



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

June 27, 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 June 1, 2007 response to Ohio EPA's April 27, 2007 Notice of Violation letter. Your response included the following documentation:

- RCRA Design Assessment for new Tank 2003-F dated June 2006;
- RCRA Installation Assessment and Certification for new Tank 2003-F dated July 2006;
- RCRA Installation Assessment and Certification for new Tank 2003-F Containment Lining dated December 2006;
- Tank 2104-F Evaluation and Assessment Report dated April 24, 2007;
- Tank 2105-F Evaluation and Assessment Report dated May 3, 2007; and
- A photograph demonstrating that containers of universal waste spent fluorescent lamps have been properly labeled.
- In addition, on April 5, 2007, Sunoco submitted a Class 1 permit modification request for the replacement of > 90 day hazardous waste storage Tank 2003-F, which was acknowledged as approved by Ohio EPA on June 4, 2007.

A review of the submitted documentation reveals that Sunoco Chemicals-Haverhill has demonstrated abatement of the following violations discovered during Ohio EPA's hazardous waste inspection conducted on April 4 and April 11, 2007:

- (1) **GENERAL PERMIT CONDITIONS**  
*Condition A.1.(b); Effect of Permit, and Condition A.5. Duty to Comply*
- (2) **TANK STORAGE AND MANAGEMENT PERMIT CONDITIONS**  
*Condition D.2(a) and (b), Design and Installation of New Tank Systems or Components*
- (4) **OAC Rule 3745-273-34(E), Standards for Large Quantity Handlers of Universal Waste - Labeling/Marking**

However, Sunoco Chemicals-Haverhill remains in violation of the following:

Mr. Andrew Lett  
Sunoco Chemicals-Haverhill  
June 27, 2007

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

101  
107  
A.27.(e): Within five years of the date of the previous in service tank inspection, and every five years thereafter, the Permittee shall submit an in service tank inspection report for each of the tanks and associated ancillary equipment. This inspection should be performed in accordance with American Petroleum Institute (API) standards 653 and 575, including ultrasonic thickness testing of the tanks.

D.5.(e): The Permittee shall inspect the tanks in accordance with the compliance schedule in permit condition A.27.

In accordance with the above permit conditions, in service tank inspection reports for the permitted > 90 day hazardous waste storage tank systems were due to be submitted by May 4, 2005. The in service tank inspection reports submitted by Sunoco on August 15, 2006 and May 30, 2007 is incomplete and lack the required information to achieve compliance with the above permit conditions. Specific deficiencies in these reports are discussed in detail in Attachment A of this correspondence, along with the measures Sunoco must take to correct the noted deficiencies.

Sunoco must submit complete in service tank inspection reports for the permitted > 90 day hazardous waste storage Tank 2104-F and Tank 2105-F as well as the requested information for Tank 2003-F, addressing all of the items outlined in Attachment A. I have enclosed a copy of the API 653 and API 575 inspection checklists for your reference. Sunoco will remain in violation of permit conditions A.27.(e) and D.5.(e) until complete in service tank inspection reports for Tank 2104-F and Tank 2105-F have been received and reviewed, and Ohio EPA has acknowledged that the reports meet the requirements of the permit conditions and applicable Ohio hazardous waste rules.

Since the original in service inspection reports were due May 4, 2005 (for the required period of May 4, 2000 to May 4, 2005) a lot of the data that Sunoco should have provided at that time is no longer applicable or has since been updated. Some of the survey dates did not fall within the required period of May 4, 2000 to May 4, 2005, making the data inadequate. Sunoco's in service tank inspection data is required by the permit so that Ohio EPA can determine whether the tanks are currently fit for use. Even though the inspection reports due on May 4, 2005 should have included data for the period of May 4, 2000 to May 4, 2005, Sunoco should submit their most recent information on the tanks in response to this letter.

**GENERAL COMMENTS:**

For future in service tank inspection submittals, Sunoco should ensure that the survey dates and data they provide are current data from the required time period. Sunoco will still be required to submit complete in service tank inspection reports, including ultrasonic thickness testing, for the permitted > 90 day hazardous waste storage tanks by May 4, 2010 for the required period of May 4, 2005 to May 4, 2010.

Mr. Andrew Lett  
Sunoco Chemicals-Haverhill  
June 27, 2007

Please submit the requested documentation to this office **within 30 days** of your receipt of this letter. 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

Attachments

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.*

## Attachment A

### Sunoco August 15, 2006 Submittal:

#### Tank 2105-F

The August 2006 submittal for Tank 2105-F contained only a Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) dated July 21, 2006. Since Permit Condition A.27(e) requires ultrasonic thickness testing of the tanks every five years, Sunoco should have submitted the ultrasonic thickness testing results for Tank 2105-F in support of the Tank 2105-F Corrosion Monitoring Eq/Circ ID Analysis Report. Additionally, this report lists the "last survey dates" for various points on the tank as either December 1, 2002 or December 9, 1998. Pursuant to condition A.27(e), ultrasonic thickness testing was required during the period of May 4, 2000 to May 4, 2005. Therefore, the data from the December 9, 1998 survey date is inadequate. Sunoco did not provide a description or explanation with this report to explain why the December 9, 1998 data was not updated.

***Sunoco must submit the most recent set of ultrasonic thickness testing results from Tank 2105-F, along with a current copy of the Corrosion Monitoring Eq/Circ ID Analysis Report. Sunoco must submit a written description or summary that describes the contents of the report and how it addresses the requirements of the permit conditions. It should be noted that, although Ohio EPA is requesting the most recent data to replace the deficient information in the "2005" report, Sunoco will still be required to submit an in-service tank inspection report, including ultrasonic thickness testing, by May 4, 2010.***

#### Tank 2104-F

The August 2006 submittal for Tank 2104-F's report contained two items: an External Coating Inspection Report dated July 17, 2003, and a Corrosion Monitoring Eq/Circ ID Analysis Report (spreadsheet) dated August 10, 2006.

The July 17, 2003 External Coating Inspection Report should have included T.S. Hayes's inspection checklists along with Hayes's signature and API certification number. Since these items were not included with the report, Ohio EPA cannot conclude whether the in service tank inspection on Tank 2104-F was adequate and complete. Additionally, Sunoco did not provide a description or explanation with this report to address Hayes's recommendations and describe the actions Sunoco has taken in response to those recommendations.

***Sunoco must submit Hayes's inspection checklists for the external coating inspection report, along with a written description or summary that describes the actions taken by Sunoco as a result of Hayes's recommendations.***

The August 10, 2006 Corrosion Monitoring Eq/Circ ID Analysis Report included a description of the coating inspection, but there was no explanation of the spreadsheet data. Similar to the corrosion data provided for Tank 2105-F, many of the "last survey dates" for various points on the tank fell before May 4, 2000. As previously noted, ultrasonic thickness testing was required during the period of May 4, 2000 to May 4, 2005; therefore, the data from survey dates prior to May 4, 2000 is inadequate. It was also noted that a few

"thickness monitoring location due dates" on the report had expired prior to the date of the report, August 10, 2006. Lastly, a few "thickness monitoring location retirement dates" were expired or nearing expiration at the time of the August 10, 2006 report. Sunoco did not provide a written description or summary to explain the apparent deficiencies and describe the actions that Sunoco has taken or plans to take to address nearing retirement dates.

***Sunoco must submit the most recent set of ultrasonic thickness testing results from Tank 2105-F, along with a current copy of the Corrosion Monitoring Eq/Circ ID Analysis Report. Sunoco must submit a written description or summary to explain expired/nearing expiration monitoring and retirement dates. It should be noted that, although Ohio EPA is requesting the most recent data to replace the deficient information in the "2005" report, Sunoco will still be required to submit an in-service tank inspection report, including ultrasonic thickness testing, by May 4, 2010.***

#### Tank 2003-F

The August 2006 submittal for Tank 2003-F consisted of an External Visual and Ultrasonic Thickness Testing Inspection Report dated October 21, 2005; an External Visual and Ultrasonic Thickness Testing Inspection Report dated March 3, 2004; and a Corrosion Monitoring Eq/Circ ID Analysis Report dated July 21, 2006. Even though these results are no longer applicable since the tank has since been replaced, Ohio EPA noted there are numerous items missing from these inspection reports. Briefly, the October 21, 2005 External Visual and Ultrasonic Thickness Testing Inspection Report lacks the inspector's signature, inspection checklists, the ultrasonic thickness testing results, and Sunoco's response to the inspector's recommendations. The March 3, 2004 External Visual and Ultrasonic Thickness Testing Inspection Report contains the inspector's signature and ultrasonic thickness testing results, but does not include the inspector's API certification number. The report included no explanation of the corrosion monitoring (spreadsheet) data, and issues similar to those discussed with Tank 2104-F and 2105-F were noted regarding survey dates that did not fall within the period required (May 4, 2000 to May 4, 2005), making the data inadequate.

***Rather than require Sunoco to provide Ohio EPA with the outdated inspection checklists and ultrasonic thickness testing results for this tank that are no longer applicable, Sunoco will be required to submit these results in their May 4, 2010 in service tank inspection report for new Tank 2003-F (for the compliance period of May 4, 2005 to May 4, 2010).***

#### Piping External Visual Inspection Reports dated January 4, 2006; January 9, 2006; January 10, 2006; and January 12, 2006 (checklists)

Since these reports are dated January 2006, Sunoco did not provide documentation that the tanks' ancillary equipment was inspected during the period required (May 4, 2000 to May 4, 2005), making the data inadequate. In addition to the checklists, Sunoco should have included Paul Talbot's write-up to support the piping inspections. Paul Talbot's write-up should have stated that the ancillary equipment of all three permitted tanks was inspected as a part of his multi-day inspection. Otherwise, Ohio EPA has no way of determining whether the inspections were complete. Also, Sunoco should have provided a write-up addressing all of Paul Talbot's recommended actions.

***Sunoco must submit Paul Talbot's write-up to support the piping inspections of the three permitted tanks. Sunoco must provide a written description or summary addressing all of Paul Talbot's recommended actions.***

## **Sunoco May 30, 2007 Submittal:**

### Tank 2104-F

The May 2007 submittal for Tank 2104-F consisted of an Evaluation and Assessment Report dated April 24, 2007 and contained a summary letter and certification statement signed by the PE, David Gibson, along with five pages of handwritten calculations with no description or explanation. David Gibson's April 24, 2007 letter to Sunoco states, "Information provided by you has been reviewed and an assessment has been completed on the subject tank." It is unclear what information Sunoco provided to David Gibson to evaluate and assess Tank 2104-F. It is also unclear if David Gibson performed an in service inspection on Tank 2104-F during the required period of May 4, 2000 to May 5, 2005; since the actual inspection date(s) could not be determined from the report. As part of this report, Sunoco should have submitted the information they provided to David Gibson, as well as any additional and/or supplemental information (i.e., inspection checklists). Without this information, Ohio EPA cannot determine whether David Gibson completed an adequate in service tank inspection and/or ultrasonic thickness testing on Tank 2104-F during the period from May 4, 2000 to May 5, 2005.

***Sunoco must submit the information that David Gibson used to evaluate and assess Tank 2104-F, as well as any other supplemental information available regarding David Gibson's evaluation and assessment, including a written description or summary.***

### Tank 2105-F

The May 2007 submittal for Tank 2105-F consisted of a summary letter dated May 3, 2007 signed by the PE, David Gibson. The actual inspection date(s) could not be determined from the letter. David Gibson's letter to Sunoco states, "I hereby certify that I have performed an assessment of the above referenced storage tank at your Haverhill facility according to OAC Rule 3745-50-44 using information provided by you." Sunoco should have submitted the information they provided to David Gibson, as well as any additional and/or supplemental information (i.e., inspection checklists); without that information, the letter gives the implication that David Gibson never actually saw the tank in person. Without any additional information, Ohio EPA cannot determine whether David Gibson completed an adequate in service tank inspection and/or ultrasonic thickness testing on Tank 2105-F during the required period from May 4, 2000 to May 5, 2005. Since David Gibson states in the letter that he used "reports dated 11/3/06, 4/6/07, 4/13/07, and 5/2/07" to assess and evaluate Tank 2105-F, it does not appear that David Gibson's May 3, 2007 letter is adequate to comply with the in service tank inspection requirements for the period of May 4, 2000 to May 4, 2005.

In addition, David Gibson's May 3, 2007 letter indicated that Tank 2105-F is experiencing "structural distortion", referencing Conam inspection reports that were not included in Sunoco's submittal. His letter recommended an internal inspection for the tank, which Sunoco indicated is planned for October 2007. Since Sunoco did not provide any additional information on the structural distortion of Tank 2105-F addressed in David Gibson's May 3, 2007 letter, Ohio EPA cannot determine the severity of the distortion and the urgency of a recommended action.

***Sunoco must submit the information that David Gibson used to evaluate and assess Tank 2105-F and any other supplemental information available to his evaluation and assessment. In addition, Sunoco should provide information to Ohio EPA to follow-up on the structural distortion of Tank 2105-F. At the very latest, Sunoco's follow-up should be on this issue must be addressed through David Gibson's recommended October 2007 out of service tank inspection.***

### **General Comments on Tank Inspection Submittals:**

To ensure the in service tank inspections were performed adequately and completely (in accordance with API Standards 575 and 653), Sunoco should have submitted inspection checklists for the inspections performed by the Authorized Inspectors on Tanks 2104-F, 2105-F, and 2003-F. No inspection checklists were provided for the in service tank inspections for the period of May 4, 2000 to May 4, 2005. Likewise, ultrasonic thickness testing results should have been submitted pursuant to Permit Condition A.27(e). Tank 2003-F was the only tank with ultrasonic thickness testing results provided. Also, Sunoco should have submitted write-ups in support of every document submitted with the in service tank inspection reports. These write-ups should have included a brief overview of the inspection/testing, including the date, inspector's name, and their qualifications; the results and recommendations; and Sunoco's completed/proposed actions taken in response to the recommendations.

For future in service tank inspection submittals, Sunoco should ensure that the survey dates and data they provide are current data from the required time period. Sunoco will still be required to submit complete in service tank inspection reports, including ultrasonic thickness testing, for the permitted > 90 day hazardous waste storage tanks. Future reports for each tank system should contain the following information:

- The date the inspection occurred, the name of the inspector(s), and a summary of the methods used;
- A full description of the tank system (tank and ancillary equipment), including tank number, design capacity, contents, dimensions, materials, roof design, floor design, etc. Any applicable design standards such as API Standard 650, must be identified. A blueprint or drawing of the tank should be provided if available.
- All instrument readings, checklists, notes, observations, and photographs (if taken);
- Tank shell ultrasonic thickness data showing reading locations and results;
- A summary and recommendations write-up based on a determination of suitability of the tank for its intended service. All repairs and alterations to the tank system that are recommended by the tank inspector must be itemized.
- The tank shell corrosion rate, calculated according to API 653 from the ultrasonic thickness data generated;
- The recommended date for the next external inspection based on the calculated corrosion rate;
- A statement that the inspection was performed in accordance with the latest edition of API 653/API 575; and
- The signature, name, address, telephone, employer, title, and API certification number of the tank inspector.
- In addition, each report should clearly indicate that it is an "in service" inspection, and all spreadsheets or other data included in the report should be clearly identified, labeled, or titled as to their contents (e.g., corrosion data, etc.).