BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

ASHTA Chemicals Inc.
3509 Middle Road
Ashtabula, Ohio 44005

Director's Final Findings
and Orders

Respondent

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are issued to ASHTA Chemicals Inc. pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) §§ 3734.02(G), 3734.13, 3734.14 and 3745.01 and Ohio Administrative Code (OAC) rule 3745-50-31.

II. PARTIES BOUND

These Orders shall apply to and be binding upon the Respondent and successors in interest liable under Ohio law. No change in ownership of the Respondent, or of the facility, shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 3734. and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Pursuant to ORC § 3734.02(G) and rule 3745-50-31 of the Ohio Administrative Code (OAC), the Director, by order, may exempt any person generating, storing, treating, disposing of, or transporting hazardous waste, in such quantities or under such circumstances that, in the determination of the Director, are unlikely
to adversely affect the public health or safety or the environment from any requirement to obtain a permit or comply with other requirements of ORC Chapter 3734. Such an exemption shall be consistent with and equivalent to rules promulgated under the Resource Conservation and Recovery Act of 1976, 90 Stat. 2806, 42 U.S.C. § 6921 et seq., as amended.

2. ORC § 3734.02(E)(2) requires all persons engaged in the storage, treatment, or disposal of any hazardous waste to have a hazardous waste installation and operation permit issued in accordance with ORC § 3734.05, except at a facility that is not subject to permit requirements under rules adopted by the Director pursuant to ORC § 3734.02(E)(3)(b).

3. Respondent is the owner and operator of the facility located at 3509 Middle Road, Ashtabula, Ohio (Facility). Respondent notified of its hazardous waste activities and was assigned U.S. EPA identification number OHD980793301. At the Facility, Respondent generates hazardous waste that exhibits the characteristic of toxicity for mercury (D009) as described in OAC rule 3745-51-24.

4. On July 23, 2019, Respondent submitted a letter requesting an extension of the 90-day accumulation period for hazardous waste mercury that had been accumulated at the Facility since May 17, 2019. Respondent requested the extension because Respondent’s normal destination facility, a treatment facility that normally recycles Respondent’s hazardous waste mercury stream, is performing capital upgrades to their treatment process and is unable to accept any hazardous waste mercury until such upgrades are complete. The recycling facility informed Respondent the upgrades would be completed by the fourth quarter 2019.

5. On July 31, 2019, Ohio EPA issued a letter to Respondent approving the extension request through September 14, 2019.

6. In early September 2019, Respondent was informed by the recycling facility described in Finding No. 4. of these Orders, that the recycling facility would not accept hazardous waste from off-site for recycling until potentially end of first quarter of 2020.

7. On or about September 9, 2019, Due to the information in Finding No. 6. of these Orders, Respondent contacted Ohio EPA to discuss options regarding the management of the hazardous waste since the 30-day exemption granted described in Finding No. 5. of these Orders was to expire on September 14, 2019.

8. Respondent evaluated other options for treatment and disposal but did not identify a treatment storage disposal facility that will recover and return the
reclaimed mercury. Respondent requires mercury to maintain its process and has historically used reclaimed mercury, instead of virgin mercury, which minimizes the amount introduced to the environment.

9. On September 12, 2019, Respondent submitted an application to Ohio EPA pursuant to ORC § 3734.02(G) and OAC rule 3745-50-31 for an exemption from ORC § 3734.02(E)(2). The application is attached and incorporated herein. The application included information justifying the request and documentation that the storage of hazardous waste mercury at the Facility without a hazardous waste installation and operation permit and is unlikely to adversely affect public health or safety or the environment.

10. Respondent will store hazardous waste mercury in 55-gallon drums on Respondent’s outdoor hazardous waste storage pad and continue to comply with all applicable hazardous waste generator requirements for generators of greater than 1000 kilograms in a calendar month (large quantity generator) pursuant to OAC rule 3745-52-34. The hazardous waste storage pad is constructed of fiberglass coated concrete and the seams have been sealed with epoxy to prevent adsorption of any spilled materials. Storm water precipitation is collected in a blind sump and is tested at Respondent’s internal lab for pH and conductivity for proper disposition. Prior to transferring any collected precipitation from the blind sump, Respondent will conduct a visual inspection of containers to ensure no releases have occurred. If Respondent determines a release from a container has occurred, Respondent shall contain and collect the waste under proper hazardous waste spill procedures as referenced in Respondent’s BDM 17.0 Waste Management document attached and incorporated herein to these Orders. Further the Respondent will test the collected waste at the time of release pursuant to OAC rule 3745-52-11 to determine if the precipitation is a hazardous waste. If the water is cleared for recovery, it is pumped to a storm drain which flows to a cooling tower and is reintroduced into the manufacturing process. No water is discharged off-site.

11. On September 12, 2019, Ohio EPA visited the Facility to view the hazardous waste storage pad and discuss the exemption request with Respondent. Ohio EPA observed cracks in the hazardous waste storage pad. OAC rule 3745-55-75 requires the base of a containment system located at a permitted facility to be free of cracks. Ohio EPA recommended Respondent patch and seal the cracks.

12. As of September 12, 2019, Respondent had 35 drums of hazardous waste mercury stored. Respondent generates approximately 8-10 drums of hazardous waste mercury a month and has the capacity to store 112 drums on the hazardous waste storage pad. An additional 80 drums could be stored if pallets are stacked two high. The maximum storage capacity allows for adequate aisle
space to conduct inspections and to maneuver emergency equipment and a tow motor between drums.

13. Due to the recycling facility’s extended outage, a processing backlog is expected. Respondent estimates Respondent may need until March 31, 2020 to transport all accumulated hazardous waste mercury drums off-site.

14. Pursuant to ORC § 3734.02(G) and OAC rule 3745-50-31, the Director has determined that Respondent’s management of hazardous waste mercury at the Facility described in the application from the effective date of these Orders is unlikely to adversely affect public health and safety or the environment so long as it is managed in accordance with these Orders and the application. Furthermore, issuance of these Orders is consistent with the conditions set forth in ORC § 3734.14 which encourages the recovery of resources from hazardous waste.

V. ORDERS

1. Respondent is hereby exempted from the requirement to obtain a hazardous waste installation and operation permit issued in accordance with ORC § 3734.05, as required by ORC § 3734.02(E)(2), provided Respondent complies with the application and the conditions herein, including, but not limited to, the applicable provisions of OAC rule 3745-52-34, except for the accumulation of hazardous waste for 90 days or less. The exemption applies to all 55-gallon drums of hazardous waste mercury stored at the Facility since May 17, 2019.

2. Within 10 days of the effective date of these Orders, Respondent shall repair all cracks in the hazardous waste storage pad described in Finding No. 10. of these Orders.

3. Respondent shall conduct and document inspections of the hazardous waste storage pad twice per week.

4. Respondent shall remove all accumulated liquid from the hazardous waste storage pad within 24 hours, or as soon as practicable, following a precipitation event and follow the procedures described in Finding No. 10. of these Orders.

5. Respondent shall provide a drum count and dates that accumulated liquid has been removed from the hazardous waste storage pad, by electronic correspondence, to Nyall McKenna, Ohio EPA Northeast District Office, Division of Environmental Response and Revitalization at Nyall.McKenna@epa ohio.gov by the end of each week.

6. The Director may revoke the exemption granted in Order No.1. for any reason including, but not limited to, a determination that Respondent’s activities at the
Facility adversely affect public health or safety or the environment and/or the activities are not being conducted in accordance with these Orders and/or the application.

7. The exemption provided by Order No.1 shall terminate when any of the following occurs:
   a. Upon March 31, 2020; or
   b. The Director revokes the exemption granted under these Orders.

8. The issuance of these Orders by the Director does not release Respondent of any liability Respondent may have incurred for any violations which may have occurred at the Facility prior to the effective date of these Orders. The issuance of these Orders does not release Respondent from any obligation Respondent has to comply with the State of Ohio’s environmental laws, or any variance, except as otherwise specifically provided herein.

9. These Orders do not exempt Respondent from any other local, state, or federal laws or regulations which are otherwise applicable.

VI. TERMINATION

Respondent’s obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and Ohio acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: “I certify that the information contained in or accompanying this certification is true, accurate and complete.”

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is a [e.g., corporate officer] who is in charge of a principal business function of the Respondent.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent’s Facility.
VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII. of these orders.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio Environmental Protection Agency
Northeast District Office
Division of Environmental Response and Revitalization
2110 East Aurora Road
Twinsburg, Ohio 44087
Attn: Hazardous Waste Program Manager

and Ohio EPA Central Office at the following address:

For mailings, use the post office box number:

Manager, Hazardous Waste Compliance Assurance Section
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Environmental Response and Revitalization
P.O. Box 1049
Columbus, Ohio 43216-1049

For deliveries to the building:

Manager, Hazardous Waste Compliance Assurance Section
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Environmental Response and Revitalization
50 West Town Street
Columbus, Ohio 43215

or to such persons and addresses as may hereafter be otherwise specified in writing by
XI. MODIFICATIONS

These Orders, including the application, may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be processed by the administrative requirements found in OAC rule 3745-50-51. The effective date of the modifications shall be the date approved by Ohio EPA.

XII. WAIVER

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director’s Journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS ORDERED AND AGREED:

Ohio Environmental Protection Agency

Laurie A. Stevenson
Director
IT IS SO AGREED:

ASHTA Chemicals Inc.

Signature

Richard L. Jackson

Printed or Typed Name

E.V.P. - Operations

Title

Date

10/22/2019
Ms. Laurie A. Stevenson, Director  
Director’s Office  
Ohio EPA  
Lazarus Government Center  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, OH 44030

September 12, 2019

Re: ASHTA Chemicals Inc. Request for Exemption from 90-day Accumulation Rule

Dear Director Stevenson:

Please accept this Application request for Exemption under Ohio Administrative Code ("OAC") rule 3745-50-31 on behalf of ASHTA Chemicals Inc. ("ASHTA") for an extension of time from the 90-day accumulation period under OAC rule 3745-52-34 for certain of ASHTA’s containizered (55 gallon drums) hazardous waste currently stored and staged for removal to a Treatment, Storage and Disposal Facility ("TSDF") for lawful treatment. The location of this waste is at ASHTA’s Ashtabula facility located at 3509 Middle Road, Ashtabula, Ohio ("ASHTA Facility"). Under OAC rule 3745-50-31, the Director may grant an exemption of the 90-day accumulation period, among other requirements. The Exemptions of OAC 3745-50-31, states in pertinent part as follows:

3745-50-31 Exemptions

(A) The director, by order, may exempt any person generating, collecting, storing, treating, disposing of, or transporting hazardous wastes in such quantities or under such circumstances that, in the determination of the director, are unlikely to adversely affect the public health or safety or the environment from ...other requirements of Chapter 3734. of the Revised Code and rules adopted thereunder...

(B) Applications for exemptions shall contain such detail plans, specifications and information regarding objectives, procedures, controls, and other pertinent data as are necessary to satisfactorily demonstrate to the director that the issuance of the exemption will not adversely affect public health or safety or the environment. The director may require such additional information as the director deems necessary.

Application Request – Background for Request

ASHTA requests an exemption of the 90-day accumulation period under OAC rule 3745-52-34 for some containerized hazardous wastes (i.e. drums) generated at the ASHTA Facility. The storage exemption is needed for containerized, mercury containing, KOH filter cake, used carbon/graphite, sump sludges, and miscellaneous debris generated at the ASHTA Facility. These wastes are normally sent for mercury
reclamation at Waste Management (WM Mercury Waste, Inc., E.P.A. ID number WIR 000 000 356) in Union Grove Wisconsin. On July 18, 2019, ASHTA was informed (attached letter – Attachment 1) that due to capital upgrades to the Waste Management facility, their mercury processing operations had been halted and Waste Management cannot accept ASHTA's wastes until the upgrades are complete. This delay is unforeseen, without warning, and beyond ASHTA's control. ASHTA currently has 35 drums impacted by the Exemption Request, and generates approximately 8 – 10 drums per month. We therefore estimate the maximum amount of these drums in storage would be 105 at the end of the exemption, and the pad has sufficient capacity for at least 112 drums of the impacted profiles assuming no pallet stacking. Conservatively, an additional 80 drums of storage would be available if appropriate pallets were stacked two pallets high, but we do not anticipate that this would be necessary.

The list of mercury drums, with accumulation dates are provided in the list below:

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<th>Accumulation Start Date</th>
<th>Drum Number</th>
<th>Waste Type</th>
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<tbody>
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<td>5/21/2019</td>
<td>E066</td>
<td>Carbon/Graphite</td>
</tr>
<tr>
<td>6/11/2019</td>
<td>E120</td>
<td>Filter cake</td>
</tr>
<tr>
<td>6/13/2019</td>
<td>E119</td>
<td>Debris</td>
</tr>
<tr>
<td>6/13/2019</td>
<td>E118</td>
<td>Debris</td>
</tr>
<tr>
<td>6/14/2019</td>
<td>E117</td>
<td>Filter cake</td>
</tr>
<tr>
<td>6/19/2019</td>
<td>E121</td>
<td>Filter cake</td>
</tr>
<tr>
<td>7/1/2019</td>
<td>E122</td>
<td>Filter cake</td>
</tr>
<tr>
<td>8/5/2019</td>
<td>E116</td>
<td>Debris</td>
</tr>
<tr>
<td>8/8/2019</td>
<td>E094</td>
<td>Carbon/Graphite</td>
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</table>
8/8/2019 | E089 | Carbon/Graphite
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8/8/2019 | E090 | Carbon/Graphite
8/8/2019 | E091 | Carbon/Graphite
8/8/2019 | E092 | Carbon/Graphite
8/20/2019 | E114 | Debris
9/16/2019 | E123 | Filter cake

Request for Exemption

On August 05, 2019, ASHTA made request for and received approval from Ohio EPA for a 30-day extension (ending September 14, 2019) for the storage of these waste drums. The Waste Management TSD facility indicates their estimated schedule to be back online for waste acceptance is the end of 2019. ASHTA will then work expeditiously to ship the accumulated drums, shipping the oldest drums first to Waste Management. ASHTA does anticipate a slight start-up delay in shipping the ASHTA drums due to Waste Management’s extended outage and the backlog of waste from ASHTA and Waste Management’s other customers. Therefore, ASHTA wishes to request an exemption from the 90-day storage limit until Waste Management’s facility is able to resume processing the ASHTA’s mercury containing waste. Based on information provided to ASHTA by the Waste Management facility, ASHTA’s best estimate is that timing of the exemption from the requirements for accumulation time of hazardous waste should extend through March 31, 2020.

ASHTA has evaluated other management options for disposal and treatment, but have not identified any TSD that will recover and return the reclaimed mercury to the ASHTA Facility. Historically, ASHTA requires that its mercury waste be reclaimed so that reclaimed mercury is set back to ASHTA which minimizing mercury to the environment and waste stream. As Ohio EPA is aware, ASHTA needs the reclaimed mercury to maintain the required levels in its process without adding additional new (virgin) mercury or putting additional mercury waste to the environment, and thus no waste treatment and disposal alternatives are viable. Further, ASHTA believes additional transportation and temporary storage to another facility would not make sense, and only create more risk to the environment.

ASHTA has the benefit of sufficient space available for secure storage, trained employees on site at all times capable of securing and properly managing stored mercury waste, and more importantly trained to immediately respond to any hazardous material spill. Additionally, the necessary secondary containment systems for the storage, staging, collection and recovery of any spilled waste, if such accident should occur are already in place. (See Attachment 2 for Photos of the storage area). The structure is constructed of concrete coated with fiberglass to prevent adsorption of any spilled materials. Seams are sealed with epoxy resin and are regularly maintained.

ASHTA will continue to comply with the applicable Generator Standards listed at OAC rule 3745-52 with the exception of 3745-52-34, Accumulation time of hazardous waste for only the profiles mentioned above. All other waste profiles will be managed in full compliance with all applicable Generator Standards.
This exemption is not likely to adversely affect the public health or safety or the environment. These profiles are each highly stable—they are not corrosive or aggressive to the drums. This material stored on ASHTA's containment pad, which is designed to contain wastes from our site prior to disposal. In the unlikely event of a spill, the material would be localized and easily contained. A spill kit is maintained nearby, and formal weekly inspections are performed. The pad is centrally located on ASHTA's property, which is manned 24 hours a day, 7 days a week. The ASHTA Facility is fenced on all sides and access is limited to authorized personnel, only.

Please do not hesitate to contact me with questions or additional information at (440) 997-5221 x263.

Sincerely,

Richard Jackson
E.V.P., Operations

CC:
Ms. Melissa Witherspoon, Division Chief
Environmental Response and Revitalization
Ohio EPA
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 44030

Ms. Natalie Oryshkewych, Environmental Manager
Ohio EPA
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Attachments:

1: Waste Management July 18, 2019 - Notice of Suspended Operations for Capital Improvements Letter
2: ASHTA Chemicals’ 90 Day Accumulation Storage Area Photos
July 18, 2019

Dear Valued Customer,

We would like to take this opportunity to give you an update on our ongoing process improvements for the WM Mercury Waste facility. Over the past few months, Waste Management has initiated capital upgrades to improve the facility’s processes, equipment and operational capabilities. Due to the complexity of our operations these upgrades have, and will, take time to implement to our satisfaction. Many of our mercury processing operations have been halted due to these complexities. We are asking for your continued patience and understanding through this process. We are forecasting to be back to full operational capacity by the fourth quarter of this year. If we can resume regular operations sooner, we will communicate that promptly.

We apologize for any inconvenience this may cause your company. We thank you for your business and ask for your patience and support as we continue to improve our operations to best serve your disposal needs.

Thank you for being a WM Mercury Waste Customer.

Sincerely,

John Kendall

Senior Manager Operations
17.01 PURPOSE

The purpose of the section of the ASTHA Business Discipline Manual is to:

- Identify the various waste streams routinely generated at ASHTA and provide the appropriate waste classification to each stream.
- Establish procedure to ensure that ASHTA’s waste are handled in a manner that protects ASHTA’s employees and the environment.
- Identify parties responsible for managing the wastes: handling, storage, shipping, record keeping, invoice approval, and auditing of ASHTA’s waste management practices.
- Provide instruction to respond and make sure waste management activities are in compliance with the US Environmental Protection Agency’s (EPA) Resource Conservation and Recovery Act (RCRA) regulations.

17.02 SCOPE

The purpose of this procedure is applicable to all waste generated from activities at the ASHTA manufacturing facility in Ashtabula, Ohio – both hazardous and non-hazardous.

Additional Environmental Management procedures (15.0 and 15.1) can also be found at H:\BusDisManual\BDMAUAL\Level II.

17.03 PROCEDURE

17.03.1 WASTE IDENTIFICATION

17.03.1.1 Hazardous Waste

Two specific plant processes generate mercury-contaminated hazardous waste. These wastes are considered ‘Listed Waste’ and have specific EPA Identification numbers.

- **K071 Wastes** are brine purification mds generated from chlor-alkali brine treatment process. These wastes are accumulated in an identified, covered roll-off outside the north end of the main plant. Used filters soaked from the brine filters are also placed in this container. This classification of waste is shipped to a EPA regulated off-site hazardous waste disposal facility which is permitted to receive mercury containing waste for stabilization and landfilling.

- **K106 Wastes** consist of wastewater treatment sludge generated from the precipitant in the process water settler. There are two Shriver filter presses within the system that generate muds. These waste are also accumulated in an identified, covered roll-off outside the north end of the main plant, just north of the K071 roll-off. ASHTA routinely monitors the mercury concentration levels from each filter press. If the average mercury concentration of the roll-off is kept below 260 ppm the waste is shipped to a permitted off-site hazardous waste...
disposal facility for stabilization and then placed in a landfill. If the average mercury concentration of a roll-off is above 260 ppm the waste must be shipped to Canada for disposal at a much higher costs and risk.

Other mercury contaminated waste are characterized as 'toxic' wastes when a sample of the waste that is analyzed by the Toxic Characteristic Leaching Procedure (TCLP) test produces a result that meets or exceeds 0.2 ppm mercury. These waste are classified by EPA Code D009. ASHTA further separates D009 waste into low mercury concentration and high mercury concentration:

- **Low Mercury Concentration D009 Solid Waste (less than 260 ppm, and no visible mercury)** are typically demolition materials such as concrete, piping, cell construction materials, excavation soils, etc. These wastes are normally accumulated in bulk in an identified, covered roll-off northeast of the main plant. This classification of waste is shipped to a permitted off-site hazardous waste disposal facility for stabilization and then placed in a landfill.

- **High Mercury Concentration D009 Solid Waste (greater than 260 ppm, and/or have visible mercury)** generally includes the solids collected from the liquid caustic potash filters, spent graphite from cell decomposers, sludge from the floor drain sumps and other material that has significant mercury contamination. This classification of waste is sent to an off-site mercury recovery facility, where the mercury in the waste is reclaimed through a retorting process and shipped back to ASHTA. The ash from the retort operation is landfilled.

**Miscellaneous Waters** that cannot be recovered on-site and require disposal are occasionally generated from the plant water recovery system (PWRS) and/or clean out of site storage tank and vessels, or other site activities. This water should be collected in drums, totes, or other portable containers. In case of a tank cleanout, the water may also be retained in the tank until transferred to a truck for off-site shipment. The water cannot be transferred to another tank for holding, since ASHTA currently has no hazardous waste storage tanks on-site. Samples will be collected from these waters and submitted to ASHTA’s internal laboratory or to an off-site laboratory for analysis of the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), pH and any other potential compounds of concern, as determined by the Environmental Department. Sample analysis will be performed in accordance with methods included in the EPA publication SW-846, entitled “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.” Refer to ENV-19, Material Disposition, for further details.

**Recovery Materials** are also generated on-site at ASHTA. The most common is mop water from janitorial floor cleaning activities from plant offices, locker rooms, the plant lunchroom and Laboratory. Tests have demonstrated this water contains low-level concentrations of mercury, yet is deemed hazardous by regulation. Once the satellite storage drums where this water is collected are full, they are recovered back to the Plant Water Recovery System. For other materials refer to ENV-19, Material Disposition to ensure proper recovery.
Chloropicrin Drier Sludge (spent drier media/desiccant) is considered a hazardous waste with EPA Code of D001 because it contains a ‘reactive’ oxidizer received from the potassium bleach that is one of the raw materials used to make chloropicrin. This waste is disposed of at an off-site hazardous waste incinerator that is permitted to accept the waste.

Chloropicrin Overflow Sludge waste is generated in the chloropicrin storage tanks. The tanks are overflowed to remove the sludge, which is lighter than the chloropicrin and floats at the top of the tanks. This material is classified as a hazardous waste with EPA Code D002 due to the presence of pH above 12.5 classifying the material as “corrosive”. This waste is shipped to an off-site hazardous waste incinerator that is permitted to accept the waste.

Spent Activated Carbon Drums (vent drums) EPA Code of D001 and Used Chloropicrin Filters (clean-up) EPA Code of D009, are both hazardous wastes that are generated from the chloropicrin process. These wastes are shipped to an off-site hazardous waste incinerator that is permitted to accept the waste.

Over pack containers should be used for Chloropicrin Overflow Sludge drums due to concerns with chloropicrin vapors.

Plant product quality analysis also generate another characteristic ‘toxic’ hazardous waste.

Barium EPA Code D005, contaminated wastes generated from tests performed to determine the amount of KOH in Potassium Carbonate. These tests are conducted both at the Process Operator’s bench and in the ASTHA laboratory. This waste is shipped off-site as hazardous waste for stabilization.

The parts cleaner in the maintenance shop also produces a characteristic ‘ignitable’ hazardous waste.

Spent Degreaser Solvent has a flashpoint of less than 60°C and therefore exhibits the characteristic of ignitability. The characteristics of hazardous waste (ignitability, corrosivity, reactivity, and toxicity) are described in the Federal environmental regulations under 40 CFR 261.20 through 40 CFR 261.24.

Any other waste materials suspected to being a hazardous waste should be brought to the attention of ASHTA’s Environmental group and then sampled and tested in the ASTHA laboratory, or an outside laboratory, if necessary. Examples of material that should be tested for characterization before disposal include, but are not limited to: used degreaser solvent from the parts washer; grit from the grit blaster; used oil that may be contaminated with halogenated compounds; and spent acid, caustic, or solvent cleaning solutions.

Note: It is always appropriate to collect a sample of any unknown waste and inform the Environmental group to ensure proper collection, handling, and disposal of the waste. Refer to ENV-19, Material Disposition to ensure proper disposition and or recovery of
any materials generate or found on-site. Refer to ENV-08, Satellite Accumulation Areas for storage locations on-site.

17.03.1.2 Universal Waste and Electronic Waste

Universal wastes are items which contain hazardous constituents, but when handled correctly can be recycled and are exempt from hazardous waste regulations. These include mercury containing thermostats, fluorescent lamps, unused pesticides and spent batteries. Electronic wastes are electrical equipment that is outdated or obsolete which contains hazardous materials.

To manage Universal and Electronic Waste in accordance with applicable requirements reference ENV-10, Universal and Electronic Wastes.

17.03.1.3 Non-Hazardous Waste

Non-hazardous wastes are other materials generated in the process or at the site that also require similar handling, storage, and disposal but are not listed as hazardous in the Federal Regulations.

Used Oils are non-hazardous waste as long as they do not contain more than 1,000 parts per million of Total Halogen or other constituents. If it is suspected that used oil has come into contact with halogenated materials, sampling is required to verify that the used oil meets this requirement. For further instructions of storage and handling of new and used oil as well as contaminated debris reference ENV-11, Used Oil Management.

ASHTA is committed to sustainable business practices that promote environmental health. ASHTA promotes recycling, re-use, and wise use where applicable. Some common non-hazardous waste generate on-site are listed below.

- Scrap Metal from demolition projects, steel drums that were cleaned and purged of their contents and scrap steel articles.
- Empty Nitromethane Drums are collected for a drum reconditioning company.
- Plant trash (non-metallic) includes cardboard, wood, non-metal objects, emptied non usable plastic drums, etc.


17.03.2 WASTE CONTAINER STORING/FILLING

ASHTA uses a variety of containers for waste collection, primarily roll-offs and drums. Roll-offs for hazardous waste are rented from an off-site company and generally have a capacity of 20-cubic yards for (D009, K106, K071). Various different sized roll-offs and dumpsters are used for plant trash and scrap steel. They are provided by the disposal/recycling facility.

ASHTA purchases new recycled containers from an outside vendor that will be designated for onsite materials and wastes. Refer to procedure ENV-33, Container Receiving and Handling, to ensure all containers will be properly tracked and inspected before and after use.
All containers of hazardous wastes must be kept closed at all times except when adding or removing material. This applies to both regular and bulk containers (drums, hoppers, totes and roll-offs). Drums must have lids on with rings and bungs, if present, securely in place. Hoppers and roll-offs must be closed with fitted tarp covers, or equivalent. Totes shall have screwed caps in place and tightened.

Those containers of hazardous wastes stored on the Hazardous Waste Storage a Pad (drums and totes), must be labeled with the containers contents, the date when it was filled and what type of waste it is. The containers must be placed on pallets to allow inspection for leaks.

All wastes on the Hazardous Waste Storage Pad must be segregated by type, and pallet rows must be arranged so that the drums and labeling can be inspected from two sides of each pallet.

Incompatible wastes shall be segregated during storage.

Occasionally, a drum selected for holding wastes will develop a leak, or damaged to a point where it is no longer in a condition acceptable for shipment. In the event, the contents will be transferred to a drum in good condition or the leaking drum will be placed in secondary containment ‘overpack’ drums. Overpack containers are not intended to accept wastes directly. Overpacks are also Storeroom items and Stores withdrawals must be made for the containers used.

17.03.3 WASTE STORAGE COMPLIANCE

The areas where hazardous and non-hazardous waste containers are stored will be inspected at least weekly to inventory the wastes and to ensure that containers are covered, in good condition with no leaks, and properly labeled. The accumulation dates will also be reviewed and waste shipments scheduled, as necessary, to ensure that no hazardous wastes are stored on site for more than 90 days and no universal wastes are stored for more than one year. The weekly inspections are set up as a Planned Maintenance (PM) task to be performed by the Environmental Department. Refer to ENV-01, Environmental Compliance Inspections, for more information. Any minor findings from the inspection (e.g., improper labeling, loose bungs, etc.) will be corrected immediately by the individual performing the inspection. If more serious findings requiring corrective action (e.g., bulging corroded, leaking container) are identified, a high priority work order will be written to ensure that the condition is corrected quickly to prevent or minimize releases to the environment.

17.03.4 MANIFESTS

All hazardous waste shipments will be accompanied by a waste manifest. Copies of manifests for shipped wastes will be maintained for at least three years. The treatment, storage or disposal facility (TSDF) is required to return copies of the manifest signed by a facility representative to verify that the waste was received. ASHTA will maintain a manifest log located at H:\Environment\Waste\Manifest Log, to track waste shipments and return of signed manifests. During the weekly inspection, the manifest log will be reviewed to determine if any manifests have not been returned by the TSDF within 35 days after shipment. If so, ASHTA will contact the transporter or TSDF to determine the status of the waste. If a manifest signed by the TSDF is
not received within 45 days of shipment, an Exception Report will be generated and submitted to the EPA Regional Administrator.

Note: As of June 30, 2018 EPA launched the e-Manifest program. Beginning on June 30, 2018, generators, transports, and receiving facilities have the option for using electronic manifest. EPA launched E-Manifest, which is a national system for tracking hazardous waste shipments electronically. This system will modernize the nation’s cradle-to-grave hazardous waste tracking process while saving valuable time and resources.

17.03.5 SPILL RESPONSE

Should a chemical or waste spill occur at any time, it is the responsibility of the Shift Lead and/or Plant Manager/Duty Manager to see that cleanup is carried out in an expeditious manner. Minor spills that may occur when overfilling a small container should be cleaned up by the designated individual within the department who has had the appropriate training. The source of the spill must be identified and isolated in an expeditious manner. HAZWOPER trained response personnel must adhere to the PPE matrices found in the maintenance office, ASHTA-U and attached to the SWPPP. A more sizable spill must be contained immediately through the use of containment booms. Spill materials are kept outside the plant store room located in the north end of Building 01. There are also four spill kits in various locations on-site. If contract assistance is required for the cleanup of a spill, contact Enviroserve (Phone Number 216-642-1311). For more details refer to BDM 11.0, Emergency Control Plan and Response Guide Lines, section 11.10.5 to ensure all emergency contacts and appropriate agencies are notified within 30 minutes of the spill discovery.

17.04 RESPONSIBILITY FOR ADMINISTRATION

All personnel involved in the generation, handling, shipping and management of hazardous wastes shall be responsible for complying with this procedure to the best of their ability and to the extent they are trained.

The Environmental Department is responsible for the administration of this procedure.

17.05 AUDIT RESPONSIBILITIES

It is the responsibility of the Environmental Department and Quality Supervisor to conduct an audit of this procedure as needed.

17.06 DISTRIBUTION

This section of the BD Manual is made available to all employees electronically as a read only document. Any proposed changes to this procedure will be made and maintained in accordance with procedure Level II BDM Procedure 8.0 (Documentation Control).