



State of Ohio Environmental Protection Agency

Southeast District Office

2195 Front Street
Logan, Ohio 43138

TELE: (740) 385-8501 FAX: (740) 385-6490
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

September 14, 2007

**SCIOTO COUNTY
SUNOCO CHEMICALS-HAVERHILL
DHWM-SEDO
OHD005108477**

Mr. Andrew Lett
Sunoco Chemicals-Haverhill
1019 Haverhill-Ohio Furnace Road
Haverhill, Ohio 45636

Dear Mr. Lett:

Thank you for your August 6, 2007 response to Ohio EPA's June 27, 2007 Notice of Violation letter. Sunoco's response included a written response to each of the comments in Attachment A of Ohio EPA's June 27, 2007 letter, and information regarding the in service tank inspections for Tank 2104-F and 2105-F.

A review of the submitted documentation reveals that Sunoco remains in violation of the following violation discovered during Ohio EPA's April 2007 hazardous waste inspection:

- (3) **GENERAL PERMIT CONDITIONS**
Condition A.27.(e) Compliance Schedule Documents, and Condition D.5.(e) Inspection Schedules and Procedures.

These permit conditions require Sunoco to submit an in service tank inspection report for each of the permitted tanks and their associated ancillary equipment. The inspections should be performed in accordance with American Petroleum Institute (API) standards 653 and 575, and include ultrasonic thickness testing of the tanks. The inspection reports were to be submitted by May 4, 2005, for the period of May 4, 2000 to May 4, 2005. Sunoco has submitted tank inspection reports dated August 15, 2006, May 30, 2007, and August 6, 2007; a summary of the information contained in each of the tank inspection reports is attached to this correspondence.

The in service tank inspection reports submitted by Sunoco do not contain all of the information required to demonstrate compliance with the above permit conditions. Specifically, Sunoco is requested to provide the following information **within 30 days** of receipt of this letter.

- A. Sunoco should provide a correction and/or explanation for the discrepancies Ohio EPA noted in the Settlement Survey for Tank 2104-F, April 2007 by Conam Inspection and Engineering Services, Inc. The "Deviation Between Points" row is not consistent with the "Total Deviation from Point 1." Specifically this discrepancy was noted between Stations 3 and 4:
Deviation from point 1 measured at Station 3 is shown as -0.250
Deviation from point 1 measured at Station 4 is shown as -0.500
Deviation between Stations 4 and 3 is shown as +0.750.
- B. Sunoco should provide an explanation of the Tank Calculations for Tank 2104-F, April 22, 2007 by David Gibson, P.E. This can be included in a separate document from the hand-written calculations or in the calculations themselves. Please include the following information:
The standards that were used when performing the calculations;
Where the assumed values can be found; and
An explanation of why calculated values are acceptable, or the location of the standard that the calculated values were compared to.
- C. Sunoco should provide documentation that all piping for the three permitted tanks was inspected. In our June 27, 2007 letter, Ohio EPA requested Sunoco to provide a written summary demonstrating that all of the piping and ancillary equipment for all three permitted tanks was included in Paul Talbot's inspection reports. While Sunoco's August 6, 2007 response included Paul Talbot's reports showing numerous piping inspections, we are still unable to confirm if all of the piping for the three permitted tanks was inspected.

GENERAL COMMENTS:

- a. The purpose of the in service tank inspections/assessments required by permit conditions A.27.(e) and D.5.(e) of Sunoco's permit is to identify potential problems that may affect tank integrity and service and to address the potential problems. The inspection/assessment reports that are submitted by Sunoco also aid Ohio EPA in determining whether the tanks are currently fit for use. Sunoco has submitted tank inspection reports on August 15, 2006, May 30, 2007, and August 6, 2007; however, to date, Sunoco has not adequately described and documented their responses to actions recommended by the API inspector(s) as a result of the inspections/assessments for Tank 2104-F and Tank 2105-F and associated ancillary equipment. This information is necessary for Ohio EPA to determine Sunoco's compliance.

For example, In our June 27, 2007 letter, Ohio EPA requested a written summary describing the steps taken by Sunoco as a result of the External Coating Inspection Report on Tank 2104-F by T.S. Hayes, dated July 17, 2003. In addition to painting recommendations, the report indicated that "the steam supply line insulation is at failure and support hanger is broken on the north side of the tank and will require repair", and recommended these items be repaired. Sunoco's August 6, 2007 response to Ohio EPA indicated the tank is on the equipment paint list, but failed to indicate if the other recommended repairs to the insulation, etc. were made. We also requested Sunoco to provide a written description or summary addressing all of Paul Talbot's recommended actions from the Piping External Visual Inspection Reports (checklists) dated January 4, 2006; January 9, 2006; January 10, 2006;

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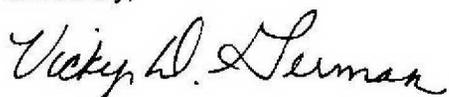
and January 12, 2006. One of the recommendations resulting from these inspections was to repair insulation. Sunoco's August 6, 2007 response to Ohio EPA listed the most frequent recommended actions from these inspections, and indicated the fourth most frequent recommendation is to repair damaged insulation. Sunoco did not indicate if they had in fact made repairs to the insulation in response to the inspection reports.

Future in service tank inspection/assessment reports submitted for the permitted tanks should contain documentation demonstrating that Sunoco has addressed items recommended as a result of the tank inspections. Sunoco should ensure that the survey dates and data they provide in these inspection reports are current data from the required time period. As we previously discussed, Sunoco is required to submit complete in service tank inspection reports, including ultrasonic thickness testing, for the permitted hazardous waste storage tanks by May 4, 2010 for the required period of May 4, 2005 to May 4, 2010.

- b. In our June 27, 2007 letter, Ohio EPA requested Sunoco to provide information to follow-up on the structural distortion of Tank 2105-F. Sunoco provided a list of actions taken, but did not indicate the results or conclusions of those actions, or explain how the determination was made that this tank is suitable to remain in service until October 2007 when it will be taken out of service for cleaning and internal inspection. Due to the shell distortion problem with Tank 2105-F, David Gibson did not perform calculations to verify the tank's integrity. Sunoco should keep Ohio EPA informed of the results of the out-of-service inspection for this tank.

Should you have any questions, please feel free to call me at 740-380-5237.

Sincerely,



Vicky D. German
Environmental Specialist
Division of Hazardous Waste Management
Ohio EPA, Southeast District Office

VDG/mlm

cc: Pam McCoy, DHWM-CO-ERAS
Jason Patrick, Sunoco Chemicals-Haverhill
Carl Henderson, Sunoco Chemicals-Haverhill
Melissa Essman, Sunoco Chemicals-Haverhill

NOTICE:

Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with all applicable regulations.

In Service Tank Inspections/Assessments Submitted by Sunoco

August 2007 Submittal

Tank 2104-F

- Inspection Report for External Visual Inspection (Inspection date November 3, 2006; Follow-up date April 6, 2007) - Bill Miller, T.S. Hayes
- API certification information for T.S. Hayes
- Conam Inspection & Engineering Services, Inc. Tank Inspection Report dated April 2007 (External Settlement)
- David Gibson's out-of-plane settlement calculations
- DJA Inspection Services, Inc. Tank inspection report for tank and associated ancillary equipment dated May 4, 2000
- James C. Johnston, P.E. report on calculation of stresses in bottom annular section of Tank 2104-F dated August 1, 2000
- James C. Johnston, P.E. report on 2104-F ancillary equipment/piping dated November 30, 2000.
- Four photos of 2104-F (tank overview, gauge hatch, exterior weather barrier, and roof vent with insulation removed)
- Bottom plate drawing dated January 6, 1989
- Shell details drawing dated August 7, 1968
- Nozzle elevations drawing dated July 16, 1968

Tank 2105-F

- Inspection Report for External Visual Inspection (Inspection date: November 3, 2006 Follow-up date: April 6, 2007) – Bill Miller, T.S. Hayes
- DJA Inspection Services, Inc. Tank inspection report for tank and associated ancillary equipment dated May 4, 2000
- James C. Johnston, P.E. report on 2105-F ancillary equipment/piping dated November 30, 2000
- Ten photos of 2105-F (tank overview, area out of plumb, CUI at top of secondary floor, areas showing flattened shell, CUI, area between original and secondary floor, area anchor removed)
- Bottom plate drawing dated January 6, 1989
- Shell details drawing dated August 7, 1968
- Nozzle elevations drawing dated July 16, 1968

Piping and Ancillary Equipment

Visual Inspection Report Checklist (Paul Talbot), Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) and Inspection Pipe Isometric drawings dated January 4, 2006 were submitted for the following:

- Circ. ID UTIL-005 Heavy ends suction from 2105-F
- Circ. ID UTIL-006 Heavy ends suction from 2105-F
- Circ. ID UTIL-007 Light ends suction from 2003-F
- Circ. ID UTIL-009 Heavy ends suction to 2007-JB
- Circ. ID UTIL-010R Light ends suction to 2007-JA
- Circ. ID UTIL-011R Light ends suction to 2007-J
- Circ. ID UTIL-0012R Fuel oil to sample pot 2007-JA
- Circ. ID UTIL-013 2007 J discharge light ends
- Circ. ID UTIL-014 Heavy ends rundown to 2104-F
- Circ. ID UTIL-015 Heavy ends rundown to 2104-F
- Circ. ID UTIL-017 2007-JC discharge to 2007-B discharge
- Circ. ID UTIL-018 2007-JC discharge to 2007-JB discharge
- Circ. ID UTIL-024 Heavy ends rundown to 2105-F

- Circ. ID UTIL-025 Heavy ends rundown to 2105-F
- Circ. ID UTIL-026 Heavy ends rundown and suction vent
- Circ. ID UTIL-027R 2007-JA discharge
- Circ. ID UTIL-028R 2007-J discharge
- Circ. ID UTIL-029A 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-030 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-031 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-033B Heavy ends to 2001-UA
- Circ. ID UTIL-051R Fuel oil to boilers
- Circ. ID UTIL-052 Fuel oil to boilers
- Circ. ID UTIL-053R Fuel oil to boilers
- Circ. ID UTIL-055R Fuel oil to boilers
- Circ. ID UTIL-056 Fuel oil to boilers
- Circ. ID UTIL-058 Fuel oil to 2001-UD and UE
- Circ. ID UTIL-060 Fuel oil to 2001-UE
- Circ. ID UTIL-064R Light ends to 2003-F
- Circ. ID UTIL-066 Light ends to 2003-F
- Circ. ID UTIL-097 Oil lines and tank 2003-F

May 2007 Submittal

Tank 2003-F

- RCRA Design Assessment of New Tank 2003-F (David Gibson, P.E.) dated June 14, 2006
- RCRA Installation Assessment and Certification Tank 2003-F (David Gibson, P.E.), dated August 1, 2006
- RCRA Installation Assessment and Certification Tank 2003-F Containment Lining (David Gibson, P.E.), dated January 5, 2007

Tank 2104-F

- Tank Evaluation and Assessment Report, Heavy Hydrocarbon Service (David Gibson, P.E.), dated April 24, 2007. Consists of the cover letter, annular support ring calculations, out of plane settlement calculations.

Tank 2105-F

- Tank Evaluation and Assessment Report, Heavy Hydrocarbon Service (David Gibson, P.E.), dated May 3, 2007. Consists of the cover letter from David Gibson, P.E.. Letter states Tank 2105-F is experiencing structural distortion as indicated by Conam Inspection reports dated November 3, 2006; April 6, 2007; April 13, 2007; and May 2, 2007 (not included). Recommends internal out-of-service inspection, planned for October 2007.

August 2006 Submittal

Tank 2003-F

- External Visual and UTT Inspection Report dated October 21, 2005 (Bill Miller)
- External Visual and Ultrasonic Thickness Inspection Report dated March 3, 2004
- Conam shell thickness measurements dated October 21, 2005.
- Drawing of data points where ultrasonic thickness measurements were taken on tank shell.
- Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) dated July 21, 2006.

Tank 2104-F

- Visual Inspection Report (T.S. Hayes) dated April 17, 2003 (summary and recommendations page).
- Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) dated August 10, 2006.

Tank 2105-F

- Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) dated July 21, 2006

Piping and Ancillary Equipment

Visual Inspection Report Checklist (Paul Talbot) for the following:

- Circ. ID UTIL-005 Heavy ends suction from 2105-F
- Circ. ID UTIL-006 Heavy ends suction from 2105-F
- Circ. ID UTIL-007 Light ends suction from 2003-F
- Circ. ID UTIL-009 Heavy ends suction to 2007-JB
- Circ. ID UTIL-010R Light ends suction to 2007-JA
- Circ. ID UTIL-011R Light ends suction to 2007-J
- Circ. ID UTIL-0012R Fuel oil to sample pot 2007-JA
- Circ. ID UTIL-013 2007 J discharge light ends
- Circ. ID UTIL-014 Heavy ends rundown to 2104-F
- Circ. ID UTIL-0015 Heavy ends rundown to 2104-F
- Circ. ID UTIL-017 2007-JC discharge to 2007-B discharge
- Circ. ID UTIL-018 2007-JC discharge to 2007-JB discharge
- Circ. ID UTIL-024 Heavy ends rundown to 2105-F
- Circ. ID UTIL-025 Heavy ends rundown to 2105-F
- Circ. ID UTIL-026 Heavy ends rundown and suction vent
- Circ. ID UTIL-027R 2007-JA discharge
- Circ. ID UTIL-028R 2007-J discharge
- Circ. ID UTIL-029A 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-030 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-031 2007-J, JA, and JB discharge to boilers
- Circ. ID UTIL-032 2007-J, JA, and JB discharge to boilers *
- Circ. ID UTIL-033B Heavy ends to 2001-UA
- Circ. ID UTIL-037 Heavy ends to 2001-UB *
- Circ. ID UTIL-038 Heavy ends to 2001-UC *
- Circ. ID UTIL-039A Heavy ends to 2001-UC *
- Circ. ID UTIL-039B Heavy ends to 2001-UC *
- Circ. ID UTIL-051R Fuel oil to boilers
- Circ. ID UTIL-052 Fuel oil to boilers
- Circ. ID UTIL-053R Fuel oil to boilers
- Circ. ID UTIL-054R Fuel oil to boilers *
- Circ. ID UTIL-055R Fuel oil to boilers
- Circ. ID UTIL-056 Fuel oil to boilers
- Circ. ID UTIL-057 Fuel oil to 2001-UC *
- Circ. ID UTIL-058 Fuel oil to 2001-UD and UE
- Circ. ID UTIL-060 Fuel oil to 2001-UE
- Circ. ID UTIL-064R Light ends to 2003-F
- Circ. ID UTIL-066 Light ends to 2003-F
- Circ. ID UTIL-096 Oil lines and tank *
- Circ. ID UTIL-097 Oil lines and tank 2003-F

* Not included in August 2007 submittal.

Inspection report for less than 90 day Tank 2108-F was included with this submittal.