Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

April 20, 2011

RE: DIAMOND SPARKLER COMPANY
EPA ID NO. OHD 981 199 649
MAHONING COUNTY
NOTICE OF VIOLATION (NOV)
SQG

William A. Weimer
Vice President and General Counsel
B. J. Alan Company
555 Martin Luther King Jr. Blvd.
Youngstown, Ohio 44502-1171

Dear Mr. Weimer:

On April 13, 2011, I as a representative of Ohio EPA, Division of Materials and Waste Management, inspected the Diamond Sparkler Company (Diamond Sparkler) facility located at 127 N. West Avenue in Youngstown, Ohio, to determine compliance with Ohio's hazardous waste, universal waste, and used oil laws and regulations as found in Chapter 3734 of the Ohio Revised Code (ORC) and Chapter 3745 of the Ohio Administrative Code (OAC). You and Phil McKinley, Plant Manager, represented Diamond Sparkler during the inspection.

Diamond Sparkler manufactures sparklers and warehouses and repackages imported sparklers. In recent years the proportion of imported sparklers has increased significantly; consequently only the largest size sparklers are still manufactured at the facility. Manufacturing operations now typically run for about one month per year.

The manufacturing process and constituents were reported to be the same as in 1986 when this facility was last inspected by the DMWM (then known as DSHWM). Sparklers are manufactured by dipping steel wires into a liquid mixture, one of the constituents of which is a barium compound. "Spent mix" waste is generated when material in the bottom of the dip tank is no longer usable and is discarded. At the point of discard, spent mix is a mixture of suspended solids and dissolved constituents and water. The spent mix is transferred to 55-gallon open top drums which are stored on a concrete pad with a roof to provide shelter from precipitation located behind the manufacturing building. The spent mix constituents react while sitting on the pad and release gases. The time needed to complete this reaction depends on the temperature; in 1986 it was reported to be between two and fourteen days. A smaller volume of dry waste of similar composition is generated from floor sweepings and other clean-ups.

The letter issued by Ohio EPA to Diamond Sparkler after the 1986 inspection stated that spent mix "is EP toxic for barium," which means that spent mix was a hazardous waste for the presence of leachable barium. Diamond Sparkler did not challenge this characterization in its response letters. While I could not find any analytical results in our file, there is a letter dated July 29, 1986, from USEPA to Diamond Sparkler granting a time extension for accumulating spent mix beyond 90 days which includes as part of the justification the sentence "The laboratory analysis turn around time and the approval time period...has been prolonged." The sentence indicates that analytical work was performed in 1986.

As the manufacturing process and constituents were reported to still be the same as in 1986, my initial conclusion is that the spent mix on site at the time of my inspection is also a hazardous waste, however, as the facility questioned the basis for the 1986 evaluation, this is only a tentative conclusion pending the response to this letter.

The inspection included a review of the facility's operations, as well as waste management practices and documentation. Diamond Sparkler was inspected tentatively for the requirements of a small quantity generator (SQG) of hazardous waste as Diamond Sparkler appears to generate between 220 and 2,200 pounds of spent mix per calendar month (when manufacturing operations are running) and had more than 2,200 pounds of spent mix on site at the time of the inspection. SQG status is determined on a calendar month waste generation rate, not a monthly average. If Diamond Sparkler exceeds 2,200 pounds of hazardous waste per calendar month in the future, it must comply with the LQG requirements for those months. A guidance document on this subject is included.

This letter will explain the violations I found and steps you need to take to correct them. If spent mix is confirmed to be hazardous waste, additional violations may be cited in the future.

I found the following violation of Ohio's hazardous waste, used oil and universal waste laws and regulations:

1. **OAC Rule 3745-52-11 Waste Evaluation**

OAC Rule 3745-52-11 requires "Any person who generates a waste... [to] determine if that waste is a hazardous waste..."

During the inspection I observed the following quantities of spent mix:

- Three 55-gallon drums of wet spent mix, nearly full, and one 5-gallon pail of dry sweepings on the concrete pad behind the manufacturing building, reportedly generated late last year;
- Approximately twenty 55-gallon drums of dried spent mix stored on a van trailer located at the dock.

Verbal comments during the inspection indicated that the waste spent mix on the van had been generated over a number of years. My understanding is that the facility's practice is to leave the spent mix containers on the concrete pad until all or most of the water evaporates and then place the containers on the van. Dry-out requires warm ambient temperatures. Apparently some of the containers are combined when placing in the van.

The facility questioned whether the 1986 characterization was based on analytical data and whether the 1986 classification of spent mix as hazardous waste was still appropriate.

The facility was not able to provide any documentation of any waste evaluation of the spent mix currently on the van or on the concrete pad. The facility made reference to a third party having evaluated the waste a few years ago, but did not provide any documentation.

To respond to this violation the facility must:

- Either agree to manage discarded spent mix as hazardous waste; or,
- Evaluate discarded spent mix using the TCLP test to determine if it exhibits any characteristic of hazardous waste.

The constituent of most concern in spent mix is barium. Acceptable methods of waste evaluation are:

- Provide results of previous analyses using the TCLP test of a representative sample of the waste;
  OR
- Obtain a representative sample of the wet spent mix currently on the concrete pad and analyze using the TCLP test;
  AND
- Obtain a representative sample of the dried spent mix stored in the van trailer and analyze using the TCLP test.

Note: the request is for two samples of the existing wastes as the agency has no way of determining if the drying process results in chemical reactions that alter the results of the TCLP test.

Laboratory quality assurance and quality control (QA/QC) data should be provided with the TCLP test results.

If the spent mix is a hazardous waste, Diamond Sparkler will be required in an agency response letter to manage the existing waste inventory and future spent mix waste in accordance with the hazardous waste rules.

Submit the above requested response documentation to this office within 30 days of receipt of this letter. Response correspondence should be sent to:

Neil Wasilk
Northeast District Office
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, OH 44087

Enclosed you will find a copy of the checklists completed during the inspection.

CONCERNS

We discussed management of used fluorescent lamps. A guidance document is attached which provides additional information.

Other Information

The division has created an electronic news service to provide you with updates related to hazardous waste activities in Ohio. You can find more information and sign up for this free service at the following Web link:
http://ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage.

You can find copies of the rules and other information on the division's web page at:
http://www.epa.ohio.gov/dhwm/laws_regs.aspx.

Present or past instances of non-compliance may be subjects of pending or future enforcement actions.

Should you have any questions regarding this letter, please contact me at (330) 963-1165.

Sincerely,

Neil J. Wasilk
Environmental Specialist
Division of Materials and Waste Management

NJW/cl

Enclosures

ec: Natalie Oryshkewych, Ohio EPA, DMWM, NEDO
Nyall McKenna, Ohio EPA, DMWM, NEDO
Marlene Kinney, Ohio EPA, DMWM, NEDO

Send to Central Office ☒

Ohio Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION/VERIFICATION FORM

For Ohio EPA use only

Completed verification forms required to be submitted to CO should be e-mailed to brad.hauser@epa.state.oh.us.

Site EPA ID No.
EPA ID Number: **OHD 981 199 649**

Site Name
Name: **Diamond Sparkler Company**
Website: (Optional)

Site Location Information
Street Address: **127 N. West Ave**
City, Town, or Village: **Youngstown**
State: OH
County Name: **MAHONING**
Zip Code: **44502**

Site Land Type (check only one)

Private	County	District	Federal	Indian	Municipal	State	Other
☒	☐	☒	☐	☐	☐	☐	☐

NAICS code(s) www.census.gov/epcd/www/naics.html

Facility Representative

Additional names can be recorded in number 12

First Name: **William** MI: Last Name: **Weimer**
Title:
Phone Number: **330-746-1064** Phone Number Extension:
E-Mail Address:
Fax Number: Fax Number Extension:

Only provide address information if it is different than the site address

Street or P.O. Box: **555 Martin Luther King Jr. Blvd.**
City, Town or Village: **Youngstown**
State: **OH** Zip Code: **44502**

Legal Owner And Operator of the Site. List Additional Owners and/or Operators in the Comment Section or on another copy of this form page

Name of Site's Legal Owner:
Date Became Owner (mm/dd/yyyy):

Owner Type:	Private	County	District	Federal	Indian	Municipal	State	Other
	☐	☐	☐	☐	☐	☐	☐	☐

Street or P.O. Box:
City, Town or Village: Owner Phone #:
State: Country: Zip Code:

Name of Site's Operator:
Date Became Operator (mm/dd/yyyy):

Operator Type:	Private	County	District	Federal	Indian	Municipal	State	Other
	☐	☐	☐	☐	☐	☐	☐	☐

Street or P.O. Box:
City, Town or Village: Operator Phone #:
State: Country Zip Code:

VIOLATIONS CITED? ☒ Yes ☐ No

TYPE OF HANDLER - MARK "X" AS APPROPRIATE

☐ Not a HW Generator

☐ UNKNOWN: Cited for violation of 3745-52-11

☐ Short-Term/Temporary Generator (generates from a short-term or one-time event and not from on-going processes). *Check the box for the applicable generator status and provide a comment.*

☐ Large Quantity Generator (LQG)

☒ Small Quantity Generator (SQG)

☐ Conditionally Exempt Small Quantity Generator

☐ U.S. Importer of Hazardous Waste

☐ Mixed Waste (Hazardous and Radioactive) Generator

TYPE OF REGULATED WASTE ACTIVITY (MARK "X" IN ALL OF THE APPROPRIATE BOXES)

- ☐ Hazardous Waste Transporter
- ☐ Hazardous Waste Transfer Facility
- ☐ Treater, Storer or Disposer of Hazardous Waste
- ☐ Recycler of Hazardous Waste
- ☐ 72-Hour Recycler
- ☐ Exempt Boiler and/or Industrial Furnace
  - ☐ Small Quantity On-Site Burner Exemption
  - ☐ Smelting, Melting, Refining Furnace Exemption
- ☐ Underground Injection Control Facility
- ☐ Receives Hazardous Waste from Off-site

UNIVERSAL WASTE ACTIVITIES (INDICATE TYPES OF UNIVERSAL WASTE MANAGED (CHECK ALL BOXES THAT APPLY)

- ☒ Small Quantity Handler of Universal Waste
- ☐ Large Quantity Handler of Universal Waste (accumulates 5,000 kg. or more)
- ☐ Destination Facility for Universal Waste

CHECK ALL BOXES BELOW THAT APPLY FOR THE TYPES OF UNIVERSAL WASTE THE FACILITY MANAGES

- ☐ Batteries
- ☐ Pesticides
- ☐ Mercury containing equipment
- ☐ Lamps

USED OIL ACTIVITIES (INDICATE TYPE(S) OF ACTIVITY(S)

- ☐ Used Oil Generator
- ☐ Used Oil Transporter
- ☐ Used Oil Transfer Facility
- ☐ Used Oil Processor
- ☐ Used Oil Re-refiner
- ☐ Off-Specification Used Oil Burner
- ☐ Used Oil Fuel Marketer who directs shipment of Off-Spec Used Oil
- ☐ Used Oil Fuel Marketer who first claims the Used Oil meets the specifications

Eligible Academic Entities with Laboratories: Facility has previously notified that they are opting into managing laboratory hazardous waste pursuant to OAC rules 3745-52-200 through 3745-52-216. Check the box(es) below to indicate the laboratory type.

- ☐ College or University
- ☐ Teaching hospital that is owned by or has a formal written affiliation agreement with a college or university
- ☐ Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Waste Codes for Federally Regulated Hazardous Wastes. Please list the codes for the federally regulated hazardous waste handled at the site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page or list them in the comments if more space is needed. If the waste codes are the same as listed in the most recent RCRAInfo source record, you do not need to list them. Instead just indicate the date of the most recent source record.

D005

COMMENTS: USE THIS AREA TO DESCRIBE WHETHER THE INSPECTION WAS ANNOUNCED, WHETHER THE WASTE IS STORED IN TANKS OR CONTAINERS, ETC.

Announced	☐ Yes	☒ No	Additional Facility Representatives:
Tanks	☐ Yes	☒ No	
Containers	☒ Yes	☐ No	

Name of Inspector(s)	Name of Inspector(s)	Date of Inspection/Time (mm/dd/yyyy) (hh:mm)
N. Wasilk		**04/13/2011 09:40 a.m.**

Comments:

PROCESS DESCRIPTION

Facility:
EPA ID NO.: OHD 981 199 649

Diamond Sparkler Company
127 N. West Ave
Youngstown, Ohio 44502

Facility now mostly packaging and warehousing imports from China. Only makes one size sparkler (36 inch). Last U.S. operating sparkler manufacturing facility. Process and ingredients still same as in 1986. Barium still used.

Parts washer in maintenance shop. Uses mineral spirits as solvent. Used mineral spirits go to B. J. Alan Co. maintenance shop for further management.

No used oil managed. Air compressor oil changed by contractor that takes it.

Used fluorescent light bulbs go to B.J. Alan Co.

No used batteries generated except vehicle lead acid batteries.

Process waste material is "spent mix". The spent mix constituents react while sitting on the pad to release gases. Then solidified by drying. Generating about two drums per month (i.e., per run) when operating. Now do one run per year. Waste is material left in bottom of dip tank. To reduce waste, facility transfers dip mixture from large tank to medium tank to small tank; also blend some into new mix.

Bad sparklers are run through a grinder to remove "sparkler" component from steel wire. Recovered material can only be mixed in limited amounts with new mix as it has a deleterious effect on mix quality and stability.

The spent mix is transferred to 55 gallon open top drums which are stored on a concrete pad with a roof to provide shelter from precipitation located behind the manufacturing building.

Three 55 gallon drums of wet spent mix, nearly full, were on the concrete pad behind the manufacturing building, reportedly generated late last year. Waiting for it to dry-up which requires warmer weather. One 5-gallon pail of sweepings of dry mix material was also on the concrete pad.

A Semi Trailer Van (GM-4) (also marked ADV 7709) at the Truck Dock was being used for storage of dried spent mix. Approximately twenty 55 gallon drums of dried spent mix were in the van trailer.