/05/96	403	1

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0403

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4048	3	V CONT	CONT LOOP N OF RC33	M	G	#111	09/14/95	2000	09/14/95	2000		VP CONT	09/14/95	TP	2000		CNI	07/05/96	403	3
4161	.50	V	E OF XJ39A	M	L	#83	09/12/95	1400	09/12/95	1400		VP	09/12/95	TP	100	09/12/95		09/12/95	403	1
4168	2	V	E OF XJ39B	M	L	#83	09/12/95	1000	07/18/95	2000		VP	07/18/95	TP	2000		NNP	08/02/95	401	1
													08/16/95	TP	2000		TA	07/05/96	402	1
													09/12/95	TP	400	09/12/95	RTM	09/12/95	403	1

TOTAL LEAKING COMPONENTS 19
TOTAL COMPONENTS MONITOR 3,782

TOTAL LEAKING VALVES 12
TOTAL NUMBER OF VALVES MONITORED 3,645
% OF VALVES LEAKING .33 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

10/23/95
18:42:48
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0404

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 10/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
1173		PUMP	ON SJ52A	M	L	#74	10/12/95	8	09/13/95	1500		P SEAL	09/13/95	ADJ	1500		CNI	07/05/96	403	2
													10/12/95	ADJ	8	10/12/95	RTM	10/12/95	404	1
1469	1	V CONT	SE OF SE05	M	L	#66	10/12/95	800	09/13/95	800		VP CONT	09/13/95	TP	800		NNP	07/05/96	403	2
													10/12/95	TP	800		NNP	10/27/95	404	1
2585		PUMP	ON SJ54B	M	L	68	10/12/95	8	09/14/95	2000		P SEAL	09/14/95	ADJ	2000		CNI	07/05/96	403	3
													10/12/95	ADJ	8	10/12/95	RTM	10/12/95	404	1
3562	.50	V	W OF GC10	M	G	#101	10/12/95	8	09/12/95	10000		V SEAT	09/12/95	CV	10000		NP	07/05/96	403	1
													10/12/95	ASD	8	10/12/95	RTM	10/12/95	404	1
3695		COMP	IST STAGE RJ29	M	G	#104	10/12/95	300	08/16/95	10000		FLG	08/16/95	TBB	10000		TA	07/05/96	402	1
													09/14/95	TFB	10000		CNI	07/05/96	403	3
													10/12/95	TFB	300	10/12/95	RTM	10/12/95	404	1
3727		COMP	RJ29 2ND STAGE	M	G	#104	10/12/95	8	06/15/95	10000		FLG	06/15/95	TFB	10000		CNI	07/05/96	312	4
													07/18/95	TFB	10000		FBF	08/02/95	401	1
													08/16/95	TBB	10000		TA	07/05/96	402	1
													09/14/95	TFB	10000		CNI	07/05/96	403	3
													10/12/95	TFB	8	10/12/95	RTM	10/12/95	404	1
3881	.50	V	CONT LOOP SE OF PE10	M	L	#81	10/12/95	8	09/12/95	2000		V SEAT	09/12/95	CV	2000		NP	07/05/96	403	1
													10/12/95	ASD	8	10/12/95	RTM	10/12/95	404	1
4048	3	V CONT	CONT LOOP N OF RC33	M	G	#111	10/12/95	2000	09/14/95	2000		VP CONT	09/14/95	TP	2000		CNI	07/05/96	403	3
													10/12/95	TP	2000		NNP	10/27/95	404	1

TOTAL LEAKING COMPONENTS 8
TOTAL COMPONENTS MONITOR 125

TOTAL LEAKING VALVES 4
TOTAL NUMBER OF VALVES MONITORED 14
% OF VALVES LEAKING 28.57 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/28/95
9:44:59
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0405

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 11/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0443		PUMP	PJ45	M	L	16	11/15/95	1000	11/15/95	1000		P SEAL	11/15/95	ADJ	1000		CNI	11/29/95	405	1
1225		PUMP	SJ15A	M	L	#77	11/15/95	1800	11/15/95	1800		P SEAL	11/15/95	ADJ	1800		CNI	11/29/95	405	1
1983		PUMP	ON SJ25B	M	L	75	11/15/95	4000	11/15/95	4000		P SEAL	11/15/95	ADJ	4000		CNI	11/29/95	405	1

TOTAL LEAKING COMPONENTS 3
TOTAL COMPONENTS MONITOR 107

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

12/18/95
6:39:57
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0406

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 12/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0084	1	V	E OF PE15	M	L	4	12/11/95	10000	12/11/95	10000		V SEAT	12/11/95	CV	10000		NP	12/29/95	406	1
0201	2	V	N OF PE10	M	L	4	12/11/95	1000	12/11/95	1000		VP	12/11/95	TP	100	12/11/95			406	1
0203	1	V CONT	N OF PE10	M	L	4	12/11/95	1000	12/11/95	1000		VP CONT	12/11/95	TP	1000		NNP	12/29/95	406	1
0321	.50	V	ON PJ02A	M	L	17	12/11/95	1000	12/11/95	1000		V SEAT	12/11/95	TC	1000		NP	12/29/95	406	2
0400		PUMP	PJ03A	M	L	18	12/11/95	2000	12/11/95	2000		THRD	12/11/95	TC	2000		CNI	12/29/95	406	2
0443		PUMP	PJ45	M	L	16	12/11/95	8	11/15/95	1000			11/15/95	ADJ	1000		CNI	11/29/95	405 406	1 2
1051	.75	V	S ON SF06B	M	L	#71	12/12/95	10000	12/12/95	10000		THRD	12/12/95	TC	10000		CNI	12/29/95	406	3
1225		PUMP	SJ15A	M	L	#77	12/12/95	8	11/15/95	1800			11/15/95	ADJ	1800		CNI	11/29/95	405 406	1 4
1469	1	V CONT	SE OF SE05	M	L	#66	12/12/95	40	09/13/95	800			09/13/95 10/12/95	TP TP	800 800		NNP NNP	07/05/96 10/27/95	403 404 406	2 1 3
1753	.5	V	S OF PJ13B	M	L	6	12/11/95	1000	12/11/95	1000		V SEAT	12/11/95	CV	1000		NP	12/29/95	406	2
1823	1	V	N OF PT02	M	L	62	12/11/95	2000	12/11/95	2000		THRD	12/11/95	TC	2000		CNI	12/29/95	406	2
1889		PUMP	ON SJ48B	M	L	77	12/11/95	1000	12/11/95	1000		P SEAL	12/11/95	ADJ	1000		CNI	12/29/95	406	1
1983		PUMP	ON SJ25B	M	L	75	12/11/95	40	11/15/95	4000			11/15/95	ADJ	4000		CNI	11/29/95	405 406	1 1
2015		PUMP	ON SJ25C	M	L	75	12/12/95	6500	12/12/95	6500		P SEAL	12/12/95	ADJ	6500		CNI	12/29/95	406	4
2133	1	V CONT	1ST LVL OF SE08	M	L	61	12/12/95	1000	12/12/95	1000		VP CONT	12/12/95	TP	1000		NNP	12/29/95	406	3
2441	1	V CONT	2ND LVL CONT LOOP S OF SE18	M	L	68	12/12/95	2000	12/12/95	2000		VP CONT	12/12/95	TP	2000		NNP	12/29/95	406	3
2815	.75	V	ON RJ16B	M	L	#82	12/11/95	1000	12/11/95	1000		V SEAT	12/11/95	CV	1000		NP	12/29/95	406	2

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0406

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
2819	.75	V	ON RJ16A	M	L	#82	12/11/95	1000	12/11/95	1000		V SEAT	12/11/95	CV	1000		NP	12/29/95	406	2
3332	8	V	PLATFORM W OF GF08	M	G	#102	12/12/95	2000	12/12/95	2000		VP	12/12/95	TP	2000		NNP	12/29/95	406	3
3400	.25	V INST	PR W GC20	M	G	#102	12/12/95	10000	12/12/95	10000		THRD	12/12/95	TC	10000		CNI	12/29/95	406	4
3695		COMP	IST STAGE RJ29	M	G	#104	12/11/95	10000	12/11/95	10000		FLG	12/11/95	TFB	10000		CNI	12/29/95	406	1
3718	1	V	S ON RJ-29	M	G	#104	12/11/95	2000	12/11/95	2000		VP	12/11/95	TP	50	12/11/95			406	2
3738	1	V	SG ON RJ-29	M	G	#104	12/11/95	2000	12/11/95	2000		VP	12/11/95	TP	1000		NNP	12/29/95	406	2
4227	2	V	LOADING RACKS	M	G	#100	12/11/95	10000	12/11/95	10000		THRD	12/11/95	TC	10000		CNI	12/29/95	406	1

TOTAL LEAKING COMPONENTS 24
TOTAL COMPONENTS MONITOR 4,123

TOTAL LEAKING VALVES 17
TOTAL NUMBER OF VALVES MONITORED 3,845
% OF VALVES LEAKING .44 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/19/96
11:25:11
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0407

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 1/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0084	1	V	E OF PE15	M	L	4	01/12/96	8	12/11/95	10000		V SEAT	12/11/95 01/12/96	CV ASD	10000 8	01/12/96	NP RTM	12/29/95 07/05/96	406 407	1 1
0203	1	V CONT	N OF PE10	M	L	4	01/12/96	8	12/11/95	1000		VP CONT	12/11/95 01/12/96	TP RPP	1000 8	01/12/96	NNP RTM	12/29/95 07/05/96	406 407	1 1
0321	.50	V	ON PJ02A	M	L	17	01/12/96	8	12/11/95	1000		V SEAT	12/11/95 01/12/96	TC ASD	1000 8	01/12/96	NP RTM	12/29/95 07/05/96	406 407	2 1
0400		PUMP	PJ03A	M	L	18	01/12/96	2000	12/11/95	2000		THRD	12/11/95 01/12/96	TC TC	2000 2000		CNI CNI	12/29/95 07/05/96	406 407	2 1
1051	.75	V	S ON SF06B	M	L	#71	01/12/96	8	12/12/95	10000		THRD	12/12/95 01/12/96	TC ASD	10000 8	01/12/96	CNI RTM	12/29/95 07/05/96	406 407	3 1
1753	.5	V	S OF PJ13B	M	L	6	01/12/96	8	12/11/95	1000		V SEAT	12/11/95 01/12/96	CV ASD	1000 8	01/12/96	NP RTM	12/29/95 07/05/96	406 407	2 1
1823	1	V	N OF PT02	M	L	62	01/12/96	8	12/11/95	2000		THRD	12/11/95 01/12/96	TC ASD	2000 8	01/12/96	CNI RTM	12/29/95 07/05/96	406 407	2 1
1889		PUMP	ON SJ48B	M	L	77	01/12/96	400	12/11/95	1000		P SEAL	12/11/95 01/12/96	ADJ ADJ	1000 400	01/12/96	CNI RTM	12/29/95 07/05/96	406 407	1 1
2015		PUMP	ON SJ25C	M	L	75	01/12/96	10	12/12/95	6500		P SEAL	12/12/95 01/12/96	ADJ ADJ	6500 10	01/12/96	CNI RTM	12/29/95 07/05/96	406 407	4 1
2133	1	V CONT	1ST LVL OF SE08	M	L	61	01/12/96	8	12/12/95	1000		VP CONT	12/12/95 01/12/96	TP RPP	1000 8	01/12/96	NNP RTM	12/29/95 07/05/96	406 407	3 1
2441	1	V CONT	2ND LVL CONT LOOP S OF SE18	M	L	68	01/12/96	8	12/12/95	2000		VP CONT	12/12/95 01/12/96	TP RPP	2000 8	01/12/96	NNP RTM	12/29/95 07/05/96	406 407	3 1
2815	.75	V	ON RJ16B	M	L	#82	01/12/96	8	12/11/95	1000		V SEAT	12/11/95 01/12/96	CV ASD	1000 8	01/12/96	NP RTM	12/29/95 07/05/96	406 407	2 1
2819	.75	V	ON RJ16A	M	L	#82	01/12/96	8	12/11/95	1000		V SEAT	12/11/95	CV	1000		NP	12/29/95	406	2

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0407

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
													01/12/96	ASD	8	01/12/96	RTM	07/05/96	407	1
3332	8	V	PLATFORM W OF GFO8	M	G	#102	01/12/96	8	12/12/95	2000		VP	12/12/95	TP	2000		NNP	12/29/95	406	3
													01/12/96	RPP	8	01/12/96	RTM	07/05/96	407	1
3400	.25	V INST	PR W GC20	M	G	#102	01/12/96	8	12/12/95	10000		THRD	12/12/95	TC	10000		CNI	12/29/95	406	4
													01/12/96	TC	8	01/12/96	RTM	07/05/96	407	1
3695		COMP	IST STAGE RJ29	M	G	#104	01/12/96	8	12/11/95	10000		FLG	12/11/95	TFB	10000		CNI	12/29/95	406	1
													01/12/96	RP	8	01/12/96	RTM	07/05/96	407	1
3738	1	V	SG ON RJ-29	M	G	#104	01/12/96	8	12/11/95	2000		VP	12/11/95	TP	1000		NNP	12/29/95	406	2
													01/12/96	COV	8	01/12/96	RTM	07/05/96	407	1
4227	2	V	LOADING RACKS	M	G	#100	01/12/96	8	12/11/95	10000		THRD	12/11/95	TC	10000		CNI	12/29/95	406	1
													01/12/96	TC	8	01/12/96	RTM	07/05/96	407	1

TOTAL LEAKING COMPONENTS 18
TOTAL COMPONENTS MONITOR 127

TOTAL LEAKING VALVES 14
TOTAL NUMBER OF VALVES MONITORED 14
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/28/96
11:34:22
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0408

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 2/29/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0400		PUMP	PJ03A	M	L	18	02/20/96	8	12/11/95	2000		THRD	12/11/95	TC	2000		CNI	12/29/95	406	2
													01/12/96	TC	2000		CNI	07/05/96	407	1
													02/20/96	TC	8	02/20/96	RTM	03/05/96	408	1
1051	.75	V	S ON SF06B	M	L	#71	02/20/96	10000	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	408	1
3400	.25	V INST	PR W GC20	M	G	#102	02/20/96	1000	02/20/96	1000		VP	02/20/96	TP	1000		NNP	03/05/96	408	1
3695		COMP	IST STAGE RJ29	M	G	#104	02/20/96	10000	02/20/96	10000		FLG	02/20/96	TFB	10000		CNI	03/05/96	408	1
4227	2	V	LOADING RACKS	M	G	#100	02/20/96	10000	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	408	1

TOTAL LEAKING COMPONENTS 5
TOTAL COMPONENTS MONITOR 135

TOTAL LEAKING VALVES 3
TOTAL NUMBER OF VALVES MONITORED 18
% OF VALVES LEAKING 16.67 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

4/08/96
15:59:54
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0409

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 3/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0711	3	V	E ON PJ76	M	L	33	03/20/96	2000	03/20/96	2000		FLG	03/20/96	TFB	2000		CNI	03/24/96	409	1
1051	.75	V	S ON SF06B	M	L	#71	03/20/96	8	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	408	1
													03/20/96	TC	8	03/20/96	RTM	03/24/96	409	1
1453	1	V CONT	CONT LOOP SW OF SC09	M	L	#63	03/20/96	600	03/20/96	600		VP CONT	03/20/96	TP	600		NNP	03/24/96	409	2
1485	1	V CONT	S OF SC09	M	L	#66	03/20/96	2000	03/20/96	2000		VP CONT	03/20/96	TP	2000		NNP	03/24/96	409	2
2292	1	V	ON SJ86A	M	L	65	03/20/96	10000	03/20/96	10000		V SEAT	03/20/96	CV	10000		NP	03/24/96	409	2
2342	1	V	ON SJ89	M	L	73	03/20/96	2000	03/20/96	2000		VP	03/20/96	TP	300		NNP	03/24/96	409	2
2959	.75	V	ON RE-06	M	L	#82	03/20/96	1000	03/20/96	1000		V BON	03/20/96	TBB	950		CNI	03/24/96	409	3
2989	2	V	ON RJ14B	M	L	#82	03/20/96	4500	03/20/96	4500		VP	03/20/96	TP	4000		NNP	03/24/96	409	3
3131	.5	V	1ST LVL OF RE05	M	L	#82	03/20/96	550	03/20/96	550		V SEAT	03/20/96	ASD	8	03/20/96		03/24/96	409	3
3400	.25	V INST	PR W GC20	M	G	#102	03/20/96	1000	02/20/96	1000		VP	02/20/96	TP	1000		NNP	03/05/96	408	1
													03/20/96	TP	1000		NNP	03/24/96	409	3
3422	.5	V	S OF GB02	M	G	#102	03/20/96	10000	03/20/96	10000		VP	03/20/96	TP	10000		NNP	03/24/96	409	3
3458	.50	V	S OF GB03	M	G	#102	03/20/96	6000	03/20/96	6000		VP	03/20/96	TP	6000		NNP	03/24/96	409	3
3461	.50	V	S OF GB03	M	G	#102	03/20/96	5000	03/20/96	5000		VP	03/20/96	TP	5000		NNP	03/24/96	409	3
3590	.75	V	S OF RJ29	M	G	#104	03/20/96	2500	03/20/96	2500		VP	03/20/96	TP	2500		NNP	03/24/96	409	3
3632	3	V	N OF RF43	M	G	#104	03/20/96	3000	03/20/96	3000		VP	03/20/96	TP	3000		NNP	03/24/96	409	3
3695		COMP	1ST STAGE RJ29	M	G	#104	03/20/96	10000	02/20/96	10000		FLG	02/20/96	TFB	10000		CNI	03/05/96	408	1
													03/20/96	TFB	10000		CNI	03/24/96	409	3
3997	4	V	CONT LOOP N RE10	M	G	#109	03/20/96	10000	03/20/96	10000		VP	03/20/96	TP	7000		NNP	03/24/96	409	3
4218	2	V	LOADING RACKS	M	G	#100	03/20/96	2000	03/20/96	2000		VP	03/20/96	TP	2000		NNP	03/24/96	409	3

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0409

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4220	2	V	LOADING RACKS	M	G	#100	03/20/96	5000	03/20/96	5000		VP	03/20/96	TP	5000		NNP	03/24/96	409	3
4227	2	V	LOADING RACKS	M	G	#100	03/20/96	8	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	408	1
													03/20/96	RPP	8	03/20/96	RTM	03/24/96	409	3

TOTAL LEAKING COMPONENTS 20
TOTAL COMPONENTS MONITOR 3,629

TOTAL LEAKING VALVES 19
TOTAL NUMBER OF VALVES MONITORED 3,499
% OF VALVES LEAKING .54 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/06/96
11:42:54
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0410

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 4/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0711	3	V	E ON PJ76	M	L	33	04/25/96	30	03/20/96	2000		FLG	03/20/96	TFB	2000		CNI	03/24/96	409	1
													04/25/96	TFB	30	04/25/96	RTM		410	1
1453	1	V CONT	CONT LOOP SW OF SC09	M	L	#63	04/25/96	100	03/20/96	600		VP CONT	03/20/96	TP	600		NNP	03/24/96	409	2
													04/25/96	TP	100	04/25/96	RTM		410	1
1485	1	V CONT	S OF SC09	M	L	#66	04/25/96	70	03/20/96	2000		VP CONT	03/20/96	TP	2000		NNP	03/24/96	409	2
													04/25/96	TP	70	04/25/96	RTM		410	1
2292	1	V	ON SJ86A	M	L	65	04/25/96	10	03/20/96	10000		V SEAT	03/20/96	CV	10000		NP	03/24/96	409	2
													04/25/96	ASD	10	04/25/96	RTM		410	1
2342	1	V	ON SJ89	M	L	73	04/25/96	300	03/20/96	2000		VP	03/20/96	TP	300		NNP	03/24/96	409	2
													04/25/96	TP	300	04/25/96	RTM		410	1
2959	.75	V	ON RE-06	M	L	#82	04/25/96	200	03/20/96	1000		V BON	03/20/96	TBB	950		CNI	03/24/96	409	3
													04/25/96	TBB	200	04/25/96	RTM		410	1
2989	2	V	ON RJ14B	M	L	#82	04/25/96	8	03/20/96	4500		VP	03/20/96	TP	4000		NNP	03/24/96	409	3
													04/25/96	TP	8	04/25/96	RTM		410	1
3400	.25	V INST	PR W GC20	M	G	#102	04/25/96	50	02/20/96	1000		VP	02/20/96	TP	1000		NNP	03/05/96	408	1
													03/20/96	TP	1000		NNP	03/24/96	409	3
													04/25/96	TP	50	04/25/96	RTM		410	1
3422	.5	V	S OF GB02	M	G	#102	04/25/96	8	03/20/96	10000		VP	03/20/96	TP	10000		NNP	03/24/96	409	3
													04/25/96	TP	8	04/25/96	RTM		410	1
3458	.50	V	S OF GB03	M	G	#102	04/25/96	10500	03/20/96	6000		VP	03/20/96	TP	6000		NNP	03/24/96	409	3
													04/25/96	TP	25	04/25/96			410	1
3461	.50	V	S OF GB03	M	G	#102	04/25/96	10100	03/20/96	5000		VP	03/20/96	TP	5000		NNP	03/24/96	409	3
													04/25/96	TP	40	04/25/96			410	1
3590	.75	V	S OF RJ29	M	G	#104	04/25/96	8	03/20/96	2500		VP	03/20/96	TP	2500		NNP	03/24/96	409	3
													04/25/96	TP	8	04/25/96	RTM		410	1
3632	3	V	N OF RF43	M	G	#104	04/25/96	10	03/20/96	3000		VP	03/20/96	TP	3000		NNP	03/24/96	409	3

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0410

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
													04/25/96	TP	10	04/25/96	RTM		410	1
3695		COMP	IST STAGE RJ29	M	G	#104	04/25/96	35	02/20/96	10000		FLG	02/20/96	TFB	10000		CNI	03/05/96	408	1
													03/20/96	TFB	10000		CNI	03/24/96	409	3
													04/25/96	TFB	35	04/25/96	RTM		410	1
3997	4	V	CONT LOOP N RE10	M	G	#109	04/25/96	8	03/20/96	10000		VP	03/20/96	TP	7000		NNP	03/24/96	409	3
													04/25/96	TP	8	04/25/96	RTM		410	1
4218	2	V	LOADING RACKS	M	G	#100	04/25/96	425	03/20/96	2000		VP	03/20/96	TP	2000		NNP	03/24/96	409	3
													04/25/96	TP	425	04/25/96	RTM		410	1
4220	2	V	LOADING RACKS	M	G	#100	04/25/96	150	03/20/96	5000		VP	03/20/96	TP	5000		NNP	03/24/96	409	3
													04/25/96	TP	150	04/25/96	RTM		410	1

TOTAL LEAKING COMPONENTS 17
TOTAL COMPONENTS MONITOR 112

TOTAL LEAKING VALVES 16
TOTAL NUMBER OF VALVES MONITORED 19
% OF VALVES LEAKING 84.21 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/17/96
17:52:33
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0411

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 5/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 111

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 16
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

6/26/96
17:50:12
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0412

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 6/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0001	2	V	BTM OF GF08	M	L	01	06/18/96	10000	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
0029	3	V CONT	W OF GF11	M	L	02	06/18/96	1500	06/18/96	1500		VP CONT	06/18/96	TP	1500		NNP	07/02/96	412	2
0249		PUMP	PJ26B	M	L	14	06/18/96	1000	06/18/96	1000		P SEAL	06/18/96	ADJ	1000		CNI	07/02/96	412	2
0512		PUMP	PJ46	M	L	16	06/17/96	3500	06/17/96	3500		P SEAL	06/17/96	ADJ	3500		CNI	07/01/96	412	1
0527		PUMP	PJ48A	M	L	24	06/17/96	3000	06/17/96	3000		P SEAL	06/17/96	ADJ	3000		CNI	07/01/96	412	1
1173		PUMP	ON SJ52A	M	L	#74	06/19/96	1000	06/19/96	1000		P SEAL	06/19/96	ADJ	1000		CNI	07/03/96	412	3
1225		PUMP	SJ15A	M	L	#77	06/19/96	10000	06/19/96	10000		P SEAL	06/19/96	ADJ	10000		CNI	07/03/96	412	3
1453	1	V CONT	CONT LOOP SW OF SC09	M	L	#63	06/20/96	1700	06/20/96	1700		VP CONT	06/20/96	TP	1700		NNP	07/04/96	412	4
1889		PUMP	ON SJ48B	M	L	77	06/20/96	2000	06/20/96	2000		P SEAL	06/20/96	ADJ	2000		CNI	07/04/96	412	4
1945		PUMP	SJ37A	M	L	76	06/20/96	1000	06/20/96	1000		P SEAL	06/20/96	ADJ	1000		CNI	07/04/96	412	4
1982		PUMP	ON SJ38	M	L	76	06/20/96	4000	06/20/96	4000		P SEAL	06/20/96	ADJ	4000		CNI	07/04/96	412	4
2133	1	V CONT	1ST LVL OF SE08	M	L	61	06/20/96	1500	06/20/96	1500		VP CONT	06/20/96	TP	1500		NNP	07/04/96	412	4
2587		PUMP	ON SJ53	M	L	67	06/19/96	1200	06/19/96	1200		P SEAL	06/19/96	ADJ	1200		CNI	07/03/96	412	3
3207	3	V	TOP OF GT01	M	G	#100	06/17/96	10000	06/17/96	10000		VP	06/17/96	TP	8000		NNP	07/01/96	412	1
3372	6	V	CONT LOOP NW GC16	M	G	#100	06/18/96	10000	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
3460	4	V	S OF GB03	M	G	#102	06/18/96	4000	06/18/96	4000		VP	06/18/96	TP	2000		NNP	07/02/96	412	2
3461	.50	V	S OF GB03	M	G	#102	06/18/96	10000	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
3559	6	V	W OF GC10	M	G	#101	06/18/96	12000	06/18/96	12000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
3849	1	V	PLATFORM E OF PE08	M	G	#107	06/19/96	1000	06/19/96	1000		VP	06/19/96	TP	1000		NNP	07/03/96	412	3

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0412

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
3892	6	V	SE LOOP OF PE10 CONT LOOP	M	G	#101	06/19/96	10000	06/19/96	10000		VP	06/19/96	TP	10000		NNP	07/03/96	412	3
4118	4	V	TOP OF XT20 SPHERE	M	G	#100	06/17/96	10000	06/17/96	10000		VP	06/17/96	TP	10000		NNP	07/01/96	412	1
4140	.50	V	BTM XT20 SPHERE	M	G	#100	06/17/96	2000	06/17/96	2000		VP	06/17/96	TP	3000		NNP	07/01/96	412	1
4159	2	V	E OF XJ39A	M	L	#83	06/17/96	2500	06/17/96	2500		VP	06/17/96	TP	2500		NNP	07/01/96	412	1

TOTAL LEAKING COMPONENTS 23
TOTAL COMPONENTS MONITOR 3,563

TOTAL LEAKING VALVES 14
TOTAL NUMBER OF VALVES MONITORED 3,444
% OF VALVES LEAKING .41 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

7/15/96
10:05:02
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0501

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 7/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0001	2	V	BTM OF GF08	M	L	01	07/09/96	8	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	TP	8	07/09/96	RTM	07/09/96	501	1
0029	3	V CONT	W OF GF11	M	L	02	07/09/96	20	06/18/96	1500		VP CONT	06/18/96	TP	1500		NNP	07/02/96	412	2
													07/09/96	TP	80	07/09/96	RTM	07/09/96	501	1
0249		PUMP	PJ26B	M	L	14	07/09/96	8	06/18/96	1000		P SEAL	06/18/96	ADJ	1000		CNI	07/02/96	412	2
													07/09/96	ADJ	8	07/09/96	RTM	07/09/96	501	1
0512		PUMP	PJ46	M	L	16	07/09/96	3500	06/17/96	3500		P SEAL	06/17/96	ADJ	3500		CNI	07/01/96	412	1
													07/09/96	ADJ	3500		CNI	07/23/96	501	1
0527		PUMP	PJ48A	M	L	24	07/09/96	8	06/17/96	3000		P SEAL	06/17/96	ADJ	3000		CNI	07/01/96	412	1
													07/09/96	ADJ	8	07/09/96	RTM	07/09/96	501	1
1173		PUMP	ON SJ52A	M	L	#74	07/09/96	8	06/19/96	1000		P SEAL	06/19/96	ADJ	1000		CNI	07/03/96	412	3
													07/09/96	ADJ	8	07/09/96	RTM	07/09/96	501	1
1225		PUMP	SJ15A	M	L	#77	07/09/96	8	06/19/96	10000		P SEAL	06/19/96	ADJ	10000		CNI	07/03/96	412	3
													07/09/96	ADJ	8	07/09/96	RTM	07/09/96	501	1
1453	1	V CONT	CONT LOOP SW OF SC09	M	L	#63	07/09/96	100	06/20/96	1700		VP CONT	06/20/96	TP	1700		NNP	07/04/96	412	4
													07/09/96	TP	100	07/09/96	RTM	07/09/96	501	1
1889		PUMP	ON SJ48B	M	L	77	07/09/96	2000	06/20/96	2000		P SEAL	06/20/96	ADJ	2000		CNI	07/04/96	412	4
													07/09/96	ADJ	2000		CNI	07/23/96	501	1
1945		PUMP	SJ37A	M	L	76			06/20/96	1000		P SEAL	06/20/96	ADJ	1000		CNI	07/04/96	412	4
																	CNI	07/04/96	501	
1982		PUMP	ON SJ38	M	L	76	07/09/96	4000	06/20/96	4000		P SEAL	06/20/96	ADJ	4000		CNI	07/04/96	412	4
													07/09/96	ADJ	4000		CNI	07/23/96	501	1
2133	1	V CONT	1ST LVL OF SE08	M	L	61	07/09/96	200	06/20/96	1500		VP CONT	06/20/96	TP	1500		NNP	07/04/96	412	4
													07/09/96	TP	200	07/09/96	RTM	07/09/96	501	1
2587		PUMP	ON SJ53	M	L	67			06/19/96	1200		P SEAL	06/19/96	ADJ	1200		CNI	07/03/96	412	3

TEAM, INC
LEAKING COMPONENT LOG

CUSTOMER : ANGUS CHEMICAL COMPANY
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0501

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
																	CNI	07/03/96	501	
3207	3	V	TOP OF GT01	M	G	#100	07/09/96	8000	06/17/96	10000		VP	06/17/96	TP	8000		NNP	07/01/96	412	1
													07/09/96	TP	8000		NNP	07/23/96	501	1
3372	6	V	CONT LOOP NW GC16	M	G	#100	07/09/96	10	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	RPP	10	07/09/96	RTM	07/09/96	501	1
3460	4	V	S OF GB03	M	G	#102	07/09/96	100	06/18/96	4000		VP	06/18/96	TP	2000		NNP	07/02/96	412	2
													07/09/96	RPP	100	07/09/96	RTM	07/09/96	501	1
3461	.50	V	S OF GB03	M	G	#102	07/09/96	3000	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	TP	3000		NNP	07/23/96	501	1
3559	6	V	W OF GC10	M	G	#101	07/09/96	20	06/18/96	12000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	RPP	20	07/09/96	RTM	07/09/96	501	1
3849	1	V	PLATFORM E OF PE08	M	G	#107	07/09/96	1000	06/19/96	1000		VP	06/19/96	TP	1000		NNP	07/03/96	412	3
													07/09/96	TP	1000		NNP	07/23/96	501	1
3892	6	V	SE LOOP OF PE10 CONT LOOP	M	G	#101	07/09/96	450	06/19/96	10000		VP	06/19/96	TP	10000		NNP	07/03/96	412	3
													07/09/96	TP	450	07/09/96	RTM	07/09/96	501	1
4118	4	V	TOP OF XT20 SPHERE	M	G	#100	07/09/96	100	06/17/96	10000		VP	06/17/96	TP	10000		NNP	07/01/96	412	1
													07/09/96	RPP	100	07/09/96	RTM	07/09/96	501	1
4140	.50	V	BTM XT20 SPHERE	M	G	#100	07/09/96	60	06/17/96	2000		VP	06/17/96	TP	3000		NNP	07/01/96	412	1
													07/09/96	RPP	60	07/09/96	RTM	07/09/96	501	1
4159	2	V	E OF XJ39A	M	L	#83	07/09/96	15	06/17/96	2500		VP	06/17/96	TP	2500		NNP	07/01/96	412	1
													07/09/96	RPP	15	07/09/96	RTM	07/09/96	501	1

TOTAL LEAKING COMPONENTS 23
TOTAL COMPONENTS MONITOR 106

TOTAL LEAKING VALVES 14
TOTAL NUMBER OF VALVES MONITORED 14
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/09/96
9:11:51
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0502

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 8/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0001	2	V	BTM OF GF08	M	L	01	08/08/96	10000	08/08/96	10000		VP	08/08/96	TP	10000		NNP	03/24/97	502	1
0512		PUMP	PJ46	M	L	16	08/08/96	50	06/17/96	3500		P SEAL	06/17/96	ADJ	3500		CNI	07/01/96	412	1
													07/09/96	ADJ	3500		CNI	07/23/96	501	1
													08/08/96	ADJ	50	08/08/96	RTM		502	1
1889		PUMP	ON SJ48B	M	L	77	08/08/96	8	06/20/96	2000		P SEAL	06/20/96	ADJ	2000		CNI	07/04/96	412	4
													07/09/96	ADJ	2000		CNI	07/23/96	501	1
													08/08/96	ADJ	8	08/08/96	RTM		502	1
1945		PUMP	SJ37A	M	L	76	08/08/96	8	06/20/96	1000		P SEAL	06/20/96	ADJ	1000		CNI	07/04/96	412	4
																	CNI	07/04/96	501	
													08/08/96	ADJ	8	08/08/96	RTM		502	1
1982		PUMP	ON SJ38	M	L	76	08/08/96	8	06/20/96	4000		P SEAL	06/20/96	ADJ	4000		CNI	07/04/96	412	4
													07/09/96	ADJ	4000		CNI	07/23/96	501	1
													08/08/96	ADJ	8	08/08/96	RTM		502	1
2587		PUMP	ON SJ53	M	L	67	08/08/96	8	06/19/96	1200		P SEAL	06/19/96	ADJ	1200		CNI	07/03/96	412	3
																	CNI	07/03/96	501	
													08/08/96	ADJ	8	08/08/96	RTM		502	1
3207	3	V	TOP OF GT01	M	G	#100	08/08/96	3000	06/17/96	10000		VP	06/17/96	TP	8000		NNP	07/01/96	412	1
													07/09/96	TP	8000		NNP	07/23/96	501	1
													08/08/96	TP	150	08/08/96			502	1
3461	.50	V	S OF GB03	M	G	#102	08/08/96	10000	06/18/96	10000		V BON	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	TP	3000		NNP	07/23/96	501	1
													08/08/96	TBB	10000		CNI	03/24/97	502	1
3849	1	V	PLATFORM E OF PE08	M	G	#107	08/08/96	100	06/19/96	1000		VP	06/19/96	TP	1000		NNP	07/03/96	412	3
													07/09/96	TP	1000		NNP	07/23/96	501	1
													08/08/96	TP	100	08/08/96	RTM		502	1
4118	4	V	TOP OF XT20 SPHERE	M	G	#100	08/08/96	1800	08/08/96	1800		VP	08/08/96	TP	85	08/08/96			502	1

TOTAL LEAKING COMPONENTS 10
TOTAL COMPONENTS MONITOR 107

TOTAL LEAKING VALVES 5
TOTAL NUMBER OF VALVES MONITORED 14
% OF VALVES LEAKING 35.71 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

10/11/96
17:36:06
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0503

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 9/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0001	2	V	BTM OF GF08	M	L	01	09/16/96	300	08/08/96	10000		VP	08/08/96	TP	10000		NNP	03/24/97	502	1
													09/16/96	COV	300	09/16/96	RTM	03/24/97	503	2
0166	.75	V	E OF PF-51	M	L	11	09/16/96	10100	09/16/96	10100		V SEAT	09/16/96	CV	8	09/16/96			503	2
1099	.75	V	CONT LOOP SE OF SE05	M	L	#77	09/16/96	12000	09/16/96	12000		V SEAT	09/16/96	CV	12000		NP	10/31/96	503	2
1250	1	V	ON SJ49B	M	L	#77	09/16/96	550	09/16/96	550		VP	09/16/96	TP	200	09/16/96			503	2
2977	6	V	N OF RE-06	M	L	#82	09/16/96	9000	09/16/96	9000		VP	09/16/96	TP	300	09/16/96			503	2
3461	.50	V	S OF GB03	M	G	#102	09/16/96	8	06/18/96	10000		VP	06/18/96	TP	10000		NNP	07/02/96	412	2
													07/09/96	TP	3000		NNP	07/23/96	501	1
													08/08/96	TBB	10000		CNI	03/24/97	502	1
													09/16/96	COV	8	09/16/96	RTM	03/24/97	503	2

TOTAL LEAKING COMPONENTS 6
TOTAL COMPONENTS MONITOR 3,605

TOTAL LEAKING VALVES 6
TOTAL NUMBER OF VALVES MONITORED 3,493
% OF VALVES LEAKING .17 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/13/96
12:18:30
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0504

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 10/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
1099	.75	V	CONT LOOP SE OF SE05	M	L	#77	10/28/96	8	09/16/96	12000		V SEAT	09/16/96	CV	12000		NP	10/31/96	503	2
													10/28/96	ASD	8	10/28/96	RTM	10/31/96	504	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 106

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 6
% OF VALVES LEAKING 16.67 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/26/96
17:42:06
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0505

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 11/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
1080		PUMP	ON SJ55B	M	L	#62	11/18/96	2000	11/18/96	2000		P SEAL	11/18/96	ADJ	2000		CNI	12/08/96	505	1
1983		PUMP	ON SJ25B	M	L	75	11/18/96	5000	11/18/96	5000		P SEAL	11/18/96	ADJ	5000		CNI	12/08/96	505	1

TOTAL LEAKING COMPONENTS 2
TOTAL COMPONENTS MONITOR 109

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 9
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

1/14/97
14:07:57
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0506

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 12/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
1080		PUMP	ON SJ55B	M	L	#62			11/18/96	2000		P SEAL	11/18/96	ADJ	2000		CNI	12/08/96	505	1
																	CNI	12/08/96	506	
1983		PUMP	ON SJ25B	M	L	75	12/20/96	8	11/18/96	5000		P SEAL	11/18/96	ADJ	5000		CNI	12/08/96	505	1
													12/20/96	ADJ	8	12/20/96	RTM	12/20/96	506	2

TOTAL LEAKING COMPONENTS 2
TOTAL COMPONENTS MONITOR 2,836

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 2,663
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/03/97
10:28:22
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0507

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 1/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
1080		PUMP	ON SJ55B	M	L	#62	01/30/97	8	11/18/96	2000		P SEAL	11/18/96	ADJ	2000		CNI	12/08/96	505	1
																	CNI	12/08/96	506	
													01/30/97	ADJ	8	01/30/97	RTM	01/30/97	507	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 90

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/21/97
15:01:47
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0508

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 2/28/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0717		PUMP	PJ76	M	L	34	02/19/97	600	02/19/97	600		P SEAL	02/19/97	ADJ	600		CNI	11/17/97	508	1
0853		PUMP	PJ22B	M	L	#54	02/19/97	4000	02/19/97	4000		P SEAL	02/19/97	ADJ	4000		CNI	11/17/97	508	1

TOTAL LEAKING COMPONENTS 2
TOTAL COMPONENTS MONITOR 99

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

4/01/97
20:51:50
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0509

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 3/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0717		PUMP	PJ76	M	L	34	03/24/97	8	02/19/97	600		P SEAL	02/19/97	ADJ	600		CNI	11/17/97	508	1
													03/24/97	RPS	8	03/24/97	RTM	04/01/97	509	1
0853		PUMP	PJ22B	M	L	#54	03/24/97	8	02/19/97	4000		P SEAL	02/19/97	ADJ	4000		CNI	11/17/97	508	1
													03/24/97	RPS	8	03/24/97	RTM	04/01/97	509	1
1485	1	V CONT	S OF SC09	M	L	#66	03/24/97	1000	03/24/97	1000		VP CONT	03/24/97	TP	1000		NNP	04/01/97	509	2
4224	2	V	LOADING RACKS	M	G	#100	03/25/97	10000	03/25/97	10000		VP	03/25/97	TP	10000		NNP	04/01/97	509	4

TOTAL LEAKING COMPONENTS 4
TOTAL COMPONENTS MONITOR 3,559

TOTAL LEAKING VALVES 2
TOTAL NUMBER OF VALVES MONITORED 3,440
% OF VALVES LEAKING .06 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

4/18/97
10:47:50
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0510

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 4/30/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0512		PUMP	PJ46	M	L	16	04/11/97	590	04/11/97	590		PSL	04/11/97	ADJ	560		SD	04/11/97	510	2
1485	1	V CONT	S OF SC09	M	L	#66	04/11/97	9	03/24/97	1000		VP CONT	03/24/97	TP	1000		NNP	04/01/97	509	2
													04/11/97	RPK	9	04/11/97	RTM	04/11/97	510	2
4224	2	V	LOADING RACKS	M	G	#100	04/11/97	176	03/25/97	10000		VP	03/25/97	TP	10000		NNP	04/01/97	509	4
													04/11/97	TP	176	04/11/97	RTM	04/11/97	510	2

TOTAL LEAKING COMPONENTS 3
TOTAL COMPONENTS MONITOR 96

TOTAL LEAKING VALVES 2
TOTAL NUMBER OF VALVES MONITORED 2
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/23/97
9:33:50
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0511

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 5/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 0

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

UNIT SHUT DOWN THIS MONTH.

8/18/97
9:41:14
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0512

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 6/30/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
0512		PUMP	PJ46	M	L	16	06/18/97	15	04/11/97	590		PSL	04/11/97	ADJ	560		SD	04/11/97	510	2
													06/18/97	ADJ	15	06/18/97			512	1
1164	.5	V	ON SJ52A	M	L	#74	06/18/97	4000	06/18/97	4000		V SEAT	06/18/97	ASD	20	06/18/97		06/18/97	512	3
2916	4	V	CONT LOOP S OF RC-3C	M	L	#82	06/19/97	6000	06/19/97	6000		VP	06/19/97	TP	10	06/19/97		06/19/97	512	6
4679		PUMP	XJ-011A	M	L	NITROMETHANE	06/19/97	1800	06/19/97	1800		P SEAL	06/19/97	ADJ	1800		TA	07/15/98	512	2

TOTAL LEAKING COMPONENTS 4
TOTAL COMPONENTS MONITOR10,081

TOTAL LEAKING VALVES 2
TOTAL NUMBER OF VALVES MONITORED 4,123
% OF VALVES LEAKING .05 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/19/97
12:10:11
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP
TEAM ID : 111001
SEQUENCE : 0601

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 7/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4679		PUMP	XJ-011A	M	L	NITROMETHANE	07/28/97	5	06/19/97	1800		P SEAL	06/19/97	ADJ	1800		TA	07/15/98	512	2
													07/28/97	RTM	5	07/28/97	TA	07/15/98	601	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 119

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 2
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/24/95
20:16:02
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0307

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 8/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 3

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

9/21/95
8:43:45
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0308

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 9/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 126

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 119
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

10/16/95
12:46:03
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0309

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 10/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 3

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/28/95
10:51:32
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0310

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 11/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 3

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

12/17/95
8:26:26
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0311

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 12/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 144

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 136
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

1/22/96
18:13:10
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0312

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 1/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 3

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/27/96
12:43:38
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0401

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 2/29/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 3

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

3/26/96
9:41:30
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0402

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 3/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 126

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 119
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/03/96
10:36:22
PGM: MA07OFED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0403

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 4/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/17/96
18:06:59
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0404

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 5/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

6/26/96
18:49:58
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0405

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 6/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 123

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 118
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

7/10/96
13:58:46
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0406

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 7/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:04:52
PGM: MA07OFED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0407

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 8/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:05:02
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0408

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 9/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 124

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 119
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:05:05
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0409

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 10/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:05:08
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0410

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 11/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:05:09
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0411

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 12/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 142

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 136
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/05/97
9:05:15
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0412

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 1/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
17:18:43
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0501

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 2/28/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
16:21:09
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0502

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 3/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 123

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 118
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
16:21:14
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0503

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 4/30/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
16:21:19
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0504

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 5/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 0

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
16:21:23
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0505

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 6/30/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 299

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 136
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/15/97
16:21:31
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : HEADS (PWR HSE)
TEAM ID : 111004
SEQUENCE : 0506

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 7/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 1

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/24/95
20:12:48
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0201

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 8/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4679		PUMP	XJ-011A	M	L	NITROMETHANE	08/16/95	1000	08/16/95	1000		P SEAL	08/16/95	ADJ	1000		TA	07/05/96	201	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 18

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

9/21/95
20:19:55
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0202

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 9/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4679		PUMP	XJ-011A	M	L	NITROMETHANE	09/11/95	30	08/16/95	1000		P SEAL	08/16/95	ADJ	1000		TA	07/05/96	201	1
													09/11/95	ADJ	30	09/11/95	RTM	09/11/95	202	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 458

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 436
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

10/16/95
13:45:11
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0203

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 10/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 18

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/28/95
10:23:41
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0204

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 11/30/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 18

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

12/18/95
6:50:21
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0205

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 12/31/95

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4420	.5	V	SAMP PNT @ SJ-86B	M	L	#65	12/12/95	10000	12/12/95	10000		THRD	12/12/95	TC	10000		CN1	12/26/95	205	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 537

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 464
% OF VALVES LEAKING .22 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/08/96
8:39:25
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0206

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 1/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4420	.5	V	SAMP PNT @ SJ-86B	M	L	#65	01/12/96	8	12/12/95	10000		THRD	12/12/95	TC	10000		CNI	12/26/95	205	1
													01/12/96	COV	8	01/12/96	RTM	01/12/96	206	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 19

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 1
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/27/96
12:41:00
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0207

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 2/29/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4420	.5	V	SAMP PNT @ SJ-86B	M	L	#65	02/20/96	10000	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	207	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 19

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 1
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

4/01/96
13:17:04
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0208

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 3/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4357	.5	V	SAMP PNT @ PJ-02A	M	L	#17	03/20/96	10000	03/20/96	10000		V SEAT	03/20/96	CV	400	03/20/96			208	2
4393	1	V	OH N @ SJ-86A	M	L	#65	03/20/96	1000	03/20/96	1000		V BON	03/20/96	TBB	1000		CNI	03/24/96	208	2
4420	.5	V	SAMP PNT @ SJ-86B	M	L	#65	03/20/96	8	02/20/96	10000		THRD	02/20/96	TC	10000		CNI	03/05/96	207	1
													03/20/96	TC	8	03/20/96	RTM	03/24/96	208	2
4587		PUMP	DJ-176A	M	L	#66	03/20/96	1000	03/20/96	1000		P SEAL	03/20/96	ADJ	1000		CNI	03/24/96	208	2

TOTAL LEAKING COMPONENTS 4
TOTAL COMPONENTS MONITOR 522

TOTAL LEAKING VALVES 3
TOTAL NUMBER OF VALVES MONITORED 456
% OF VALVES LEAKING .66 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/03/96
10:31:26
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0209

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 4/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4393	1	V	OH N @ SJ-86A	M	L	#65	04/25/96	4000	03/20/96	1000		V BON	03/20/96	TBB	1000		CNI	03/24/96	208	2
													04/25/96	TBB	4000		CNI	05/15/96	209	1
4587		PUMP	DJ-176A	M	L	#66	04/25/96	1000	03/20/96	1000		P SEAL	03/20/96	ADJ	1000		CNI	03/24/96	208	2
													04/25/96	ADJ	1000		CNI	05/15/96	209	1

TOTAL LEAKING COMPONENTS 2
TOTAL COMPONENTS MONITOR 35

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 21
% OF VALVES LEAKING 4.76 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/21/96
8:47:07
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0210

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 5/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4393	1	V	OH N @ SJ-86A	M	L	#65	05/16/96	150	03/20/96	1000		V BON	03/20/96	TBB	1000		CNI	03/24/96	208	2
													04/25/96	TBB	4000		CNI	05/15/96	209	1
													05/16/96	RG	150	05/16/96	RTM	05/16/96	210	1
4587		PUMP	DJ-176A	M	L	#66			03/20/96	1000		P SEAL	03/20/96	ADJ	1000		CNI	03/24/96	208	2
													04/25/96	ADJ	1000		CNI	05/15/96	209	1
																	CNI	05/15/96	210	

TOTAL LEAKING COMPONENTS 2
TOTAL COMPONENTS MONITOR 10

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 2
% OF VALVES LEAKING 50.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

6/27/96
10:22:22
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0211

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 6/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4587		PUMP	DJ-176A	M	L	#66	06/17/96	200	03/20/96	1000		P SEAL	03/20/96	ADJ	1000		CNI	03/24/96	208	2
													04/25/96	ADJ	1000		CNI	05/15/96	209	1
																	CNI	05/15/96	210	
													06/17/96	RTM	200	06/17/96			211	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 472

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 454
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

7/10/96
15:59:25
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0212

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 7/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 14

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

8/08/96
20:33:43
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0301

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 8/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 14

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

10/01/96
19:50:26
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0302

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 9/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4349	.5	V	SAMP PNT @ PJ-48B	M	L	#27	09/17/96	10000	09/17/96	10000		V SEAT	09/17/96	CV	10000		NP	10/02/96	302	2

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 472

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 454
% OF VALVES LEAKING .22 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/13/96
12:31:31
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0303

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 10/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF
4349	.5	V	SAMP PNT @ PJ-48B	M	L	#27	10/28/96	8	09/17/96	10000		V SEAT	09/17/96	CV	10000		NP	10/02/96	302	2
													10/28/96	ASD	8	10/28/96	RTM	10/28/96	303	1

TOTAL LEAKING COMPONENTS 1
TOTAL COMPONENTS MONITOR 15

TOTAL LEAKING VALVES 1
TOTAL NUMBER OF VALVES MONITORED 1
% OF VALVES LEAKING 100.00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

11/26/96
18:02:26
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0304

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 11/30/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 15

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 1
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

12/23/96
14:20:20
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0305

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 12/31/96

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 553

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 484
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

1/31/97
10:57:33
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0306

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 1/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 14

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

2/21/97
11:51:55
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0307

T E A M , I N C

L E A K I N G C O M P O N E N T L O G

PERIOD ENDING 2/28/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	P A R T	L O C A T I O N	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 14

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

3/31/97
9:22:40
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0308

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 3/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 472

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 454
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

4/14/97
12:14:55
PGM: MA07OFED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0309

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 4/30/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 14

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

5/23/97
10:02:10
PGM: MA070FED
CUSTOMER : ANGUS CHEMICAL COMPANY
PLANT : STERLINGTON
UNIT : NP TOO
TEAM ID : 111002
SEQUENCE : 0310

TEAM, INC

LEAKING COMPONENT LOG

PERIOD ENDING 5/31/97

Based on PPM Equal or Greater Than 500

PROGRAM: NSPS

TAG#	SIZE	PART	LOCATION	CAT	LG	PRODUCT DESCRIPTION	MONITOR DATE	CURRENT READING	LK START DATE	LK START READING	SENS LK	PART LEAKING	ATTEMPT DATE	REPAIR METH	REMONITOR READING	REPAIR DATE	DELAY REASON	EXPECT REPAIR	SEQ NO.	CAL REF

TOTAL LEAKING COMPONENTS 0
TOTAL COMPONENTS MONITOR 0

TOTAL LEAKING VALVES 0
TOTAL NUMBER OF VALVES MONITORED 0
% OF VALVES LEAKING .00 %

SIGNATURE OF OWNER OR OPERATOR
RESPONSIBLE FOR DELAY OF REPAIR DECISION

UNIT SHUT DOWN THIS MONTH.

ATTACHMENT 6

ANGUS®

September 16, 1997

FEDERAL EXPRESS

CCC #121-97

Mr. Jeffery Neil Whitney
Environmental Protection Specialist
Surveillance Section (6EN-AS)
1445 Ross Avenue
Dallas, TX 75202-2733

Subject: Inspection on September 4 and 5, 1997
LDAR Repair and Recordkeeping

Dear Mr. Whitney:

Subsequent to your closing conference on September 5, please note the following information and corrective actions taken in regard to the LDAR issues that you identified during your inspection.

(1) Three open-ended lines downstream from valve Nos. 10258, 10265, and 33081 were identified as not having plugs, caps, or second valves properly installed. Following your departure on the evening of September 5th, ANGUS' operational personnel wrote emergency work orders and conducted overtime call out procedures in order to resolve these problems immediately. Enclosed for your review is a copy of the emergency work order outlining the work performed as well as the completion date of the tasks.

In addition, please note that the open-ended line associated with valve No. 33081 was improperly tagged and should not have been monitored in accordance with the HON Subpart H Monitoring Requirements. This valve is located on the water discharge line from a kerosene tank (RF-02) and is hard-piped directly to ANGUS' process sewer. ANGUS has characterized this line as a Group 2 source of wastewater under the HON Subpart G requirements. Moreover, analytical data reveals that the total average HAP concentration is less than 1000 ppmv. This stream is well below the 5% HAP limit as set forth in the monitoring requirements of HON Subpart H. Based upon this conclusion, ANGUS will remove this component from the HON monitoring requirement list in the near future; however, until removed ANGUS will continue to comply with the provisions of Subpart H.

(2) The LDAR log sheet prepared by our fugitive-emission monitoring consultant is currently being revised to include a "Repair Delay" Column. This column will be placed immediately adjacent to the Delay Reason Column. In the future, ANGUS will annotate these remarks on the logs maintained in our environmental library. In addition, ANGUS will transcribe the date in which repairs were completed onto the library logs.

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Previously, ANGUS has maintained these dates in on-site TEAM ECS Leaking Component Logs. The ECS logs are provided to ANGUS by the monitoring consultant prior to their departure, after a scheduled monitoring event, and are forwarded immediately to operational personnel in order to facilitate timely repairs. Because ANGUS uses the ECS log as a "working copy," we typically record work request and work order numbers on the log as well as the dates repaired. In addition, ANGUS has always written "Shutdown" for the items that were to have repairs delayed. The work order numbers can be used to access ANGUS' computerized maintenance records system (MPAC) in order to confirm work performed, time of work performed, as well as the parts installed. An example of the ECS log and associated MPAC printouts is included for your review.

If you have questions or require additional information, please do not hesitate to call me at 1-800-259-6100 Ext #355. Thank you for your guidance in this matter and the professional courtesy you extended during your visit.

Sincerely

ANGUS Chemical Company

Chet C. Chiles
Environmental Engineer

CCC\

Attachments

cc: Paul Laird (LDEQ -NERO)

ANGUS CHEMICAL COMPANY *** EMERGENCY WORK ORDER *** WO NO: 97-11

* * * C L O S E D * * *

ORIGINATOR: TROY CHAPMAN, JR.

START DATE: 09/05/97
SHUTDOWN : 0
PARTS REQD: NO
ISSUE DATE: 09/22/97
REPAIR TAG:

ACTION CODE :
PRIORITY :
PROJECT NO :
ENTERED ON :
CLEARANCE REQD:

PLANNER :
REF NO :

BRIEF DESC: REPAIR LEAKS,INSTALL PLUG ON 63 LEAN OIL TANK
UNDERFLOW LINE.SEE PAGE 2.

EQUIP/CAT : ANG0180 70 PARENT ID,DEPARTMENT, PIPING & HOSES
COST CENTER PARENT ID FOR DEPARTMENT 180 ANGUS
BASIC NITROPARAFFINS PLANT

LOCATION : BASIC NITROPARAFFINS PLNT

---------- DESCRIPTION ----------

STEP	CREW	CRAFT	
1	A	1	REPAIR LEAKS,INSTALL PLUG ON 63 LEAN OIL TANK

---------- WORK ORDER NOTES ----------

INSTALL CAP OR PLUG ON THE BLEEDERS AT SD08 REFLUX CONTROL VALVE.
REPAIR LEAK ON SE12 BOTTOMS KNOCK OUT POT,BOTTOMS BLEEDER.
REPAIR LEAKS ON PF24 REFLUX SAMPLE LINE.
WORK WAS DONE ON OVERTIME CALL OUT 09/05/97

DATE COMPLETED: 09/08/97 RECONCILATION: 01 COMPLETED - AS PLANNED
COMPLETED Y/N : YES FAILURE CODE : 14 OTHER - USE NOTES

PROGRAM: _____

QUARTER: _____

PERIOD: _____

ECS LEAKING COMPONENT LOG

Completed

PLANT: Angus Chemical

UNIT: NP

DATE: 3-25-97

CALIBRATION READING:

HIGH: _____ LOW: _____

INSTRUMENT #: 20680

OPERATOR I.D.: 6777

TAG NO.	SIZE	SOURCE (PART)	LOCATION	E/G	PART LEAK	DATE FOUND	INITIAL READING	FIRST ATTMPT	DATE ATTMPT	REP MTHD	REMON READING	DATE REPAIR	DATE REMON	REPAIR DELAY REASON	EXPECT REPAIR DATE	NEXT UNIT S.D.	LAST UNIT S.D.	RP CD	MAINTENANCE REMARKS
1485	1	V	S. of SC-09		VP	3-25-97	1000	yes	3-25-97	TP	1000	3/31/97						3	
			W/R# 11670 W/O# 97-04481					Closed		3/31/97									
4224	2	V	Loading Rack		VP	3-25-97	10,000	yes	3-25-97	TP	10,000	4/3/97						3	
			W/R# 11671 W/O# 97-04483					Closed		4/3/97									

1485 Control valve SE-03 reflange tighten packing or replace 130 LV 417

ANGUS CHEMICAL COMPANY *** ROUTINE WORK ORDER *** WO NO: 97-04

* * * C L O S E D * * *

ORIGINATOR: TROY CHAPMAN, JR.

PLANNER : JESSE W. FEAZEL

REF NO :

START DATE: 03/27/97
SHUTDOWN : 0
PARTS REQD: NO
ISSUE DATE: 09/22/97
REPAIR TAG:

ACTION CODE :
PRIORITY :
PROJECT NO :
ENTERED ON :
CLEARANCE REQD:

BRIEF DESC: TAG NO 1485,REPAIR CONTROL VALVE PACKING LEAK,
SE-03 REFLUX CONTROL VALVE.

EQUIP/CAT : 13LV417 00 LEVEL INSTR,VALVE
SF-56 NM COLUMN REFLUX DRUM
CONTROL VALVE
CONTROL VALVE
NITROMETHANE
LOCATION : FIELD

---------- DESCRIPTION ----------

STEP	CREW	CRAFT	
1	D	2	TIGHTEN OR REPLACE PACKING IN VLV

---------- WORK ORDER NOTES ----------

TIGHTENED PACKING

DATE COMPLETED: 03/31/97 RECONCILATION: 01 COMPLETED - AS PLANNED
COMPLETED Y/N : YES FAILURE CODE : 25 WORN PARTS

ANGUS CHEMICAL COMPANY *** ROUTINE WORK ORDER *** WO NO: 97-04

* * * C L O S E D * * *

ORIGINATOR: TROY CHAPMAN, JR.

PLANNER : JESSE W. FEAZEL

REF NO :

START DATE: 03/27/97
SHUTDOWN : 0
PARTS REQD: NO
ISSUE DATE: 09/22/97
REPAIR TAG:

ACTION CODE :
PRIORITY :
PROJECT NO :
ENTERED ON :
CLEARANCE REQD:

BRIEF DESC: TAG NO 4224,REPAIR VALVE PACKING LEAK ON PRPANE UNLOADING COMPRESSOR.

EQUIP/CAT : XJ61 701 COMPRESSOR,RECIPROCATING, PIPING & HOSES
PROPANE UNLOADING COMPRESSOR

LOCATION : AT PROPANE UNLOADING RACK

---------- DESCRIPTION ----------

STEP	CREW	CRAFT	
1	A	1	REMOVE HANDLE, TIGHTEN PACKING NUT. IF IT DON'T WORK, CHANGE OUT CENTER OF BALL VLV

---------- WORK ORDER NOTES ----------

TIGHTENED PACKING ON VALVE

DATE COMPLETED: 04/03/97 RECONCILATION: 01 COMPLETED - AS PLANNED
COMPLETED Y/N : YES FAILURE CODE : 14 OTHER - USE NOTES

PROGRAM: NSPS
QUARTER: 3rd
PERIOD: July

ECS LEAKING COMPONENT LOG

PLANT: Angus
UNIT: NP

DATE: 7-9-96

CALIBRATION READING:
HIGH: 10,000 LOW: 100

INSTRUMENT #: 20013

OPERATOR I.D.: 5748

TAG NO.	SIZE	SOURCE (PART)	LOCATION	U/G	PART LEAK	DATE FOUND	INITIAL READING	FIRST ATTMPT	DATE ATTMPT	REP MTHD	REMON READING	DATE REPAIR	DATE REMON	REPAIR DELAY REASON	EXPECT REPAIR DATE	NEXT UNIT S.D.	LAST UNIT S.D.	TR CD	MAINTENANCE REMARKS
0512		Pump	Pump# PJ46	L	P.Seal	7-9-96	3,500	Y	7-9-96	ADJ	3500	10/11/96	7-9-96	CNI	7-23-96			3	
w/o#		6791	Shut down.																
1982		Pump	Pump# SJ38	L	P.Seal	7-9-96	4,000	Y	7-9-96	ADJ	4000	7/10/96	7-9-96	CNI	7-23-96			3	
								w/o#	96-9742										
3207	3	V.	Top on GT-01	G	UP	7-9-96	8,000	Y	7-9-96	TP	8000	5/3/97	7-9-96	NNP	7-23-96	not repair		3	
			Shut down					w/o#	97-09773										
3461	.5	V	S. @ GB03	G	UP	7-9-96	3,000	Y	7-9-96	TP	3000	7/7/96	7-9-96	NNP	7-23-96			3	
			Shut down					w/o#	9730										
3849	1	V	Platforme E of	G	UP	7-9-96	1,000	Y	7-9-96	TP	1000	11/4/96	7-9-96	NNP	7-23-96			3	
			PE08 (OIL)		Shut down				w/o#	96-09723									
1889		Pump	Pump# SJ48B	L	P.Seal	7-9-96	2,000	Y	7-9-96	ADJ	2000	7/5/96	7-9-96	CNI	7-23-96	?		3	

ANGUS CHEMICAL COMPANY *** PRE-PLANNED WORK ORDER *** WO NO: 96-06

* * * C L O S E D * * *

ORIGINATOR: ALBERT STANSBURY, JR.
START DATE: 09/25/96
ACTION CODE :

SHUTDOWN : 7
PRIORITY :

PLANNER : JESSE W. FEAZEL
PARTS REQD: YES
PROJECT NO :

REF NO :
ISSUE DATE: 09/22/97
ENTERED ON :

REPAIR TAG:
CLEARANCE REQD:

BRIEF DESC: REPAIR LEAKING SEAL ON NEXT SHUT DOWN OF PE-17 COLUMN
TEXT ID :

EQUIP/CAT : PJ46 000 PUMP,CENTRIFUGAL
REBOILER CIRC PE-17

LOCATION : PE17

---------- DESCRIPTION ----------

STEP	CREW	CRAFT	
1	A	1	**CHAIN FALL** PULL PUMP REPLACE SEAL, CLN FLUSH

---------- WORK ORDER NOTES ----------

REPLACED SHAFT,BEARINGS,OIL SEALS,MECH. SEAL AND ALIGNED PUMP.

DATE COMPLETED: 10/16/96 RECONCILATION: 01 COMPLETED - AS PLANNED
COMPLETED Y/N : YES FAILURE CODE : 27 SEAL FAILURE

ANGUS CHEMICAL COMPANY *** PRE-PLANNED WORK ORDER *** WO NO: 96-06

* * * C L O S E D * * *

EQUIP/CAT : PJ46 000 PUMP,CENTRIFUGAL

---------- WORK ORDER PARTS LIST ----------

	STOCK NO	NOUN/QUAL	PO/REQ	DUE	U/M	REQD	COMMIT
1.	004911	SEAL, MECH	15904	09/25	EA	1	0
2.	005645	V-RING,RUBBER	19778	09/25	EA	1	0
3.	005564	V-RING,RUBBER	19778	09/25	EA	1	0
4.	005543	V-RING,RUBBER	19778	09/25	EA	1	0
5.	005541	V-RING,RUBBER	19778	09/25	EA	1	0
6.	005546	SLEEVE,SHAFT	19778	09/25	EA	1	0
7.	005531	BEARING,INNER	19778	09/25	EA	1	0
8.	005644	BEARING,COUPLING	19778	09/25	EA	2	0
9.	008693	SHAFT,	19779	09/25	EA	1	0
10.	013736	GLASS, SIGHT	19779	09/25	EA	1	0
11.	001707	SCREW,CAP HEX NC	19823	09/26	EA	3	0
12.	001771	SCREW,CAP HEX NC	19823	09/26	EA	4	0
13.	001855	SCREW,CAP HEX NC	19823	09/26	EA	4	0
14.	002278	NUT,HEX	19823	09/26	EA	1	0
15.	002280	NUT,HEX	19823	09/26	EA	4	0
16.	002238	NUT,HEX	19823	09/26	EA	4	0

ANGUS CHEMICAL COMPANY *** ROUTINE WORK ORDER *** WO NO: 96-09

* * * C L O S E D * * *

ORIGINATOR: TROY CHAPMAN, JR.

PLANNER : JESSE W. FEAZEL
REF NO :

START DATE: 07/10/96
SHUTDOWN : 0
PARTS REQD: YES
ISSUE DATE: 09/22/97
REPAIR TAG:

ACTION CODE :
PRIORITY :
PROJECT NO :
ENTERED ON :
CLEARANCE REQD:

BRIEF DESC: SJ38, TAG NO 1982,REPAIR LEAKING SEAL.

EQUIP/CAT : SJ38 804 PUMP,CENTRIFUGAL, SEAL, MECHANICAL
1-NP PROD MSTR CK TK TRANS

LOCATION : SE12

---------- DESCRIPTION ----------

STEP	CREW	CRAFT	
1	A	1	CHANGE SEAL

---------- WORK ORDER NOTES ----------

REPLACED MECH. SEAL,OIL SEALS,BEARINGS AND SHAFT ON 07/10/96

DATE COMPLETED: 07/11/96 RECONCILATION: 01 COMPLETED - AS PLANNED
COMPLETED Y/N : YES FAILURE CODE : 27 SEAL FAILURE

ANGUS CHEMICAL COMPANY *** ROUTINE WORK ORDER *** WO NO: 96-09

* * * C L O S E D * * *

EQUIP/CAT : SJ38 804 PUMP,CENTRIFUGAL, SEAL, MECHANICAL

---------- WORK ORDER PARTS LIST ----------

	STOCK NO	NOUN/QUAL	PO/REQ	DUE	U/M	REQD	COMMIT
1.	005081	SEAL, MECH	17530*	07/08	EA	2	0
2.	007006	GASKET,FULL FACE	17659	07/10	EA	1	0
3.	007013	GASKET,FULL FACE	17661	07/10	EA	1	0
4.	007014	GASKET,FULL FACE	17661	07/10	EA	1	0
5.	006987	GASKET,SPIRALWOUND	17661	07/10	EA	1	0
6.	006857	BEARING,INNER	17678	07/10	EA	1	0
7.	004741	SEAL, OIL	17678	07/10	EA	1	0
8.	006880	SEAL, OIL	17678	07/10	EA	1	0
9.	006863	BEARING,COUPLING	17680	07/10	EA	1	0
10.	006986	GASKET,SPIRALWOUND	17683	07/10	EA	1	0
11.	004789	SHAFT,	17684	07/10	EA	1	0

ATTACHMENT 7

MAILED
4/30/97

April 30, 1997

FEDERAL EXPRESS

CCC # 70-97

Director Air, Pesticides, and Toxics
EPA Region VI
1445 Ross Avenue
Dallas, TX 75202-2733

Subject: ANGUS Chemical Company
HON Subpart H - 4th Semi-Annual Report

Dear Sir or Madam:

Pursuant to 40 CFR 63.182 (d)(1 thru 4), ANGUS Chemical Company is pleased to submit its 4th semiannual report required under Subpart H of the Hazardous Organic NESHAP (HON) Rule for Synthetic Organic Chemical Manufacturing Industries (SOCMI). However, since January 22, 1995, ANGUS has interpreted the reporting rule to require semi-annual reports from the Notification of Compliance Status date, which in this case was April 22, 1995. Consequently, ANGUS' 1st semi-annual report, submitted to your department on October 22, 1995, included April through September 1995.

It was pointed out to ANGUS by Mr. Jim Orgeron of the Louisiana Department of Environmental Quality that we were in error and that the 1st semi-annual report should have included January through June 1995 and would have been due on October 22, 1995.

The confusion was due to the HON Subpart H reporting requirements being somewhat vague in describing what months should have been included in the first semi-annual report; whereas, at the time, having just read the HON Subpart G requirements which clearly state that the first semi-annual report will be due no later than 8 months after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due.

We apologize for this oversight and have included the following information: January, February, and March, 1995 as well as October, November, and December, 1996 leak reports. Leak reports including July, August, and September, 1996 were included in the 3rd semi-annual report. This should resolve the overlapping periods of reporting and thus, the next report you will receive will be in October of 1997 and will include January through June, 1997.

If you have questions or require additional assistance, I may be reached at (318) 665-5355. We appreciate your assistance in this matter.

ANGUS Chemical Company

Chet C. Chiles
Environmental Engineer

Attachments

cc: Mr. Gustave Von Bodungen, Assistant Secretary
Office of Air Quality and Radiation Protection
Department of Environmental Quality
7290 Bluebonnet Blvd.
Baton Rouge, Louisiana 70810

Mr. Jim Orgeron w/o leak reports
Air Toxics Division
Department of Environmental Quality
7290 Bluebonnet Blvd.
Baton Rouge, LA 70810

ANGUS Chemical Company
Sterlington, Louisiana

UNIT ID. - NP

SEMI-ANNUAL COMPENDIUM

Leak Detection and Repair Summary Report per
40 CFR 63.182 (d), (1-4) HON Subpart H Periodic Reporting Requirements

Equipment Type	Jan 95	Feb 95	Mar 95	Oct 96	Nov 96	Dec 96
(1) # of Valves Leaking	6	5	27	0	0	S/D
(1) # of Valves Monitored	10	10	3444	6	9	S/D
(1) % of Valves Leaking	60.00	50.00	0.784	N/A	N/A	S/D
(1) # of Valves Not Repaired	5	3	7	N/A	N/A	S/D
(2) # of Pumps Leaking	0	2	7	0	2	S/D
(2) # of Pumps Monitored	117	117	117	100	109	S/D
(2) % of Pumps Leaking	N/A	1.71	5.98	N/A	1.83	S/D
(2) # of Pumps Not Repaired	N/A	1	2	N/A	0	S/D
(3) # of Compressors Leaking	0	0	1	0	0	S/D
(3) # of Compressors Not Repaired	N/A	N/A	1	N/A	N/A	S/D
(4) # of Agitators with Leaks	0	0	0	0	0	S/D
(4) # of Agitators Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors with Leaks	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors Monitored	N/A	N/A	N/A	N/A	N/A	S/D
(5) % of Connectors Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D

Facts Explaining Any Delay of Repairs:	**For items that were delayed, it was determined that a plant shutdown would be required. The emissions from these individual sources would be greater when purging these sources in order to facilitate repairs than left unrepaired for a short period of time. ANGUS chose to wait and schedule these items for repair during the next available shutdown.**
Dates of Process Unit Shutdowns (S/D):	**Process unit shutdown from December 8, 1996 thru January 17, 1997.**
Notification of Compliance Status:	**No revisions since previous notification submittal.**

Signature:_____

ANGUS Chemical Company
Sterlington, Louisiana

UNIT ID. - NPTOO

SEMI-ANNUAL COMPENDIUM

Leak Detection and Repair Summary Report per
40 CFR 63.182 (d), (1-4) HON Subpart H Periodic Reporting Requirements

Equipment Type	Jan 95	Feb 95	Mar 95	Oct 96	Nov 96	Dec 96
(1) # of Valves Leaking	0	0	0	0	0	S/D
(1) # of Valves Monitored	0	327	123	1	1	S/D
(1) % of Valves Leaking	0	N/A	N/A	N/A	N/A	S/D
(1) # of Valves Not Repaired	0	N/A	N/A	N/A	N/A	S/D
(2) # of Pumps Leaking	0	1	0	0	0	S/D
(2) # of Pumps Monitored	12	12	12	14	14	S/D
(2) % of Pumps Leaking	N/A	8.33	N/A	N/A	N/A	S/D
(2) # of Pumps Not Repaired	N/A	0	N/A	N/A	N/A	S/D
(3) # of Compressors Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(3) # of Compressors Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(4) # of Agitators with Leaks	N/A	N/A	N/A	N/A	N/A	S/D
(4) # of Agitators Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors with Leaks	0	0	0	0	0	S/D
(5) # of Connectors Monitored	0	0	287	0	0	S/D
(5) % of Connectors Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D

Facts Explaining Any Delay of Repairs:	**No delay of repairs this reporting period.**
Dates of Process Unit Shutdowns (S/D):	**Process unit shutdown from December 8, 1996 thru January 17, 1997.**
Notification of Compliance Status:	**No revisions since previous notification submittal.**

Signature:_____

ANGUS Chemical Company
Sterlington, Louisiana

UNIT ID. - POWERHOUSE

SEMI-ANNUAL COMPENDIUM

Leak Detection and Repair Summary Report per
40 CFR 63.182 (d), (1-4) HON Subpart H Periodic Reporting Requirements

---

Equipment Type	Jan 95	Feb 95	Mar 95	Oct 96	Nov 96	Dec 96
(1) # of Valves Leaking	0	0	0	0	0	S/D
(1) # of Valves Monitored	0	136	0	0	0	S/D
(1) % of Valves Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(1) # of Valves Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(2) # of Pumps Leaking	0	0	0	0	0	S/D
(2) # of Pumps Monitored	3	3	3	1	1	S/D
(2) % of Pumps Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(2) # of Pumps Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(3) # of Compressors Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(3) # of Compressors Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(4) # of Agitators with Leaks	N/A	N/A	N/A	N/A	N/A	S/D
(4) # of Agitators Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors with Leaks	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors Monitored	N/A	N/A	N/A	N/A	N/A	S/D
(5) % of Connectors Leaking	N/A	N/A	N/A	N/A	N/A	S/D
(5) # of Connectors Not Repaired	N/A	N/A	N/A	N/A	N/A	S/D

Facts Explaining Any Delay of Repairs:	**No delay of repairs this reporting period.**
Dates of Process Unit Shutdowns (S/D):	**Process unit shutdown from December 8, 1996 thru January 17, 1997.**
Notification of Compliance Status:	**No revisions since previous notification submittal.**

Signature:_____

bcc: R.L. James
J.W. Sutton

ATTACHMENT 8

ANGUS®

September 17, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

CCC #124-97

Director, Air, Pesticides, and Toxics
EPA Region VI
1445 Ross Avenue
Dallas, TX 75202-2733

Subject: ANGUS Chemical Company
HON Subpart G
Notification of Compliance Status

Dear Sir or Madam:

Pursuant to 40 CFR 63.152(a)(3)(I), ANGUS Chemical Company ("ANGUS") is submitting the Notification of Compliance Status required under Subpart G of the Hazardous Organic NESHAP (HON) Rule. Information required under 63.117 for process vents, 63.122 for storage vessels, 63.129 for transfer operations, and 63.146 process wastewater are outlined in Attachment 1. Moreover, ANGUS maintains that it has no Group 1 HON Sources.

If you have questions or require additional information, I may be reached at (318) 665-5355.

Sincerely,

ANGUS Chemical Company

David K Denner

David K. Denner
Vice President, Operations

Attachments

CCC\

cc: Mr. Gustave Von Bodungen
Assistant Secretary
Office of Air Quality and Radiation Protection
Department of Environmental Quality
P.O. Box 82135
Baton Rouge, Louisiana 70884-2135

ANGUS Chemical Company, Louisiana Highway No. 2 • P. O. Box 1325 • Sterlington, LA 71280 • Tel: 318-665-0010 • Fax: 318-665-5296
France • Germany • Singapore • United Kingdom • United States

ANGUS®

ATTACHMENT 1
ANGUS Chemical Company
HON Subpart G - Notification of Compliance Status Report
Information Required Pursuant To 40 CFR 63.152(a)(3)(1)

Introduction: ANGUS Chemical Company reacts nitric acid and propane to produce 2-Nitropropane as the primary product within its Nitroparaffin Basics Unit. Other desired products from the reaction include nitromethane, nitroethane, and 1-nitropropane. Residual by-products (i.e., other undesired hazardous organic air pollutants) that are produced as a result of the aforementioned reaction include: acetaldehyde, acetonitrile, as well as trace amounts of formaldehyde and methanol.

Therefore, because ANGUS produces 2-Nitropropane as a primary product and that the chemical is listed on Table 1, Subpart F 40 CFR 63.110, ANGUS is submitting this notification pursuant to 40 CFR 63.152(a)(3)(1). Listed below is information required under 63.117 for process vents, 63.122 for storage vessels, 63.129 for transfer operations, and 63.146 process wastewater operations.

Process Vents: 40 CFR 63.117 - TRE calculations were made for all the emission points associated with ANGUS' production of 2-Nitropropane. ANGUS maintains that all of its emission points are classified as Group 2 process vents because each vent's respective flow rate is less 0.005 standard cubic meter per minute, the total HAP concentration is less than 50 ppmv, or the TRE Index is greater than 1.0. 40 CFR 63.113(e) states that the owner or operator of a Group 2 process vent with a TRE index greater than 4.0 is not subject to monitoring or any other provisions of 63.114 through 63.118. Table 1 provides the calculated TRE's for each of the process vents associated with the production of 2-nitropropane. Listed are TRE indexes for a flare, and an incinerator (with and without heat recovery). As expected, the flare's TRE are the lowest of the three sets. The lowest TRE index calculated was 8.63 for P-35.

Storage Tanks: 40 CFR 63.122 - Of the organic hazardous air pollutants only 2-nitropropane is stored in tanks with a capacity greater than 39,859 gallons; however, the vapor pressure of 2-nitropropane at 95°F is 0.567 psia which is less than 0.754 psia vapor pressure requirement for tanks greater than 39,859 gallons in capacity. Acetonitrile has a vapor pressure greater 1.9 psia at 95°F; however, the largest tank (PT-03) containing this material is 8,000 gallons. Acetaldehyde and methanol are not stored in tanks but pipelined directly tanks PT-06 A/B, along with acetonitrile, for proper waste disposal. PT-06 A/B are 600 gallon "Heads Burn" storage tanks which do not vent under normal operating conditions. Residual formaldehyde from the reaction is transferred to the Nitroparaffin Stripper Bottom Tanks AT-01, AT-01 A/B, and AT-06 and subsequently disposed of via deep well injection.

Table 1
ANGUS Chemical Company
HON Subpart G
Process Vents
40 CFR 63.117
TRE Index Calculations

EMISSION PTS.	DESCRIPTION	E-HAP KG/HR	M^3/MIN	Vent Heat Value MJ/M^3	E-TOC E.R. KG/HR	TRE Index (Flare)	TRE Index (Thermal Incinerator 0% Heat Recovery)	TRE Index (Thermal Incinerator 70% Heat Recovery)
PE-09	Chem Wash Stripper	1.00E-02	4.60E-04	3.53E+01	6.56E-02	1.66E+02	2.61E+02	2.98E+02
PE-14	Chem Wash Stripper	1.32E-02	6.20E-04	3.50E+01	8.90E-02	1.26E+02	1.97E+02	2.25E+02
PE-18	Heads Column #2	9.16E-02	1.59E-03	5.39E+01	1.92E-01	1.66E+01	3.50E+01	3.53E+01
PF-08	Washed NP Oil Receiver	1.00E-05	2.46E-07	4.43E+01	4.00E-05	1.59E+05	2.90E+05	3.09E+05
PF-09	Water Wash Stripper Decanter	6.82E-06	2.05E-07	3.78E+01	3.00E-05	2.41E+05	3.95E+05	4.41E+05
PF-29A	69 1st Stage Chem Wash Washer	1.50E-04	2.53E-06	4.51E+01	4.20E-04	1.06E+04	1.95E+04	2.07E+04
PF-29B	69 2nd Stage Chem Wash Washer	1.20E-04	2.15E-06	4.52E+01	3.60E-03	1.32E+04	2.44E+04	2.59E+04
PF-30A	1st Stage Chem Wash Decanter	4.00E-05	7.97E-07	4.48E+01	1.30E-04	3.98E+04	7.29E+04	7.75E+04
PF-30B	2nd Stage Chem Wash Decanter	4.00E-05	7.81E-07	4.51E+01	1.30E-04	3.97E+04	7.31E+04	7.76E+04
PF-35	2nd Stage Chem Wash Receiver	1.85E-01	4.30E-03	4.40E+01	6.07E-01	8.63E+00	1.56E+01	1.69E+01
PF-36A	69 Decanter Gas Separator	7.76E-02	1.55E-03	4.32E+01	2.62E-01	2.06E+01	3.69E+01	3.98E+01
PF-36B	69 Decanter Gas Separator	7.81E-02	1.49E-03	4.39E+01	2.54E-01	2.05E+01	3.70E+01	3.97E+01
PF-41A	1st Stage Water Washer1	4.00E-05	6.61E-07	4.43E+01	1.10E-04	3.99E+04	7.25E+04	7.74E+04
PF-47B	2nd Stage Water Washer	1.73E-02	3.10E-04	4.43E+01	5.26E-02	9.21E+01	1.68E+02	1.79E+02
PF-48A	1st Stage Water Wash Decanter	1.00E-04	1.77E-06	4.44E+01	3.00E-04	1.59E+04	2.90E+04	3.10E+04
PF-48B	2nd Stage Water Wash Decanter	8.00E-05	1.51E-06	4.43E+01	2.50E-04	1.99E+04	3.63E+04	3.87E+04
PF-54A	Spent CW Receiver	2.73E-06	8.33E-08	3.92E+01	1.00E-05	5.98E+05	1.00E+06	1.11E+06
PF-54B	Spent CW Receiver	2.73E-06	8.33E-08	3.92E+01	1.00E-05	5.98E+05	1.00E+06	1.11E+06
SE-01	Drying Column	1.23E-01	5.42E-03	3.45E+01	7.74E-01	1.36E+01	2.10E+01	2.44E+01
SE-05	1 NP Column	1.14E-03	5.30E-03	7.72E+01	1.19E+00	1.18E+03	3.46E+03	3.14E+03
SE-08	69 Drying Column	1.23E-01	5.42E-03	3.45E+01	7.74E-01	1.36E+01	2.10E+01	2.44E+01
SE-12	69 1 NP Column	1.18E-03	5.29E-03	7.72E+01	1.18E+00	1.14E+03	3.34E+03	3.03E+03
SE-15	Crude NE Column 75	7.32E-03	5.00E-05	6.93E+01	1.11E-02	1.92E+02	5.05E+02	4.67E+02
SE-17	NM Column	3.15E-03	3.25E-03	2.73E+01	4.97E-01	5.48E+02	7.49E+02	9.20E+02
SE-18	NE Column	1.44E-02	1.57E-01	5.04E+01	2.97E+01	1.10E+02	2.13E+02	3.19E+02
SE-19	2-NP Column	7.41E-03	3.00E-05	7.61E+01	7.50E-03	1.82E+02	5.27E+02	4.73E+02
SF-06A	NE Column Check Tank	2.00E-05	8.00E-05	5.04E+01	1.56E-02	7.74E+04	1.55E+05	1.59E+05
SF-06B	NE Column Check Tank	2.00E-05	8.00E-05	5.04E+01	1.56E-02	7.74E+04	1.55E+05	1.59E+05

Table 1
ANGUS Chemical Company
HON Subpart G
Process Vents
40 CFR 63.117
TRE Index Calculations

EMISSION PTS.	DESCRIPTION	E-HAP KG/HR	M^3/MIN	Vent Heat Value MJ/M^3	E-TOC E.R. KG/HR	TRE Index (Flare)	TRE Index (Thermal Incinerator 0% Heat Recovery)	TRE Index (Thermal Incinerator 70% Heat Recovery)
SF-08A	NM Column Feed Tank	1.95E-03	2.00E-05	5.86E+01	4.31E-03	7.61E+02	1.72E+03	1.68E+03
SF-08B	NM Column Feed Tank	1.84E-03	2.00E-05	5.82E+01	4.20E-03	8.09E+02	1.82E+03	1.78E+03
SF-10A	63 1NP Product Check Tank	1.00E-05	6.00E-05	7.65E+01	1.29E-02	1.35E+05	3.92E+05	3.51E+05
SF-10B	63 1NP Product Check Tank	1.00E-05	6.00E-05	7.65E+01	1.29E-02	1.35E+05	3.92E+05	3.51E+05
SF-27	2NP Column Check Tank	3.22E-03	1.00E-05	7.64E+01	3.27E-03	4.19E+02	1.22E+03	1.09E+03
SF-28	69 1NP Product Master Tank	3.00E-05	1.20E-04	7.65E+01	2.61E-02	4.49E+04	1.31E+05	1.17E+05
SF-42	NE Column Master Check Tank	3.00E-05	1.70E-04	5.04E+01	3.15E-02	5.16E+04	1.03E+05	1.06E+05
SF-43	2NP Bottom Storage Tank	2.90E-04	1.30E-03	7.68E+01	2.91E-01	4.64E+03	1.36E+04	1.22E+04
SF-59	SE-15 Vent Recovery Tank	9.09E-07	2.40E-08	5.04E+01	4.50E-06	1.70E+06	3.40E+06	3.49E+06
ST-02	2NP Column Feed Tank	1.93E-02	1.50E-04	7.36E+01	3.20E-02	7.11E+01	1.99E+02	1.81E+02
PF-33	Chem Wash Oil Layer Receiver	1.51E-06	2.70E-08	4.43E+01	4.50E-06	1.06E+06	1.92E+06	2.05E+06
PF-55	Water Wash Stripper Oil Level Drum	5.10E-06	1.30E-07	4.43E+01	2.20E-05	3.13E+05	5.69E+05	6.07E+05
30-M	30 Meter Vent	1.40E-03	8.02E-03	7.72E+01	1.49E+00	9.59E+02	2.82E+03	2.57E+03

TRE Factors	Flare Val.	Incin. w/o H.R. Val.	Incin. w/ H.R. Val.
a	1.94E+00	1.49E+00	2.52E+00
b	3.66E-01	6.27E-02	1.18E-02
c	-7.69E-03	3.18E-02	1.30E-02
d	-7.33E-04	-1.16E-03	4.79E-02

ANGUS®

The largest tank (AT-01) has a capacity 20,000 gallons; however, the vapor pressure of the nitroparaffin stripper bottoms, which contains on average 4% formaldehyde, at 120°F is 0.42 psia, which is much less than 1.9 psia. Table 2 outlines the storage tanks and group status classifications in accordance with the regulations.

Transfer Racks: 40 CFR 63.129 - A Group 1 Loading Rack is defined by the HON as one which transfers 0.17 million gallons annually and has a vapor pressure of 1.5 psia. This definition applies only to products, since the HON refers only to loading emissions. Of the aforementioned hazardous air pollutants, only 2-nitropropane is a product.. The vapor pressure of 2-nitropropane is 0.567 psia at 95°F; therefore, ANGUS' loading rack is considered a Group 2 Transfer Rack.

Process Wastewater: 40 CFR 63.146 - It is ANGUS' understanding that the provisions of this section have been delayed until April, 1999. However, based upon a characterization study conducted in late 1994, ANGUS concluded that its sources of wastewater were all Group 2 wastewater streams. Specifically, each of the wastewater streams, which contain 2-nitropropane, acetaldehyde, and acetonitrile, were under either the flow requirement of 2.64 gpm if greater than 1000 ppmv or did not exceed the 10,000 ppmv limit if the flow was greater 2.64 gpm. This analytical data is kept readily available for regulatory review and is available upon request.

Table 2
ANGUS Chemical Company
HON Subpart G
Storage Tanks
40 CFR 63.122
Calculations

EMISSION PTS.	DESCRIPTION	VAPOR PRESSURE (PSIA)	CAPACITY (GAL)	GROUP STATUS	REASON
G-45	2-Nitropropane Storage Tank	0.567	496881	2	< 0.754 psia
G-62N	2-Nitropropane Storage Tank	0.567	998204	2	< 0.754 psia
XT-6A	2-Nitropropane Storage Tank	0.567	14689	2	< 20000 gal
XT-6B	2-Nitropropane Storage Tank	0.567	14689	2	< 20000 gal
PT-06A	Heads Burn Storage Tank	9.92	600	2	< 20000 gal
PT-06B	Heads Burn Storage Tank	9.92	600	2	< 20000 gal
PT-01	NP Offgrade Storage Tank	1.1	8000	2	< 20000 gal
PT-02	NP Offgrade Storage Tank	1.1	8000	2	< 20000 gal
PT-03	NP Offgrade Storage Tank	3.09	8000	2	< 20000 gal
AT-01	NPSB Storage Tank	0.42	20000	2	< 1.9 psia
AT-01A	NPSB Storage Tank	0.42	1200	2	< 20000 gal
AT-01B	NPSB Storage Tank	0.42	1200	2	< 20000 gal
AT-06	NPSB Storage Tank	0.42	1360	2	< 20000 gal

Basics

ATTACHMENT 9

ANGUS®

July 21, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

CCC #96-97

Air Quality Division
Department of Environmental Quality
Office of Environmental Affairs
P.O. Box 82135
Baton Rouge, Louisiana 70884-2135

RE: ANGUS Chemical Company
Nitric Acid Plant Compliance Report
1997 2nd Quarter (4/1-6/30)

Gentlemen:

Pursuant to LAC 33: III 3113.C., please find attached the 1997 2nd Quarter (4/1-6/30) Nitric Acid Plant Compliance Report. This report was prepared in the format of " Quarterly Excess Emission Report Form for Sources with Continuous Emission Monitoring Systems."

Should you have any questions or require any additional information, please contact me at (318) 665-5355 at your convenience.

Sincerely,

ANGUS Chemical Company

Chet C. Chiles
Environmental Engineer

CCC\

Attachment

cc: Mr. Paul Laird (LDEQ-AQD-NERO)
P.O. Box 4967
Monroe, Louisiana 71211-4967

Form 100.10
May 16, 1986

QUARTERLY EXCESS EMISSION REPORT FORM FOR SOURCES WITH CONTINUOUS EMISSION MONITORING SYSTEMS QUARTERLY EXCESS EMISSION REPORT

Company: ANGUS Chemical Co. Location: Sterlington Plant
Date: 21-Jul-97 Quarter: 1st Quarter, (April 1 thru June 30, 1997)
By: Chet C. Chiles

1. Type of emissions monitored Opacity____ SO_2____ NOx__✓__ O_2____ CO____ Other____

2. What source does it monitor? DM Weatherly Nitric Acid Plant

3. Is this a common stack or a single stack? Common

4. Method of monitoring emissions: CEM__✓__ Process Parameters_____ Other_____

5. Process Parameters Monitored (if applicable): Not Applicable

6. CEM Manufacturer: AMETEK (Dupont)

7. CEM Model: 461

8. CEM Serial No.: 7607

9. CEM Installation Date: 9/25/92

10. CEM Certification Date: 11/26/96

11. Total Source operating time in minutes: 82,853 min. (Source down time: 48,187 min)

12. CEM down time in number of incidents and minutes classified as follows:

	No. of Incidents	Total time
a) Monitor malfunction	2	3820**
b) Non-Monitor malfunction	1	132
c) Daily Calibration Q/A	58	580
d) Other known causes	3	43655*
e) Unknown causes	0	0

13. Allowable Emission Limit: 3.0 lbs NOx/Ton of 100% Acid (3 hr rolling average)

14. Standard exceedances in number of incidents and minutes classified as follows:

	No. of Incidents	Total Time	Range
a) Process startups/shutdown	6	120	N/A
b) Sootblowing	None	None	N/A
c) Control equipment features	None	None	N/A
d) Process problems	5	166	N/A
e) Fuel problems	None	None	N/A
f) Other known problems	None	None	N/A
g) Unknown causes	None	None	N/A
h) Corrective action	N/A	N/A	N/A

*The monitor was shut down when the acid plant was down
**Several minutes of suspected monitor malfunctions also occurred during process start-ups and shut-downs. These periods were included under section 14.a.

bcc: R.L. James
J.W. Sutton

ATTACHMENT 10

State of Louisiana

Department of Environmental Quality

Edwin W. Edwards
Governor

William A. Kucharski
Secretary

RECEIVED
AUG 26 1994
NORTHEAST REGIONAL OFFICE

Mr. Michael A. McNally
Environmental Engineer
ANGUS Chemical Company
P.O. Box 1325
Sterlington, LA 71280

Dear Mr. McNally:

RE: Administrative amendment, State Permit No. 2160-00015-03, Nitroparaffins Unit, ANGUS Chemical Company, Sterlington, Ouachita Parish, Louisiana

By letter dated August 15, 1994, ANGUS Chemical Company requested a change to the excess oxygen limits of Boiler No. 5 and a correction to emission limits of Boiler No. 6 and No. 7 in the referenced permit, originally issued January 18, 1994. Change of the excess oxygen limits requires amendment of Specific Condition 5 of the permit. Air Quality Data Sheets 2 and 3 will be corrected for Boilers No. 6 and 7. Total facility emissions do not require correction.

An administrative amendment to the referenced permit is hereby approved pursuant to LAC 33:III.521. Replace the affected pages of the permit with the attached corrected sheets. Attach this letter to the permit.

Very truly yours,

Robert P. Hannah
Administrator

8/22/94
Date

RPH/ATT/att

c: Northeast Regional Office

SPECIFIC CONDITIONS

ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

1. Permittee shall limit fuel input to the four boilers (Emission Points B8004, B8005, B8006, and B8007) so as not to exceed 3,354 MM scf in any consecutive twelve month period. The fuel usage shall be computed and recorded monthly. This record shall be kept on site and available for inspection by the Air Quality Compliance Division. A report of the total annual fuel usage shall be submitted to the Air Quality Compliance Division by February 15 for the preceding calendar year.

2. Permittee shall comply with applicable provisions of New Source Performance Standards, 40 CFR 60, Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, for the NP distillation system.

3. Permittee shall monitor and record daily the temperature of the final condenser effluent following vacuum steam jet exhausts to indicate operating efficiency of the condensers. Effluent temperature from column condensers using cooling water shall not exceed 120 °F. Effluent temperature from final column condensers using chilled water shall not exceed 80 °F. These records shall be kept on site and available for inspection by Air Quality Compliance Division personnel.

4. The Nitric Acid Plant shall comply with applicable provisions of New Source Performance Standards, 40 CFR 60, Subpart G - Standards of Performance for Nitric Acid Plants.

5. Permittee shall install, operate, and maintain in accordance with manufacturer's specifications continuous oxygen monitors on boilers Nos. 5, 6, and 7 (Emission Points B8005, B8006, and B8007, respectively). Boiler No. 5 shall operate to maintain excess oxygen between 3.8% and 10.0% in the exhaust stack. Boiler No. 6 shall operate to maintain excess oxygen between 4.3% and 10.0%. Boiler No. 7 shall operate to maintain excess oxygen between 5.5% and 10.0%. The excess oxygen operating range for each boiler shall be reestablished using this method as necessary to meet the permitted CO and NO_x annual emission limitations. Written notification of any change in the excess oxygen operating range specification shall be supplied to the Air Quality Regulatory Division within seven working days of the change. Verification of the basis of the change shall be supplied upon request.

AIR QUALITY DATA SHEET
PAGE 2

ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

Emission Point No.	AT129	B8004	B8005	B8007	G100	G121
Height (ft)	-	41	41	41	30	30
Temp (°F)	-	400	400	400	100	100
Flowrate (cfm)	-	55,009	55,009	55,009	-	-
		Maximum/Average Emissions are Listed in the Units lb/hr				
Pollutant						
PM_{10}	-	-	0.75/0.75	12.2/0.75	-	-
SO_2	-	-	0.09/0.09	1.5/0.09	-	-
NO_x	-	-	142/83.3	142/88.7	-	1.4/0.02
CO	-	-	20/1.8	20/1.8	-	-
VOC	-	-	66/0.21	4.9/0.21	-	-
Acetaldehyde	-	-	-	0.16/0.02		
Acetone	-	-	-	0.59/0.06		
Acetonitrile	-	-	-	0.18/0.02		
Methanol	-	-	-	0.024/0.002		
1-Nitrobutane	-	-	-	-	1.4/0.0004	
2-Nitrobutane	-	-	-	-	1.4/0.0004	
Nitromethane	-	-	-	0.22/0.02		
1-Nitropropane	-	-	-	0.19/0.02	681*/0.24	
2-Nitropropane	-	-	-	0.016/0.002	0.685/0.0002	
1-Propanol	-	-	-	0.016/0.002		
Nitric Acid	-	-	-	-	-	0.05/0.0008

*Maximum is based on the vapors displaced from the tank by the incoming volume at the maximum pump flow rate.

AIR QUALITY DATA SHEET
PAGE 2

ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

Emission Point No.	B8006	G42	G45	GF06B	GF06C	PF54A	PF54B	SF27
Height (ft)	41	-	30	-	-	14	14	13
Temp (°F)	400	-	100	-	-	110	110	110
Flowrate (cfm)	35,067	-	0.04	-	-	neg.	neg.	neg.
Maximum/Average Emissions are Listed in the Units lb/hr								
Pollutant								
PM_{10}	6.1/0.41	-	-	-	-	-	-	-
SO_2	0.73/0.05	-	-	-	-	-	-	-
NO_x	142.0/91.2	-	-	-	-	-	-	-
CO	97.5/1.3	-	-	-	-	-	-	-
VOC	66.6/33.3	-	-	-	-	-	-	-
Acetone	-	-	-	-	-	0.04/neg.	0.04/neg.	
Acetonitrile	-	-	-	-	-	0.24/neg.	0.24/neg.	
Methanol	9.6/4.8	16.0/0.003						
Nitroethane	-	-	-	-	-	0.26/neg.	0.26/neg.	0.08/neg.
Nitromethane	-	19.6/0.003	-	-	-	1.9/neg.	1.9/neg.	
1-Nitropropane	-	-	362.2*/0.24	-	-	0.10/neg.	0.10/neg.	0.59/0.0001
2-Nitropropane	-	-	350.8*/0.23	-	-	0.41/neg.	0.41/neg.	41.7/0.007
Propane	-	-	-	0.005/neg.	0.005/neg.			
Propionitrile	-	-	-	-	-	0.08/neg	0.08/neg.	
Trimethylamine	4.4/2.2							
Isopropylamine	26.5/13.3							

*Maximum is based on the vapors displaced from the tank by the incoming volume at the maximum pump flow rate.

AIR QUALITY DATA SHEET
PAGE 3

ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

Emissions in Tons Per Year

Emission Point No.	AT129	B8004	B8005	B8007	G100	G121
Pollutant						
PM_{10}	-	-	3.3	3.3	-	-
SO_2	-	-	0.40	0.40		
NO_x	-	-	364.7	388.5	-	0.10
CO	-	-	7.9	7.9		
VOC	-	-	0.92	0.92		
Acetaldehyde	-	-	-	0.07		
Acetone	-	-	-	0.26		
Acetonitrile	-	-	-	0.08		
Methanol	-	-	-	0.01		
1-Nitrobutane	-	-	-	-	0.002	
2-Nitrobutane	-	-	-	-	0.002	
Nitromethane	-	-	-	0.10		
1-Nitropropane	-	-	-	0.08	1.0	
2-Nitropropane	-	-	-	0.007	0.001	
1-Propanol	-	-	-	0.007		
Nitric Acid	-	-	-	-	-	0.003

AIR QUALITY DATA SHEET
PAGE 3

ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

Emissions in Tons Per Year

Emission Point No.	B8006	G42	G45	GF06B	GF06C	PF54A	PF54B	SF27
Pollutant								
PM_{10}	1.8	-	-	-	-	-	-	
SO_2	0.22	-	-	-	-	-	-	
NO_x	399.5	-	-	-	-	-	-	
CO	5.7	-	-	-	-	-	-	
VOC	146.0	-	-	-	-	-	-	
Acetone	-	-	-	-	-	neg.	neg.	
Acetonitrile	-	-	-	-	-	neg.	neg.	
Methanol	21.0	0.01	-	-				
Nitroethane	-	-	-	-	-	0.00001	0.00001	neg.
Nitromethane	-	0.01	-	-	-	0.00008	0.00008	
1-Nitropropane	-	-	1.1	-	-	neg.	neg.	0.0004
2-Nitropropane	-	-	1.0	-	-	0.00002	0.00002	0.03
Propane	-	-	-					
Propionitrile	-	-	-	-	-	neg.	neg.	
Trimethylamine	9.7							
Isopropylamine	58.0							

ATTACHMENT 11

8 EMISSION POINTS
List each emission point. Use unique ID numbers. Consult instructions.

<0.754

ALL GROUP III's

Emission Point ID Number	Descriptive name of each emission point	(psia) V.P.	capacity	HAP-G Applicable
A-1	GASOLINE SERVICE			N/A
BT-03	BT03 USED OIL TANK			N/A
DT-13	50% Formaldehyde Tank			N/A
DT-14	50% Formaldehyde Tank			N/A
F-7S	Fugitive Emissions Shipping			N/A
G-114	1,2 Butylene Oxide			N/A
G-42	NIPAR NM/MEOH BLEND TANK	1.33	2591	N/A <39859 gal
G-43N	G43N NITROETHANE STORAGE TANK	0.81	22475	N/A <39859 gal
G-43S	G43S NITROETHANE STORAGE TANK	0.81	23700	N/A <39859 gal
G-65-1	METHANOL TANK			N/A
G-65-2	METHANOL TANK			N/A
G-65-3	METHANOL TANK			N/A
G-65-4	1-NP STORAGE TANK	0.54	29,151	N/A <0.754
G-78N	G78N NITROETHANE STORAGE TANK	0.81	23700	N/A <39859 gal
G-78S	G78S NITROETHANE STORAGE TANK	0.81	23700	N/A <39859 gal
G100 ✓	1-NP AND NE STORAGE TANK	0.34/0.81	411,195	N/A <0.754
G45	1NP & 2NP STORAGE	0.34/0.67	496,821	N/A <0.754
G62N ✓	NITROETHANE AND 2 NITROPROPANE STORAGE	0.81/0.67	998,204	N/A <0.754
L2PRODLOAD	PRODUCT LOADING			N/A
SG-31A	2-NP SUMP			N/A
SG-31B	2-NP SUMP			N/A
XG-65A	2-NP SUMP			N/A
XG-65B	2-NP SUMP			N/A
XT-01	TA-40 STORAGE TANK			N/A
XT-03	AMINO ALCOHOL STORAGE TANK			N/A
XT-09A	AMINO ALCOHOL STORAGE TANK			N/A
XT-09B	AMINO ALCOHOL STORAGE TANK			N/A
XT-09C	AMINO ALCOHOL STORAGE TANK			N/A
XT-10	TA-40 STORAGE TANK			N/A
XT-113	AMINO ALCOHOL STORAGE TANK			N/A
XT-13	50% FORMALDEHYDE STORAGE TANK			N/A
XT-14	50% FORMALDEHYDE STORAGE TANK			N/A
XT-15	50% FORMALDEHYDE STORAGE TANK			N/A
XT-17	AMINO ALCOHOL BLEND TANK			N/A

EMISSION POINTS
List each emission point. Use unique ID numbers. Consult instructions.

Emission Point ID Number	Descriptive name of each emission point	VP	CAPACITY	HON-G APPLICABLE
XT-22	SODA ASH UNLOADING			N/A
XT-24A	NM Underground Storage Tank	1.33	5000	N/A <39859
XT-24B	NM Underground Storage Tank	1.33	5000	N/A <39859
XT-29	KEROSENE TANK			N/A
XT-2A	AMINO ALCOHOL STORAGE TANK			N/A
XT-2B	AMINO ALCOHOL STORAGE TANK			N/A
XT-35	G62S Remediation Tank			N/A
XT-4A	2-NP TANK	0.67	25383	N/A <39859
XT-4B	AMINO ALCOHOL STORAGE TANK			N/A
XT-5A	NE TANK	0.81	14689	N/A < 39859
XT-5B	NE TANK	0.81	14689	N/A < 39859
XT-6A	2-NP TANK	0.67	14689	N/A <0.754
XT-6B	2-NP TANK	0.67	14689	N/A <0.754
XT-7A	1-NP TANK	0.34	14689	N/A <0.754
XT-7B	1-NP TANK	0.34	14689	N/A <0.754
XT-7C	1-NP TANK	0.34	14689	N/A <0.754