



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 27 2005

REPLY TO THE ATTENTION OF

Andrew Hall
Permit Review/ Development Section
Ohio Environmental Protection Agency,
Department of Air Pollution Control
50 West Town Street Suit 700
PO Box 1049
Columbus, Ohio 43216

Dear Mr. Hall,

The U.S. Environmental Protection Agency has reviewed the draft Federally Enforceable Permit to Install and Operate (FEPTIO) (permit number P0118909) for Shelly Liquid Division (SLD) in Gallipolis, Ohio. To ensure that the source meets Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

1. The permit for SLD is restricting the emissions of volatile organic compounds (VOC) from the facility to avoid applicability to Title V. The permit does not address or include Shelly Plant #2, a hot mix asphalt plant, which is owned and operated by the company and is situated on contiguous property. If SLD and Shelly Plant #2 are determined to be a single source, the total emissions for VOC would be above the Title V threshold and require a different permit. Please conduct a single source determination to verify that a FEPTIO is the appropriate permit type for SLD.
2. In Section B of the permit, condition 4.a) contains monitoring and recordkeeping requirements to determine compliance with the operational restrictions at the source. The throughput of liquid asphalt will be determined on a monthly basis. The condition does not specify the methodology with which the throughput will be determined (i.e. flowmeter, specified calculation method, etc.). Please specify the methodology with which throughput is determined, ensuring that the methodology has a level of accuracy appropriate to comply with all limitations in the permit.
3. In Section B of the permit, condition 4.b) requires that for each barge of liquid asphalt material received, the facility collect and analyze a sample of the liquid asphalt material or maintain a record of a certified material analysis provided with the delivery to verify the true vapor pressure of the incoming material. The condition does not specify a timeframe in which the analysis must be completed or procedures to follow if the material is determined to be above the limitation set in the permit. The condition does not specify the timeframe which the analysis determining true vapor pressure and corrective action report must be submitted to the Ohio Environmental Protection Agency (Ohio EPA) if the incoming material is determined to be above the limitations set within the permit. Additionally, the condition requires that the maximum allowable true vapor pressure not exceed 0.13 pounds per square inch absolute (psia) taking into account material storage conditions. We understand that the storage tanks are heated to 300 degrees Fahrenheit (°F) among other storage conditions. However, the permit does not include the calculation

method to determine the true vapor pressure of the liquid asphalt given the required storage conditions including the tanks being heated to 300 °F.

To improve clarity and enforceability the permit should specify the following:

- a. Timeframe in which an analysis of liquid asphalt material must be completed;
 - b. Timeframe and specific office in which analysis of true vapor pressure exceeding 0.13 psia are to be submitted to Ohio EPA;
 - c. Procedures to be followed if it is determined that the true vapor pressure of the liquid asphalt material exceeds 0.13 psia; and
 - d. Calculation method used to determine the true vapor pressure of the liquid asphalt material at the specified storage conditions.
4. Section B of the permit identifies the carbon adsorber as a voluntary measure for the entire facility. The use of the carbon adsorber is a requirement for emission units T006 and T007 to meet the requirements of Ohio Administrative Code (OAC) 3745-31-05(A)(3). The permit should clarify that the use of the carbon adsorber are applicable requirements for these emission units.
5. Section B of the permit, condition 4.a) include monitoring and recordkeeping requirements for the facility. The tanks are assumed to be heated to 300 °F, without any monitoring requirement to verify the temperature value. Given the nature of the material stored in the tanks, the Ohio EPA should include monitoring requirements for the tank temperatures to ensure the values used in the calculations are accurate and representative of actual facility operations.
6. In Section B of the permit, condition 4.c) contains monitoring and recordkeeping requirements for the carbon adsorber system. The monitoring of breakthrough for the carbon adsorber system is conducted by olfactory means and by a Method 21 analyzer on a weekly basis for the initial year then may be reduced if less than 2 breakthrough events the following year. It is unclear from the permit, what constitutes a breakthrough event by either olfactory means, value detected by the Method 21 analyzer, or the corrective action to be taken if breakthrough occurs. Relying on olfactory means to determine breakthrough may cause inconsistencies in monitoring due to the natural variability of odor thresholds for individuals conducting the olfactory reading. Additionally, once the monitoring schedule is reduced to semi-annually or annually, the monitoring events will never exceed the threshold to increase the monitoring schedule despite any breakthrough events that occur.

To improve clarity and enforceability, the permit should include the following:

- a. Include a detection level limit for the Method 21 analyzer to define what reading would constitute breakthrough of the carbon filter;
- b. Incorporate EPA Reference Method 21 (RM 21) to ensure proper procedures are followed;
- c. Reconsider utilizing olfactory means as a monitoring method, the method is not a reliable indicator that odors are present, and utilize RM 21 as the monitoring methodology;
- d. Include corrective action procedures for when breakthrough occurs;
- e. Monitoring frequency should be no less than quarterly, due to the history of this source and the potential to cause a nuisance in violation of OAC 3745-15-07, EPA suggests that if the schedule is to be reduced after the initial year, the schedule becomes monthly, with a final reduced schedule of quarterly;
- f. Specify inspection and maintenance procedures; and
- g. Although the use of the carbon adsorption system is voluntary for the majority of the emission units, EPA recommends the inclusion of these terms in the permit given the

history of this source and the potential to cause a nuisance in violation of OAC 3745-15-07.

7. In addition to condition B.4.c), 0.13 psia is referred to as the maximum true vapor pressure allowable for the liquid asphalt material in conditions B.5.a)(1)b., B.6.a), and C.1.f), however, this value as written may cause confusion as to what the actual limit is. The 0.13 psia is meant take into account the storage tank conditions, which the storage tanks are heated to 300 °F. The temperature is inconsistently specified throughout the permit. EPA suggests to either adjust the limit to factor in the temperature or clarify throughout the permit that the temperature must be adjusted to 300 °F in the specified calculation method.
8. In section B of the permit, condition 6.a)(1) includes the calculation used for compliance determination for emission units J001, J002, T001 – T007, and T010 – T013. The following comments are associated with this section:
 - a. The calculation method references AP-42 Section 7.1.3.2 (11/06), however, this section applies only to internal floating roof tanks, SLD owns and operates fixed roof tanks. Please review the calculation method and ensure the appropriate method is included in the permit;
 - b. The calculation method includes a fixed value of 0.13 psia as the true vapor pressure of the liquid loaded. This value should be the analyzed true vapor pressure value required by B.4.b) to ensure that the emissions are representative of actual facility operations;
 - c. The calculation method includes a calculated value, T_{β} , for temperature of bulk liquid using Equation 1-28 from AP-42 Chapter 7.1 (11/06). The equation cited does not take the heated tank temperature into consideration. Please ensure the equation is correct and can account for the holding temperature in the tank, to ensure the emissions are representative of actual facility operations. Additionally, the calculation method should be specified in the permit; and
 - d. The temperature scale is missing from the 300°F in the equation for T_{β} . Please ensure the proper units are included in all calculations.
9. Condition B.6.a)(1)b. includes procedures to determine monthly tank VOC emissions. The procedures reference a summation of emissions calculation, including methods from the permittee's application. The permit should specify the calculation method for determining emissions and specify all components of the equation to ensure all emissions are being accounted for.
10. Condition C.1.d) includes monitoring recordkeeping requirements for emission units J001 and J002 and references Section B. The permit does not include a recordkeeping or compliance method to ensure compliance with the 24.0 pounds per hour VOC limit for these emission units. The permit should include monthly calculation of VOC emissions in pounds per hour to ensure compliance with the permit limitation.
11. The permit does not specify how to include breathing losses from the fixed roof tanks. Please ensure all emissions from the facility are included in the permit, particularly since the facility is taking limitations to avoid Title V applicability.
12. Section C of the permit, condition C.1.c) states that there are no operational restrictions placed on emission units J001 and J002, however, the equipment descriptions note a restriction of a

combined annual throughput of 131,669,741 gallons of liquid asphalt material. Condition C.1.c) should also reflect the operational restriction.

13. In section C of the permit, condition 1.f)(1) includes the calculation used for compliance determination for emission units J001 and J002. The following comments are associated with this section:
 - a. The calculation method includes a fixed value of 0.13 psia as the true vapor pressure of the liquid loaded. This value should be the analyzed true vapor pressure value required by B.4.b) to ensure that the emissions are representative of actual facility operations; and
 - b. The calculation method includes a calculated value, T_{β} , for temperature of bulk liquid using Equation 1-28 from AP-42 Chapter 7.1 (11/06). The equation cited does not take the heated tank temperature into consideration. Please ensure the equation is correct and can account for the holding temperature in the tank, to ensure the emissions are representative of facility operations. Additionally, the calculation method should be specified in the permit.
14. In section C of the permit, condition 1.f)(2) includes requirements for emission testing for emission units J001 and J002. Testing is conducted if required by the Director. Ohio EPA should include conditions for testing once a permit term during peak operating season, at a minimum.
15. The permit strategy write-up concludes that this facility is not subject to Appendix A of OAC 3745-17-08 due to the facility not being located in the City of Gallipolis, however, the address of the facility states its location is in Gallipolis. Please clarify the non-applicability of OAC 3745-17-08 Appendix A and ensure that all applicable requirements are contained in the permit.

We appreciate the opportunity to provide comment on this draft permit. If you have any questions, feel free to contact me or Charmagne Ackerman, of my staff, at (312) 886-0448.

Sincerely,



Genevieve Damico
Chief
Air Permits Section