



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

DEC 23 2014

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Ms. Beth Mowrey, Vice President  
Environmental Permitting and Compliance  
The Shelly Company  
P.O. Box 266  
Thornville, Ohio 43076

Re: Notice and Finding of Violation  
The Shelly Company facility located on Route 7  
Gallipolis, Ohio

Dear Ms. Mowrey:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to The Shelly Company (you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). We find that you have violated the Clean Air Act (CAA), the Ohio State Implementation Plan, and the New Source Performance Standards under Section 111 of the CAA at your Gallipolis, Ohio facility. This NOV/FOV supersedes the Notice of Violation and Finding of Violation issued to Shelly Company by EPA on March 15, 2010.

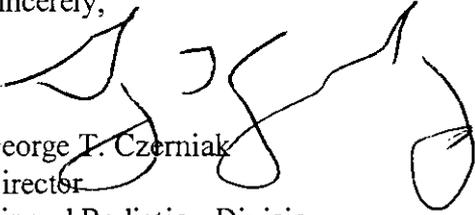
Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Michele "Mickey" Jencius. You may call her at 312.353.1377 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Czerniak", written over the typed name.

George T. Czerniak  
Director  
Air and Radiation Division

Enclosure

cc: Robert Hodanbosi, Chief – Division of Air Pollution Control, Ohio EPA

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**IN THE MATTER OF:**

**The Shelly Company  
Gallipolis, Ohio**

Proceedings Pursuant to  
the Clean Air Act  
42 U.S.C. § 7401 et seq

)  
)  
) **NOTICE OF VIOLATION and  
FINDING OF VIOLATION**

) **EPA-5-15-OH-3**  
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)

**NOTICE AND FINDING OF VIOLATION**

The Shelly Company (you or Shelly) owns and operates an asphalt storage terminal at 1400 State Route 7 North, Gallipolis, Ohio (facility). The facility includes 13 storage tanks, including 11 used to store liquid asphalt, and two loading racks.

The U.S. Environmental Protection Agency is sending this Notice and Finding of Violation (NOV/FOV or Notice) to notify you that we have found volatile organic compound (VOC) emissions from your facility in excess of the limits specified in your Permits-to-Install (PTIs) and the Ohio State Implementation Plan (Ohio SIP). These exceedances constitute violations of the Clean Air Act (the Act or CAA). In addition, EPA finds that Shelly has failed to comply with portions of the New Source Performance Standards under Section 111 of the CAA, including 40 C.F.R. § 60.11(d), and 40 C.F.R. Part 60, Subpart Kb at 40 C.F.R. § 60.116b(c).

**Statutory and Regulatory Background**

1. The statutes and regulations relevant to this NOV/FOV are as follows:
  - A. SIP Provisions:
    - a. EPA approved Ohio Administrative Code (Ohio Adm. Code) Rule 3745-31, permit to install regulations, as part of the federally enforceable Ohio State Implementation Plan (SIP). 45 Fed. Reg. 72146 (1980). Since then, EPA has approved several revisions to Ohio Adm. Code 3745-31 into the federally enforceable SIP. The rules were substantially revised and approved as a revision to the SIP on September 8, 1993 (58 Fed. Reg. 4 7211 (1993)), and subsequent revisions have been approved by EPA from time to time.
    - b. Ohio Adm. Code 3745-31-02(A) states that no person shall cause, permit, or allow the installation of a new source of air pollutants or the modification of an air contaminant source without first obtaining a permit to install (PTI) from the

Director of the Ohio Environmental Protection Agency (OEPA). Ohio Adm. Code 3745-15-05(B) provides, with certain exceptions, that any air contaminant source is exempt from, inter alia, the requirement to first obtain a PTI if the potential emissions of organic compounds, among other materials, is less than or equal to 10 pounds per day.

## B. NSPS Provisions

- a. Under Section 111 of the CAA, EPA promulgated the Standards of Performance for New Stationary Sources (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 at 40 C.F.R. Part 60, Subpart Kb, §§ 60.110b through 60.117b.
- b. Under Section 111 of the CAA, EPA promulgated regulations that contain general provisions applicable to all NSPS sources at 40 C.F.R. Part 60, Subpart A, §§ 60.1 through 60.19.
- c. Under 40 C.F.R. § 60.1(a), the provisions of 40 C.F.R. Part 60 “apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication [in part 60] of any standard (or, if earlier, the date of publication of any proposed standard) application to that facility.”
- d. Under 40 C.F.R. § 60.2, “affected facility” is defined as “any apparatus to which a standard is applicable.”
- e. Under 40 C.F.R. § 60.110b(a), the “affected facility” to which Subpart Kb applies is defined, in relevant part, as each storage vessel with a capacity greater than or equal to 75 cubic meters (m<sup>3</sup>) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984.
- f. The NSPS general provisions, at 40 C.F.R. § 60.11(d), require, at all times, including periods of startup, shutdown, and malfunction, the owner and operator of an affected facility subject to Subpart Kb to the extent practicable, to maintain and operate such affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- g. Owners or operators of storage vessels subject to 40 C.F.R. § 60.116b(c) must maintain records of the volatile organic liquid stored, the period of storage, and the maximum true vapor pressure of the organic liquid during the respective storage period.

## The Shelly Facility

2. Shelly owns and operates an asphalt storage terminal at 1400 State Route 7 North, Gallipolis, Ohio (facility). The facility includes 13 storage tanks, including 11 used to store liquid asphalt, and two loading racks.
3. OEPA has issued the following PTIs for tanks operated by Shelly at the facility.
  - a. OEPA issued PTI number 06-2395 to the facility on May 17, 1989. This PTI allowed the installation of two liquid asphalt storage tanks (OEPA source numbers T001 and T002, each with a capacity of 2.25 million gallons) and limits hydrocarbon emissions from both tanks combined to less than 1 ton per year.
  - b. OEPA issued PTI number 06-4296 to the facility on July 26, 1995. This PTI allowed the installation of three liquid asphalt storage tanks (OEPA source numbers T003, T004, and T005, two with a capacity of 840,000 gallons and one with a capacity of 2.310 million gallons) and limits the allowable VOC emissions from the tanks to "negligible" emissions. The PTI requires the owner and operator to keep records in accordance with 40 CFR § 60.116b(a) and (b) of NSPS Subpart Kb.
  - c. OEPA issued PTI number 06-5573 to the facility on January 21, 1999, and issued a revision to it on June 20, 2002. This PTI allowed the installation of one asphalt cement storage tank (OEPA source number T006, with a capacity of 6.25 million gallons), limits the VOC emissions to 0.3 tons per year, and requires the tank to be equipped with a charcoal filter. The PTI also indicates that the tank is subject to NSPS Subpart Kb.
  - d. OEPA issued PTI number 06-5936 to the facility on October 20, 1999. This PTI allowed the installation of one asphalt concrete storage tank (OEPA source number T007, with a capacity of 6.30 million gallons), limits the emissions of organic compounds to 0.3 tons per year, and requires the tank to be equipped with a charcoal filter. The PTI also indicates that the tank is subject to NSPS Subpart Kb.
  - e. OEPA issued PTI number 06-06923 to the facility on June 25, 2002. Among other things, this PTI allowed the installation of one asphalt cement storage tank (OEPA source number T010, with a capacity of 2.25 million gallons) and limits the VOC emissions from this tank to 0.9 tons per year. The PTI also indicates that the tank is subject to NSPS Subpart Kb.
  - f. OEPA issued PTI number 06-07018 to the facility on February 25, 2003. This PTI allowed the installation of three asphalt storage tanks (OEPA source numbers T011, T012, and T013, each with a capacity of 7.14 million gallons) and limits the VOC emissions from each tank to 1.75 tons per year. The PTI also indicates that the tanks are subject to NSPS Subpart Kb.

As used in the permits described above, the following terms describe the same class of materials, and hereinafter this NOV/FOV uses them interchangeably: "liquid asphalt," "asphalt cement," "asphalt concrete," and "asphalt." As used in the permits described above, the following terms describe the same class of materials, and hereinafter this NOV/FOV uses them interchangeably: "volatile organic compounds," "VOCs," "organic compounds," "OCs," and "hydrocarbons."

- The tanks operated by Shelly at the facility have the attributes summarized in Table 1:

Table 1: Summary of Permit Information

Tank ID	Material Stored	General Information			
		Type	Nominal Capacity (gallons)	PTI	VOC Limit (tons/yr)
T001	Asphalt Cement	vertical, fixed roof	2,250,000	06-2395	< 1
T002	Asphalt Cement	vertical, fixed roof	2,250,000		
T003	Asphalt Cement	vertical, fixed roof	2,310,000	06-4296	
T004	Asphalt Cement	vertical, fixed roof	840,000		
T005	Asphalt Cement	vertical, fixed roof	840,000		
T010	Asphalt Cement	vertical, fixed roof	2,250,000	06-06923	0.9
T006	Asphalt Cement	vertical, fixed roof	6,250,000	06-05573	0.3
T007	Asphalt Cement	vertical, fixed roof	6,300,000	06-05936	0.3
T011	Asphalt Cement	vertical, fixed roof	7,140,000	06-07018	1.75
T012	Asphalt Cement	vertical, fixed roof	7,140,000	06-07018	1.75
T013	Asphalt Cement	vertical, fixed roof	7,140,000	06-07018	1.75

- As summarized in Table 2, emissions generated during the following activities are vented to carbon bed adsorption systems: a) tank-to-tank transfers; b) barge unloading events; c) static conditions; and d) truck loading events.

Table 2: Carbon Bed Adsorption Systems

Carbon Bed Adsorption System	Tank and/or Activity
Battery 1	T001, T002, T003, truck loading rack 1, tank transfers and barge unloading
Battery 2	T004, T005, T010, truck loading rack 2, tank transfers and barge unloading
Battery 3	T006, T007, tank transfers and barge unloading
Battery 4	T011, T012, T013, tank transfers and barge unloading

- Shelly has not applied for or obtained a PTI for either of the two loading racks it operates at the facility.
- Tanks T001, T002, T003, T004, T005, T006, T007, T0010, T011, T012, and T013 each have a capacity greater than 151 cubic meters.
- Installation certificates were submitted to Ohio EPA for each of Tanks T003, T004, T005, T006, T007, T0010, T011, T012, and T013. The installation certificates state that each of these tanks was constructed after July 23, 1984.

9. From November 4, 2009 through at least September 12, 2013, Shelly did not operate the carbon adsorption systems on the liquid asphalt storage tanks and loading racks, when the tanks/and or racks were in operation, for:
  - a. 496 days at carbon adsorption system 1 (controlling T001, T002 & T003);
  - b. 373 days at carbon adsorption system 2 (controlling T004, T005 & T010)
  - c. 2 days at carbon adsorption system 3 (controlling T006 and T007); and
  - d. 105 days at carbon adsorption system 4 (controlling T011, T012 and T013).
10. Since at least March, 25, 2009, Shelly has not monitored the carbon systems to accurately determine when the capacity of the carbon to absorb VOCs has been exhausted.
11. In July 2012, Shelly conducted emissions testing at the inlets and the exhaust outlets of the carbon bed adsorption systems, and submitted detailed information about the results to EPA on September 14, 2012. The results of the performance testing for the exhaust outlets are summarized in Table 3.

Table 3: Summary of Performance Test Results

General Information		Test Results @ Carbon Bed Adsorption Outlet				
Tank ID	Material Stored	Carbon Bed Adsorption System	Truck <sup>1</sup> Loading (lbs/hr)	Tank transfer (lbs/hr)	Barge Unloading (lbs/hr)	Static Condition (lbs/hr)
T001	Asphalt Cement	Battery 1	0.55 <sup>2</sup>	1.82		0.68
T002	Asphalt Cement					
T003	Asphalt Cement					
n/a	Loading Rack 1					
T004	Asphalt Cement	Battery 2				0.057
T005	Asphalt Cement					
T010	Asphalt Cement					
n/a	Loading Rack 2					
T006	Asphalt Cement	Battery 3				1.08
T007	Asphalt Cement					
T011	Asphalt Cement	Battery 4			3.16	0.77
T012	Asphalt Cement					
T013	Asphalt Cement					

<sup>1</sup>Only one truck per hour long test was loaded. Can load up to 6 – 7 trucks per hour.

12. Using the performance test results listed in Table 3, EPA calculated estimated actual VOC emissions from each carbon adsorption unit on an annual basis. We assumed that the emission results appearing in Table 3 could be applied to similar activities at different times. The calculated estimated actual emissions, which are based upon information provided by Shelly on January 14, 2014 and performance test results, are summarized in Tables 4 and 5.

Table 4: Calculated Estimated Actual Emissions from Carbon Bed Adsorption Batteries During Tank Transfers, Barge Unloading, and Static Conditions

Activity	Test Data / EF (lbs/hr)	Thru-Put (hours)				Estimated Actual Emission Rate (tons/yr)			
		2009	2010	2011	2012	2009	2010	2011	2012
<b>Carbon Bed Adsorption System Battery 1 (T001, T002, T003)</b>									
Tank Transfer	1.82	511.41	450.9	717.42	472.32	0.47	0.41	0.65	0.43
Barge Unloading	3.16	88	55.5	13.75	71	0.14	0.09	0.02	0.11
Static Condition	0.68	2483	2857	2371	3558	0.84	0.97	0.81	1.21
					<b>Sum</b>	<b>1.45</b>	<b>1.47</b>	<b>1.48</b>	<b>1.75</b>
<b>Carbon Bed Adsorption System Battery 2 (T004, T005, T010)</b>									
Tank Transfer	1.82	208.5	251.51	242.91	221.26	0.19	0.23	0.22	0.20
Barge Unloading	3.16	41.25	12	18.5	23	0.07	0.02	0.03	0.04
Static Condition	0.057	7779	7709	7769	7583	0.22	0.22	0.22	0.22
					<b>Sum</b>	<b>0.48</b>	<b>0.47</b>	<b>0.47</b>	<b>0.45</b>
<b>Carbon Bed Adsorption System Battery 3 (T006, T007)</b>									
Tank Transfer	1.82	23.5	6.08	36.75	0	0.02	0.01	0.03	0.00
Static Condition	1.08	8736.5	8753.92	8723.25	8760	4.72	4.73	4.71	4.73
					<b>Sum</b>	<b>4.74</b>	<b>4.73</b>	<b>4.74</b>	<b>4.73</b>
<b>Carbon Bed Adsorption System Battery 4 (T011, T012, T013)</b>									
Tank Transfer	1.82	37.92	14.84	14.5	148	0.03	0.01	0.01	0.13
Barge Unloading	3.16	95.5	202.25	276.75	229.25	0.15	0.32	0.44	0.36
Static Condition	0.77	8626.58	8542.91	8468.75	8382.75	3.32	3.29	3.26	3.23
					<b>Sum</b>	<b>3.51</b>	<b>3.62</b>	<b>3.71</b>	<b>3.72</b>

Table 5: Calculated Estimated Actual Emissions from Carbon Bed Adsorption Batteries During Truck Loading

Activity	Test Data / EF (lbs/truck)	Thru-Put (hours)				Estimated Actual Emission Rate (tons/yr)			
		2009	2010	2011	2012	2009	2010	2011	2012
<b>Carbon Bed Adsorption System Battery 1</b>									
Truck Loading	0.55	5678	5397	5658	4659	1.56	1.48	1.56	1.28
<b>Carbon Bed Adsorption System Battery 2</b>									
Truck Loading	0.55	731	787	730	933	0.20	0.22	0.20	0.26

13. Using the results in Table 4 above, from 2009 through at least 2012, the actual VOC emissions for each carbon adsorption system battery considering emissions during tank transfers, barge unloading and static conditions exceeded the sum of the PTI VOC emission limits for all tanks for which vapor emissions are controlled by such carbon adsorption system battery. See Table 1, Table 2 and Table 4.
14. Using the performance test results listed in Table 3, EPA calculated estimated actual VOC emissions that exceeded 10 pounds per day for each loading rack. We assumed that the emission results appearing in Table 3 could be applied to other similar activities at different times. The calculated daily emissions are based upon information provided by Shelly on January 14, 2014 and performance test results. See Table 6.

Table 6: Calculated Estimated Actual VOC emissions at Loading Racks

Test Data (from Table 3)				Estimated Actual Emission Rate			
Thru-Put		EF (lbs/truck)	Thru-Put		Date of Thru-Put	lbs/day	
<b>Carbon Bed Adsorption System Battery 1 (T001, T002, T003, Loading Rack 1)</b>							
Truck Loading	1	truck	0.55	80	trucks	9/17/2009	44
<b>Carbon Bed Adsorption System Battery 2 (T004, T005, T010, Loading Rack 2)</b>							
Truck Loading	1	truck	0.55	27	trucks	6/2/2012	14.85

**Explanation of Violations**

15. EPA is alleging the following violations in this NOV/FOV:

- a. Shelly's operation of tanks T001, T002, and T003 resulted in combined annual emissions for such tanks of VOC emissions that exceeded the combined annual emission limits in PTI number 06-02395 and PTI number 06-4296 for at least the following years: 2009, 2010, 2011 and 2012. Each year for which combined emissions from Tanks T001, T002, and T003 exceeded the combined limits for such tanks in PTI number 06-02395 and PTI number 06-4296 constitutes a violation by Shelly of Section 110 of the Act, the provisions of the federally approved and enforceable SIP adopted by the State of Ohio, and PTI numbers 06-02395 and/or 06-4296.
- b. Shelly's operation of Tanks T006 and T007 resulted in combined annual emissions of VOCs that exceeded the combined annual emission limits for such tanks in PTI number 06-5573 and PTI number 06-5936 for at least the following years 2009, 2010, 2011 and 2012. Each year for which combined emissions from Tanks T006 and T007 exceeded the combined limits for such tanks in PTI number 06-5573 and PTI number 06-5936 constitutes a violation by Shelly of Section 110 of the Act, the provisions of the federally approved and enforceable SIP adopted by the State of Ohio, and PTI numbers 06-5573 and/or 06-5936.
- c. Shelly violated Ohio SIP Rule (Ohio Adm. Code) 3745-31-02(A) by its continued failure to obtain a PTI for the two loading racks it operates at the facility.
- d. Shelly's failure to adequately monitor the outlet VOC concentrations from its carbon adsorption systems for its asphalt storage tanks and failure to operate the systems for at least four months every year is not consistent with good air pollution control practice for minimizing emissions and is a violation of 40 C.F.R. § 60.11(d).
- e. Shelly's operation of Tanks T001 through T013 while emission control devices were not in operation is not consistent with good air pollution control practice for minimizing emissions and is a violation of 40 C.F.R. § 60.11(d).

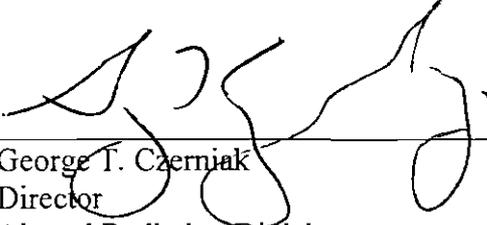
- f. Shelly failed to maintain records of the maximum true vapor pressure of the organic liquid during the respective storage period in violation of 40 C.F.R. § 60.116b(c).

**Environmental Impact of Violations**

16. Violation of VOC emission limits increases public exposure to unhealthy VOCs. VOCs are associated with a variety of adverse health effects, include chronic health disorders (e.g., irritation of the lung, eyes and mucous membranes and effects on the central nervous system) and acute health disorders (e.g., lung irritation and congestion, alimentary irritation and congestion, alimentary effect such as nausea and vomiting, and effects on the central nervous system).

Date

12/03/19

  
George T. Czerniak  
Director  
Air and Radiation Division

**CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-15-OH-3, by Certified Mail, Return Receipt Requested, to:

Ms. Beth Mowrey, Vice President  
Environmental Permitting and Compliance  
The Shelly Company  
P.O. Box 266  
Thornville, Ohio 43076

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Bob Hodanbosi  
Division of Air Pollution Control  
Ohio EPA - CDO  
P.O. Box 1049  
Columbus, Ohio 43216-1049

On the 29 day of December 2014.



Loretta Shaffer  
Program Technician  
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7670 0948