



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Solid Waste Management
Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, Tennessee 38133

January 12, 2024

George R. Harvell, III
Velsicol Chemical Corporation
1199 Warford Street
Memphis, TN 38108

CERTIFIED MAIL
#9489 0090 0027 6548 2599 44
RETURN RECEIPT REQUESTED

**RE: Hazardous Waste Compliance Evaluation Inspection
Notice of Violation
Velsicol Chemical Corporation
TND 00-702-4664
Permit No. TNHW-158**

Dear George R. Harvell, III:

On December 11, 2023, the Division of Solid Waste Management (DSWM) conducted a Hazardous Waste Compliance Evaluation Inspection (CEI) at the above referenced facility. The CEI was conducted to evaluate the facility's compliance with the *Tennessee Hazardous Waste Management Act*, T.C.A. 68-212-101 et seq., with the *Used Oil Collection Act of 1993* T.C.A. 68-211, Part 10, and with Tennessee's Hazardous Waste Regulations (Rule Chapter 0400-12-01) promulgated pursuant to those Acts, and with Permit No. TNHW-158. The attached Notice of Violation (NOV) details the inspection findings. The one violation noted in this report is non-resolvable.

The DSWM appreciates the courtesy and cooperation shown by Velsicol Chemical Corporation during the inspection. If you have questions concerning this letter or the enclosed report, please do not hesitate to contact me at 901-426-3386 or Jason.Simpson@tn.gov.

Sincerely,

Jason A. Simpson, P.E.
Jason A. Simpson, P.E. (Jan 12, 2024 16:16 CST)

Jason A. Simpson, P.E.
Hazardous Waste Inspector

Enclosure: Hazardous Waste Inspection Report

Attachment: 1. Fact Sheet: Mercury Product Disposal Control Act

cc: Dawei Li, Site Manager, Velsicol Chemical Corporation
Lisa A. Hughey, CHMM, Director, DSWM Nashville
Rob Ashe, DDFO, DSWM Nashville
Craig Almanza, DDCO, DSWM Nashville
Beverly Philpot, Hazardous Waste Program Manager, DSWM Nashville
John C. Webb, Hazardous Waste Program, DSWM Nashville
Chris Lagan, Enforcement and Compliance Manager, DSWM Nashville
Jim Holt, EFOM, DSWM Memphis
Database Site #7651
Records.swm@tn.gov

HAZARDOUS WASTE INSPECTION REPORT

SITE/PHYSICAL LOCATION

Velsicol Chemical Corporation
1199 Warford Street
Memphis, TN 38108
County: Shelby

PRIMARY CONTACTS

George R. Harvell, III
Vice President
Velsicol Chemical Corporation
1199 Warford Street
Memphis, TN 38108
Telephone: 901-323-6180
E-mail: gharvell@velsicol.com

DATE AND START-TIME OF INSPECTION

December 11, 2023, 11:45 a.m.

INSPECTION PARTICIPANTS

George R. Harvell, III
Vice President, Velsicol Chemical Corporation
Telephone: 901-323-6180
E-mail: gharvell@velsicol.com

Dr. Dawei Li, Ph.D.
Site Manager, Velsicol Chemical Corporation
Telephone: 901-323-6226. Ext. 124
E-Mail: dli@velsicol.com

Johnny Donald
Velsicol Chemical Corporation

Jason Simpson, P.E.
DSWM, Memphis Environmental Field Office
Telephone: 901-426-3386
E-mail: Jason.Simpson@tn.gov

Brett Harris
DSWM, Nashville Central Office
Telephone: 615-393-9221
E-mail: brett.harris@tn.gov

Donya Sharafoddinzadeh
DSWM, Memphis Environmental Field Office
Telephone: 901-664-9530
E-mail: Donya.Sharafoddinzadeh@tn.gov

REPORT PREPARED BY

Jason A. Simpson, P.E.
Division of Solid Waste Management
Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, TN 38133-4119
Telephone: 901-426-3386
Fax: 901-371-3170
E-mail: Jason.Simpson@tn.gov

PURPOSE OF INSPECTION

This routine unannounced compliance evaluation inspection (CEI) was conducted to evaluate Velsicol Chemical Corporation's (Velsicol) compliance with the applicable requirements of the Tennessee Hazardous Waste Management Act, T.C.A. 68-212 parts 1 and 3; the Used Oil Collection Act of 1993, T.C.A. 68-211 part 10; the regulations adopted pursuant to those Acts; and Hazardous Waste Permit No. TNHW-158. Inspection findings are based upon site observations, file review, and verbal and written information provided by facility personnel during the inspection including the identification of all physical locations where wastes are generated and managed by the facility. The facility is encouraged to advise the DSWM of any information in the report or attached letter that is incorrect. Any such communication should be submitted to the Division within fifteen (15) days following receipt of this report.

The last unannounced CEI conducted at the facility by the DSWM was on October 22, 2020.

GENERATOR STATUS

Velsicol was a Very Small Quantity Generator (VSQG) of hazardous waste at the time of the CEI and for the last three years. Velsicol is a small quantity handler of universal waste lamps.

HAZARDOUS WASTE STREAMS GENERATED

AOC has 3 active hazardous waste streams (WSs):

- WS #6 – DCPD absorbent (D001, D012, D019, D020, D031, D039), 45,000 lbs. monthly maximum,
- WS #65 – Waste aerosol cans (D001), 190 lbs. monthly maximum,
- WS #71 – Waste CATF DNAPL (D001, D012, D019, D020, D021, D022), 690 lbs. monthly maximum.

FACILITY DESCRIPTION

Velsicol is a 68-acre facility located at 1199 Warford Street in Memphis, Tennessee. Velsicol has operated at this location since approximately 1942. The facility previously manufactured endrin, heptachlor, chlordane, benzyl alcohol, chlorendic anhydride, and hexachlorocyclopentadiene (HCCPD). In 1985, Velsicol discontinued the production of endrin. Production of heptachlor was discontinued in 1994. The facility produced chlordane from 1990 to 1996. The production of benzyl alcohol was discontinued in October of 1999. The production of chlorendic anhydride was discontinued in September 2009. On June 26, 2011, Velsicol discontinued production of HCCPD.

Velsicol has a corrective action permit (Permit TNHW-158) that was issued on September 30, 2014. Per this permit, Velsicol operates a corrective action treatment facility (CATF) at the site for the treatment of contaminated ground water. Monitoring activities as well as the manual recovery of Dense Non-Aqueous Phase Liquids (DNAPLs) occur at three on-site recovery wells (TW-2, 3 and 4).

Between 2012 and 2017, Velsicol demolished most of the manufacturing portions of the facility. All process units including the permitted hazardous waste incinerator have been demolished. Velsicol's four hazardous waste storage tanks had been closed and removed. Velsicol is keeping Warehouse #3 for product storage, the CATF, and wastewater treatment system. Velsicol is also keeping the Maintenance Shop and some warehouses to lease to tenants. A concrete recycling facility had been installed on the northern portion of the site near Warehouse #1. At the time of the CEI, the concrete recycling operation had been discontinued. Facility personnel stated that the leftover crushed and uncrushed concrete has been left to be used on site in the future.

The DSWM noted that the Maintenance Shop, Warehouse #6, and parts of the facility had been leased to Johnny Donald's company to perform activities including automotive body shop, tire shop, semi-truck and trailer parking, white goods recycling, and warehousing for pallets and portable toilets. Mr. Donald's operations were not included in this inspection.

INSPECTION FINDINGS

The CEI consisted of a walk-through to inspect areas related to the management of hazardous waste, universal waste, and used oil. No used oil was observed during the CEI. Although Velsicol generates universal waste lamps, the DSWM did not observe any during the walkthrough.

Emergency response equipment and communication equipment throughout the facility were noted during the walk-through at all areas where hazardous waste is generated or accumulated.

Facility Site Observations:

CATF

At the CATF, the DSWM observed two hazardous waste satellite accumulation areas (SAAs) containing one closed 55-gallon drum each. One drum was labeled with the words "Solid Hazardous Waste," and one drum was labeled with the words "Liquid Hazardous Waste." These drums were partially full. The DSWM observed improved security measures at the CATF.

Warehouse #3

The DSWM observed that Velsicol was now storing HCCPD, chlorendic anhydride, and Velsiflex products stored in Warehouse #3. No waste was observed in this area at the time of the CEI.

Soil Consolidation Area (SWMU #7) and Fence

The DSWM did not observe any holes or tears in the cover of the Soil Consolidation Area (SWMU #7). The DSWM did not observe any breaks or holes in the fence. The DSWM noted that Velsicol had been working on removing overgrowth from the fence, but some vegetation remained to be removed.

Record Review:

The review Velsicol's hazardous waste records included the following documents from 2020 through 2023 during the CEI:

- Permit TNHW-158;
- Monthly Inspection Logs for the soil consolidation area (SWMU #7) and fence;
- Semi-annual Logs of the facility's monitoring wells;
- Annual Hazardous Waste Stream Report for 2020, 2021, and 2022; and
- Hazardous waste management training documentation for 2020, 2022, and 2023.

No hazardous waste had been shipped from the facility since 2020. *The DSWM noted that Velsicol did not have documentation of hazardous waste management training from 2021.*

VIOLATIONS

During this CEI, a violation of the following Rules was identified:

Violation #1 – Permit TNHW-158 IL.C.:

PERSONNEL TRAINING

The permittee shall comply with all the applicable personnel training and documentation requirements of Rule 0400-12-01-.06(2)(g) including, but not limited to:

1. The permittee shall ensure that facility personnel and contractors that serve to meet the requirements of this permit successfully complete a program of classroom instruction and/or on the job training that teaches them to perform their specific duties in a way that assures the permittee's compliance with this permit and the applicable portions of Rule 0400-12-01-.06(2)(g) associated with a corrective action permit. The permittee shall ensure that the training program is directed by a person(s) trained in hazardous waste management procedures and shall include instruction which teaches facility personnel the hazardous waste management procedures relevant to the positions in which they are employed. Appropriate training shall also be provided for personnel involved with corrective action investigation and remediation activities, and for any additional permit-specific requirements in the attachments to this permit.
2. Retention of Training Records: Training records on current personnel shall be kept until closure of the facility; training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

Rule 0400-12-01-.06(2)(g)3.:

(2) General Facility Standards [40 CFR 264 Subpart B]

(g) Personnel Training [40 CFR 264.16]

3. Facility personnel must take part in an annual review of the initial training required in part 1 of this subparagraph.




Violation #1 Observations: The DSWM noted that Velsicol did not have documentation of hazardous waste management training from 2021.

Violation #1 Actions: Unless Velsicol finds documentation that their employees received hazardous waste management training in 2021, this violation is non-resolvable.

REMARKS

Effective January 1, 2011, the Mercury Product Disposal Control Act (the Act) prohibits “covered generators” from disposing of “mercury-added consumer products” as non-hazardous waste. The intent of the Act is to encourage recycling of mercury-added consumer products otherwise destined for disposal. However, the Act provides covered generators the option to dispose of mercury-added consumer products as hazardous waste. Therefore, effective January 1, 2011, covered generators must ensure that their discarded mercury-added consumer products are shipped for recycling, treatment, or disposal to either a universal waste destination facility or a hazardous waste management facility that has been permitted to manage such wastes. Please review the enclosed Fact Sheet for additional information including definitions of “covered generators” and “mercury-added consumer products” (see Attachment 1).

The DSWM appreciates Velsicol’s cooperation during the CEI. If there are any questions about this report, please contact me at 901-426-3386 or Jason.Simpson@tn.gov.

Signed: <u></u> <small>Jason A. Simpson, P.E. (Jan 12, 2024 16:16 CST)</small> _____ Jason A. Simpson, P.E. Hazardous Waste Inspector	Date <u>Jan 12, 2024</u> _____
Reviewed: <u></u> <small>John Webb (Jan 15, 2024 16:50 EST)</small> _____ John C. Webb, P.E. Hazardous Program	Date <u>Jan 15, 2024</u> _____
Approved: <u></u> <small>Jim Holt (Jan 12, 2024 16:29 CST)</small> _____ Jim Holt Environmental Field Office Manager	Date <u>Jan 12, 2024</u> _____

ATTACHMENT 1

Fact Sheet: Mercury Product Disposal Control Act



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
BUREAU OF ENVIRONMENT
Nashville, TN 37243-0435

FACT SHEET: MERCURY PRODUCT DISPOSAL CONTROL ACT

General

The Mercury Product Disposal Control Act (the Act), Tennessee Code Annotated Title 68, Chapter 211, Part 2, prohibits “covered generators” from disposing “mercury-added consumer products” as non-hazardous solid waste.

Department of Environment and Conservation inspectors are required by the Act to make the following statement to the owner or similar authority at a facility undergoing an inspection:

“Are you aware that, if any of the following criteria apply to your business and your business utilizes mercury-added consumer products, such as fluorescent light bulbs, the Mercury Product Control Act applies to your business:

- (1) Employs ten (10) or more employees;*
- (2) Owns or maintains a building of at least three thousand (3,000) square feet, excluding private residences;*
- (3) Owns or maintains one (1) or more electrical distribution systems;*
- (4) Engages in the demolition of buildings, excluding private residences; or*
- (5) Owns or operates a tanning bed salon?*

The Mercury Product Control Act requires proper recycling of mercury-added consumer products rather than disposing of such products in the solid waste stream. Do you have a plan for recycling mercury-added consumer products?”

The Act prohibits covered generators from disposing of mercury-added consumer products in any Subtitle D facility (non-hazardous waste landfill). The Act also states that persons who separate and collect from a municipal solid waste stream either mercury-added consumer products from generators that are not covered generators, or mercury-containing excluded products, shall be subject to the same requirements that apply to covered generators.

The intent of the Act is to encourage recycling of mercury-added consumer products otherwise destined for disposal. However, the Act provides covered generators the option to dispose of mercury-added consumer products as a hazardous waste. Therefore, covered generators must ensure that their discarded mercury-added consumer products are shipped for recycling, treatment, or disposal to either a universal waste destination facility or a hazardous waste management facility that has been permitted to manage such materials by the federal Environmental Protection Agency (EPA) pursuant to the federal Resource Conservation and Recovery Act (RCRA); by a state program that has been authorized by the EPA to implement the pertinent portions of RCRA in the state; or by a foreign government. The Act also requires that the covered generator manage these materials as hazardous waste pursuant to Tennessee Rules 0400-12-01-.03 through 0400-12-01-.07 or as universal waste pursuant to Tennessee Rule 0400-12-01-12.

Definitions

“Covered Generators” are generators that:

- (A) Employ ten (10) or more employees;
- (B) Own or maintain a building, excluding private residences, of at least three thousand (3,000) square feet;
- (C) Own or maintain electrical distribution systems;
- (D) Own or operate a business that demolishes buildings, excluding private residences; or
- (E) Own or operate a tanning bed salon business.

“Mercury-added consumer products” are any material, device, or part of a device:

- (A) Into which elemental mercury or mercury compounds are intentionally added during the formulation or manufacture of such material or device; and
- (B) In which the continued presence of mercury is required to provide a specific characteristic, appearance or quality, or to perform a specific function.

These include, but are not limited to:

- (i) Thermostats;
- (ii) Thermometers;
- (iii) Switches (whether individually or as part of another product);
- (iv) Medical or scientific instruments;
- (v) Electrical relays and other electrical devices;
- (vi) Lamps and light bulbs; and
- (vii) Batteries other than those defined as mercury containing excluded products.

Excluded products include:

- (i) Photographic film and paper;
- (ii) Pharmaceutical products;
- (iii) Biological products;
- (iv) Any substance that can lawfully be sold over the counter without a prescription under the Federal Food, Drug and Cosmetics Act, 21 U.S.C. § 301, *et seq.*;
- (v) Button batteries used in hearing aids, radios, cameras, and other devices;
- (vi) Medical devices; or
- (vii) Restorative dental materials.

Effects of Improper Disposal

Information regarding the effects of improper disposal of mercury can be found on the Tennessee Department of Health’s Mercury Web page at:

<https://www.tn.gov/content/tn/health/cedep/environmental/environmental-health-topics/ehl/mercury.html>

Disposal Options

All solid and hazardous wastes, including those covered by the Mercury Products Disposal Control Act, must be disposed in accordance with the Rules of the Division of Solid Waste Management (0400-11-01 et seq. Solid Waste Processing and Disposal and 0400-12-01 et seq. Hazardous Waste Management).

There are several permitted commercial facilities that may be able to assist with managing your mercury products/waste. A current list of these facilities can be found on the Department’s Web Site at:

<https://www.tn.gov/environment/program-areas/solid-waste/hazardous-waste-management/mercury-product-disposal-control-act.html>

Recycling Options

The Division of Solid Waste Management has prepared a list of fluorescent bulb recyclers – which does not constitute an endorsement of any, nor an assertion that the list is all-inclusive.

<https://www.tn.gov/content/dam/tn/environment/solid-waste/documents/solid-waste/sw-mm-fluorescent-bulb-recyclers.pdf>

Further Information

More information can be found at:

<https://www.tn.gov/environment/program-areas/solid-waste/hazardous-waste-management/mercury-product-disposal-control-act.html>

or by calling your local Environmental Field Office at (888) 891-TDEC (8332).