11/1/2011

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

I. AFFIDAVIT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Joseph J. Weishar, Vice-President of Operations

11/1/2011
Date

BUILDING & PROCESS ENGINEERING, INC.

739 Cricket Lane, Middleton WI 53562
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I. AFFIDAVIT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

James R. Brachtl, P.E.

WISCONSIN JAMES R. BRACHTL No. 39541 MIDDLETON WI PROFESSIONAL ENGINEER

11-04-2011
Date

FEASIBILITY PLAN OF OPERATION

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PART 1 - GENERAL REQUIREMENTS

SECTION A. GENERAL REQUIREMENTS NR 670.010 TO NR 670.014

A.1 NR 670.010(1). Two hard copies of the license application have been submitted.

A.2. NR 670.010(12). The Plan Review and License Fee of $10,400 has been submitted.

A.3. NR 670.011(4). The Feasibility and Plan of Operation Report has been signed by Joseph Weishar, Vice President of Operations.

A.4. NR 670.011(4). The required signature by a responsible corporate officer, includes the certification statement found in NR 670.011(4).

A.5. NR 670.012 The Facility will not be claiming any information as confidential, therefore this section does not apply.

A.6. NR 670.014(20(v). The Facility held a public pre-applications meeting on November 4, 2011. A list of the attendees/addresses and copies of written comments and materials submitted during the meeting are located in **Appendix A.**

A.7. NR 670.014(2)(w). The Waste Facility Siting Board information is located in **Appendix A.** There were no local compliance requirements submitted to be met.

A.8. NR 670.013. The Part A Application is located **in Appendix A.**

A.9. NR 670.014(1). Technical data, such as design drawings and specifications, were reviewed and certified by James R. Brachtl, a Wisconsin registered Professional Engineer. The certification is located in **Appendix A.**

A.10. NR 670.014(2)(a). Hydrite Chemical Co.(Hydrite or Facility), located at 114 North Main Street in Cottage Grove, WI, is involved in the reclamation of non-chlorinated hydrocarbon solvents. It has been assigned the U.S. EPA number of WID000808824. The storage of hazardous waste at this site is subject to NR 664 and NR 670.

This facility is not establishing, constructing, or expanding its hazardous waste storage. Notification to the Department will be made on any changes in the location of hazardous waste storage as required in NR 670.013 – .014, NR 670.016.

The Facility's hazardous waste recycling facility meets the definition of legitimate recovery or reclamation. The recycling process is exempt from regulation except for the requirements found in subchapters AA, BB and CC and NR 664.

Legitimate recovery or reclamation is conducted using: (a) thin-film evaporators' (b) distillation columns; and (c) fuels blending. Fuel blending is a licensed hazardous waste management activity.

Recyclable materials are stored in containers and in bulk before they are recycled. The Facility's storage includes ten storage tanks with 66500 gallon capacity, two fuel blending tanks with 39,500 gallon capacity and container storage for 2000 drums or 110,000 gallon capacity.

The two fuel blending tanks are limited to 90 days, as the Facility's Large Quantity Generator waste is also commingled and stored in these tanks.

The Facility also maintains licenses for processing non-hazardous waste; Solid Waste Storage – Container No. 3774 and Solid Waste Processing Facility No. 3775. The procedures followed mirror the applicable requirements of the hazardous waste storage licenses. The non-hazardous waste is received into the Facility in containers and processed in a distillation column. Copies of the licenses are located in **Appendix Y.**

A.11. NR 670.014(2)(h)1. Descriptions of procedures, structures or equipment used to prevent hazardous in unloading operations.

Hazardous waste is received in containers and by tanker truckloads. In order to properly manage the process of unloading bulk products from transport tank trucks in a manner that ensures compliance with all quality, safety and regulatory requirements, a Tank Truck Bulk Unloading SOP is followed. This document is located in **Appendix S.** Loading and unloading is performed in accordance with DOT requirements. Tankers are visually monitored by trained operators during loading and unloading to prevent spills or accidents. Connections and disconnections are made only by trained personnel. Bonding and grounding procedures are followed. The wheels on trailers are chocked during loading and unloading procedures. Drums are handled with powered industrial trucks which are operated only by trained and licensed drivers. All loading and unloading activities are performed in containment.

A.12. NR 670.014(2)(h)2. Description of procedures, structures or equipment used to prevent runoff from hazardous waste handling areas or to prevent flooding.

Containers of waste are off-loaded from trailers into an enclosed warehouse. The container storage is in an enclosed warehouse, and not subject to run on or run off. The Tank storage is in a diked tank farm. The diking controls run on. The dikes are so constructed as to contain the anticipated collection from a 24-hour, 25-year storm. All

waste handling activities are done in containment. Diagrams of the container storage areas and tank farms can be found in **Appendix J.** Additional information is also provided in the Storm Water Pollution Prevention Plan found in **Appendix I.**

A.13. NR 670.014(2)(h)3. Description of procedures, structures, or equipment used to prevent contamination of water supplies.

The facility is not operated in a manner in which the management of hazardous waste will have a reasonable probability of having a detrimental effect on groundwater quality or will cause a violation of groundwater standards. Waste recycling process equipment is located inside a building and the fuel blending tanks are in containment structures. Container storage is also located inside building structures with containment. Storage tanks are located in diked storage areas which are equipped with adequate containment. Containment structures are maintained to prevent waste materials to migrate to the environment.

The Facility will not be operated in a manner allowing surface or subsurface discharge from the facility to navigable waters to cause a violation of water quality standards. Diking, performing waste activities within containment, and other procedures have been implemented to provide contamination prevention. The facility is a Tier 2 Industrial Facility. Stormwater can be discharged from the facility under a stormwater permit, No. WI-S067857-3. A copy of this permit is located in **Appendix Y.** Process wastewater is not discharged to the waters of the State, but shipped off-site to treatment facilities. Runoff which could be generated in the event of an emergency (e.g. fire fighting) would be contained on site and disposed of properly.

A.14. NR 670.014(2)(h)4. Description of procedures, structures or equipment used to mitigate effects of equipment failure or power outages.

In the event of equipment failure due to power outages, a Power Failure Checklist is followed to mitigate the effects of such an event. A copy of the Power Failure Checklist is found in **Appendix E.**

The transfer pumps used to unload tankers to storage tanks are electric and they will fail during a power outage. No liquid can back flow from the tank because the fill line has a check valve at the tank. Since the tanker and the tank are not pressurized, the lines will be in a stable quiescent state until the power is restored and the pumps are restarted.

The transfer pumps used to feed from the storage tanks to the process equipment, are electric and they will fail during a power outage. The flow to the equipment cannot proceed without the pump and the lines will be in a static quiescent state until the power is restored and the pumps are restarted.

The high level switches on the storage tanks have a signal which requires power from the Control Room. During a power failure, the high level switches on the storage tanks do not function nor do the level transmitters. However, since the transfer pumps are electrical, and will reach a static quiescent state, there will not be more material flowing into the storage tanks, should a power failure occur. When power is restored, the pumps will not start until the magnetic starter switch is activated by an operator. The magnetic starter switch will not be activated, until the control systems are fully operational.

All transfer and process equipment is in containment. Therefore an equipment failure or power outage would not have a deleterious impact on the environment, even if there was a release of material because of the adequate containment.

A.15. NR 670.014(2)(h)5. Description of procedures, structures or equipment used to prevent exposure of personnel.

Hydrite uses a three tiered approach to prevent exposure of their personnel.

The first tier is through engineering controls. Exposure hazards are engineered out with equipment such as, but not limited to, closed sampling ports, ventilation systems and high level alarms.

The second tier is through administrative controls. Hydrite supplies their personnel with Standard Operating Procedures for tasks including, but not limited to, Recycle Process SOP, Load/Unload Checklist, and Hose Connect/Disconnect SOP. A procedure such as the Luwa 1 Recycle SOP for processing hazardous waste, includes steps instructing personnel to cap lines, close valves and have a second operator check lines for routing. The contingency plans include response to hazardous waste releases and how to avoid exposure. Training is also provided for implementing these procedures.

The third tier is to provide Personal Protective Equipment and train the personnel how to properly use and maintain it. PPE that is issued to personnel may include safety glasses (including prescription), chemical goggles, air purifying and supplied air respirators with spare cartridges, gloves, steel-toed safety shoes and flame retardant uniforms. Process SOPs instruct employees when and what PPE they have to wear for specific tasks. Hazwoper training for responding to emergencies involving hazardous waste is a training requirement for operators. This level of training includes the use of Level D PPE. A uniform service is provided by the company, so that personal street clothes are not worn.

To assure that employees are not being overexposed to any organic solvent while working, the following programs have been set up to monitor environmental and

biological exposures. This is accomplished by knowledge of the constituents of the materials that are handled and the appropriate PPE for those chemicals.

Air samples are collected using passive samplers (similar to or equal to 3M Organic Vapor Monitoring Badges) or with active samplers (i.e. colorimetric/length of stain pull tubs or High/Low flow Sampling Pumps using absorbent tubes or other sampling media). Sampling is done in accordance with NIOSH, OSHA or other acceptable methods.

Hydrite Chemical Co. further ensures protection of employees by implementing a Respiratory Protection Program, conducting Process Safety Management Hazard Assessments (HAZOPs), Hazard Communication Training and by following our Process Safety Management Standard Operating Procedures. Copies of the current editions of the PPE, Respiratory Protection and PSM SOPs can be found in **Appendix N.**

A.16. NR 670.014(2)(h)6. Description of procedures, structures or equipment used to prevent releases to the atmosphere.

In order to prevent releases from hazardous waste storage tanks, the waste tanks are equipped with a high level switch that is activated by a float when the level in the tank approaches the full position. The float activates a magnetic switch which signals the computer, which activates both visual and audible alarms. Once the alarm sounds, there is sufficient capacity left in the tank, so the operator has time to shut the pump down before the tank would overflow. Material will not back flow, because the tank is filled through a check valve arrangement.

The Checklists and SOPs used for transferring and processing hazardous waste and hazardous substances, include steps which prevent the release of vapors to the atmosphere. These steps include, but are not limited to, "Relieve pressure from tanker to carbon drum prior to opening dome," "Receiving tank or process capacity was verified and will hold the amount to be transferred. Vessel capacity _____ lbs/gallons," "Check that the North Scrubber and Thermal Oxidizer are engaged and operational. " An example of the Luwa I Recycle SOP can be found in **Appendix S.**

Waste processes and storage tanks have vapors routed to a thermal oxidizer. Storage drums have carbon drums attached to capture vapors. Tanks, piping and containers are inspected daily for signs of erosion or deterioration.

A.17. NR 670.014(2)(j). Traffic patterns, estimated traffic volume, traffic control, access road surfacing and load bearing capacity.

A. Traffic Patterns

Access to Hydrite Chemical Co. is from Interstate 94 to County "N" south or from Interstate 90 to County "N" north. The distance from Interstate 94 on County "N" to the Facility is approximately 2-1/2 miles. The distance from Interstate 90 on County "N" is approximately 5 miles. County "N" is also called Main Street within the Town of Cottage Grove. The onsite traffic pattern forms a loop around the plant. The truck entrance accesses the Facility on the north side and circles around the plant with exit South of the Facility or at the same point of entrance. Most cars are confined to parking areas in non-traffic areas. About ten semi-trailers enter the plant each day. Within the plant, traffic vehicles consist mostly of forklifts.

On site traffic patterns are depicted in **Appendix U.**

B. Traffic Control

Traffic is controlled by one-way direction around the plant. The access roadway is a two-way road. A stop sign halts traffic prior to entering County "N" from the access roadway.

C. Access Road Surfacing

Access to plant is from County "N" which is a Class "A" road, with an HS-20 rating. This is the same rating as Interstate 94. County "N" is constructed with blacktop and concrete.

D. Load-bearing Capacity

County "N" is rated as a HS-20 Class "A", which is capable of handling trucks up to 20,000 lbs/axle. The plant is serviced by 18-wheel, 5-axle tractor-trailers with a maximum load of approximately 75,000 lbs. or 15,000 lbs/axle.

E. Traffic Control Signals

There are no traffic lights located at the Facility.

A.18. NR 670.014(2)(b). Chemical and physical analyses of the hazardous waste and debris to be handled at the facility.

Hydrites waste business is the storage and reclamation of solvent as described by U.S. EPA Hazardous Waste Code Numbers D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D028, D029, D035, D036, D038, D039, D040, D043, F003, F005, U002, U003, U019, U031, U057, U088, U112, U140, U154, U159, U161, U213, U220, U239.

The waste received into the Facility is primarily liquid solvents with the following characteristics:

Specific Gravity:	0.7 – 1.6
Flashpoint:	<140F
pH:	5.0 – 8.0
Vapor Pressure:	nil – 5.5 PSIA

All waste is analyzed prior to approval and upon receipt at the Facility. Examples of Analyses reports can be found in **Appendix D.**

A.19. NR 670.014(2)(b). Chemical and physical analyses contains all information that must be known to treat, store or dispose of the waste according to NR 664 requirements. The hazardous waste will be reclaimed or fuel-blended based on the following chemical and physical properties:

(A) Thin film evaporation, separates liquid from solids, and liquids from liquids, by use of boiling points and flash distillation.

(B) Fractional distillation is the finer separation of liquids from liquids by boiling points.

(C) Fuels blending, where wastes of sufficient BTU values are blended for energy. Other characteristics to be considered are chloride content, pH and suspended or settled solids.

NR 664.0013(1)(a). Before a waste stream is accepted for reclamation, a Waste Profile form is submitted by the Generator, accompanied by a representative preshipment, aka "Sales" sample of the waste. A Material Safety Data Sheet can be submitted in lieu of a sample if the waste is virgin material. The samples are analyzed by Facility personnel in an on-site laboratory.

The Waste Profile form is located in **Appendix C.**

An example of a preshipment, aka "Sales" analysis is located in **Appendix D.**

NR 664.0013(1)(a)(1). The laboratory is registered under NR 149.

A copy of the Lab Registration in found in **Appendix D.**

NR 664.0013(1(b). The Waste Profile form requires information regarding the process generating the waste. A copy of the Waste Profile Packet is located in **Appendix C.**

NR 664.0013(1)(c). The initial and all subsequent waste shipments are sampled upon receipt at the Facility.

NR 664.0013(1)(d). When a waste stream is accepted for reclamation, a Lab SOP is written for that stream detailing the chemical and physical characteristics. Each shipment of the waste stream is analyzed and compared to the SOP to ensure it matches the identity of the approved waste stream specified on the accompanying manifest or shipping document. An example of a lab SOP can be reviewed in **Appendix D.**

NR 664.0013(2). The Waste Analysis Plan is located in **Appendix D.**

NR 664.0013(3). The Waste Analysis Plan also specifies procedures and sampling methods for analyzing hazardous waste that will be fuel-blended and shipped to an off-site facility. The Facility does not ship containerized nor bulk waste to an off-site landfill.

NR 664.012. Occasionally, hazardous waste may be received from a foreign source. As required, Hydrite Chemical Co. will notify the WDNR at least four weeks prior to receiving a shipment. A copy of the only required notice to date, can be found in **Appendix B.**

A.20. NR 670.014(2)(f). Request Waiver for Preparedness and Prevention Requirements

No request for a waiver of the preparedness and prevention requirements of subch. C of ch. NR 664 is being made.

A.21. NR 670.014(2)(i). General requirements for ignitable, reactive or incompatible wastes, per compliance with **NR 664.0017.**

Reactive and incompatible wastes are not received at this Facility. These wastes are not approved nor accepted for reclamation or fuels-blending. **NR 664.0017(2)**

The Facility receives ignitable wastes. Precautions are taken to prevent accidental ignition. **NR 664.0017(2).**

1. Open flames are not permitted in areas where ignitable wastes are handled. To prevent sources of external ignition, explosion proof electrical equipment is used in flammable storage and process areas.

2. Precautions taken in the container storage area to prevent accidental fire and explosion include proper storage of containers (e.g. stacking, aisle space, and labeling and sealing of containers), dikes, sump areas, and appropriate warning signs.

Containers are never stacked more than three containers high. The top tier is banded. Sufficient aisle space is maintained to allow for inspection and emergency response.

3. Standard Operating Procedures for work in areas involving hazardous wastes have been developed, as well as procedures for controlling ignition sources.

A.22 NR 664.0017(1). Ignitable waste is separated and protected from sources of ignition.

Compliance with this requirement is demonstrated through the current edition of the SOPs, which include, but are not limited to, "Flammable and Combustible Liquids Safety," "Fire Prevention/Protection Plan," "Grounding and Bonding," and "Hot Work Permits."

A.23. NR 664.0017(1). Smoking and open flame are confined to specially designated locations when handling ignitable waste.

Open flames are not permitted in areas where ignitable wastes are handled or stored.

Effective July 1, 2012, Smoking and use of tobacco products, are not permitted on Hydrite property per Standard Operating Policy SF024AF, "General Safety Rules."

A.24. NR 664.0017(1). "No Smoking" signs are conspicuously placed where there is a hazard from ignitable waste.

Signs prohibiting smoking, i.e., "NO SMOKING", are posted in production, storage and warehouse areas and are posted at all entrances into the Facility.

A.25.NR 664.0017(3). Documentation demonstrating compliance with A.22 – A.24.

No incompatible wastes are received at this location.

Examples of referenced SOPs can be found in **Appendix H.**

SECTION B. NONCOMPLIANCE WITH PLANS OR ORDERS NR 670.014(2)(x)1.

B.1 NR 670.014(2)(x)1.a. Identification of all persons owning ≥10% legal or equitable interest in the applicant or their assets.

John Honkamp	10.6%
Paul Honkamp	10.1%
Mike Honkamp	10.7%

B.2. NR 670.014(2)(s)1.b. There is no known WI solid or hazardous waste facilities for which Hydrite Chemical or other identified persons are named in or subject to a department order or plan approval.

B.3. NR 670.014(2)(x)1.c. There is no other known WI solid or hazardous waste facilities for which Hydrite Chemical or other identified persons own or previously owned ≥ 10% interest in the assets.

B.4. NR 670.014(2)(x)1.d. There is no known noncompliance with any waste facility plan or order issued by the State to Hydrite or its owners.

SECTION C. ENVIRONMENTAL IMPACT REVIEW NR 670.014(2)(x)2.

C.1. NR 670.014(2)(x)2.a.

Hydrite Chemical Co. in Cottage Grove, WI, manufactures chemical products and stores, transfers and recycles hazardous waste. Hydrite also has a license to fuel-blend. Hazardous waste generated on-site from chemical manufacturing operations is stored in tanks or containers until it is shipped off-site for disposal. Hazardous waste received from off-site is tested and is stored on-site until it is processed or fuel-blended, or sent to another off-site facility.

The Department issued Hydrites initial hazardous waste facility operating license on April 1, 1989. The license was re-issued with an effective date of May 7, 2002, for storage of up to a maximum of 231,000 gallons of hazardous waste in containers and 66,500 gallons of hazardous waste in ten designated above ground storage tanks.

In 2009, Hydrite expanded their warehouse to accommodate a newly acquired manufacturing process. To allow for more efficient movement of wastes and products through their plant, Hydrite proposed moving a licensed container storage area into an adjoining warehouse named CE100. The maximum amount of container storage remained at 231,000 gallons.

The purpose of the Feasibility and Plan of Operation Report is to renew its license to store, transfer and recycle hazardous waste. The maximum amount of container storage is being reduced to 110,000 gallons.

C.2. – C.7. NR 670.014(2)(x)2.b.

a. Hydrite is not proposing any physical changes to the Facility in conjunction with the Permit renewal.

    1) Therefore, terrestrial resources, such as soil placement, construction of roads, surface water drainage and sedimentation controls will not be affected.
    2) There will also be no impact to aquatic resources, such as impacts to streams, wetlands or other water bodies.
    3) There will not be any new construction of buildings, roads, treatment units or other structures.
    4) There will be no emissions and discharges such as dust, odors, gases, leachate, and surface water runoff associated with facility preparation, construction, operation, and closure.

5) There are no other changes anticipated with facility development.
6) Hydrite is not proposing any physical changes to the Facility in conjunction with the Permit renewal, therefore, this is not applicable.

C.8.- C.12. NR 670.014(2)(x)2.c. A description of the existing environment that may be affected, by a Permit renewal includes;

1) The topography of the property is flat, while the surrounding area is characterized by numerous long ridges or oval shaped hills (drumlins) aligned in a northeast-southeast orientation. Between the hills are slightly concave lowlands, often poorly drained, and occupied by marshes and wetlands.

   The surface water flows primarily to a drainage ditch located on the eastern side of the large hill southeast of the facility. Water flows into the ditch from a drainage tile system; water in the ditch flows into the Koshkonong Creek at a location of about one mile east of the facility. The Koskonong Creek drains much of eastern-central Dane County and is a tributary to the Rock River. The second nearest flowing stream is Door Creek, a tributary of the Yahara River. Door Creek is located about 4,000 feet west of the property.

   Hydrite manages surface water drainage from the permitted area of the property via its Stormwater Pollution Prevention Plan located in **Appendix I.**

2) The Facility conducts the waste activities in contained areas, so there is a minimal risk of adverse affects to terrestrial plant and animal species that are native to this area. The Facility is not located on or near any ponds, lakes or bodies of water where aquatic life would be affected.

3) Hydrite is located in the General Industrial District of Cottage Grove and East of County N, the main artery of the Village of Cottage Grove. West of County N, an additional Industrial zone is being developed. North and East of the facility is residential property and South is the Wisconsin Drumlin Bike Trail and a developing residential area. Hydrite owns approximately 40 acres, which provides a buffer between the Facility and other land uses within the immediate area.

4) Hydrite has a positive effect on the existing social and economic conditions of the Village of Cottage Grove. Cottage Grove is the first municipal area East of Madison, WI. Madison is the capital of the State and is also home to the University of Wisconsin. Cottage Grove is considered a bedroom community to Madison. The Village of

Cottage Grove website reports, "Cottage Grove enjoys the benefits of small town Wisconsin, as well as the metropolitan culture and advantages of nearby Madison.

Cottage Grove is located in the County of Dane. The January, 2010 unemployment rates for Dane County and the city of Madison were 6.3% and 5.9% respectively, compared to 9.6% for the State and 10.6% for the Country.

Hydrite employs over 120 employees, many from the local area and surrounding communities. Additionally, Hydrite contracts with local business for a variety of needs, including, but not limited to, electrical and mechanical needs, office supplies, safety supplies, catering, landscaping and well as hiring summer interns from the University for work as engineers, chemists and clerical work.

Another positive impact that Hydrite has had on the community of Cottage Grove is its wide variety of involvement. Hydrite has supported local groups such as Little League, purchased specialized camera equipment for the Fire Department, donated to community projects and festivals and has offered scholarships to students pursing degrees in natural or environmental sciences. The facility has opened its laboratory for class trips. These are just a few examples of the positive affect Hydrite is having on the social and cultural aspects of the community.

5) Hydrite is situated in the general industrial district of Cottage Grove. There are no special resources, such as archaeological, historical, or prime agricultural lands in the immediate vicinity. Located south of the Facility is the State Drumlin Bike Trail. The trailhead was moved to its present location, when Hydrite purchased property south of the facility to provide a buffer around the plant. Cyclists today can enjoy the beauty of the trail, without having to ride next to an industrial plant.

C.13. – C.18. NR 670.014(2)(x)2.d. A discussion of the probable adverse and beneficial impacts including primary, indirect and secondary impacts.

1) In an effort to make the Facility more aesthetically appealing, Hydrite has built its buildings to be complimentary to surrounding businesses in style and colors. Landscapers are hired to plant and maintain shrubs, trees and flowers.

2) Hydrite is not proposing any physical changes to the Facility, therefore, there will be no probable adverse or beneficial biological impact.

3) Hydrite is not proposing any physical changes to the Facility, therefore, there will be no probable adverse or beneficial impact on land use.

4) Hydrite is a responsible and economical outlet for generator's recyclable waste which benefits a large number of Wisconsin-based companies. The solvent recycling program allows companies to be low cost leaders in their industries. The resulting impact is more jobs and higher incomes for tax payers, both locally and throughout the State. This has a very positive impact on the economic conditions of the area.

5) There are no archaeological, historical or prime agricultural lands that will be adversely or beneficially impacted by the Facility.

6) Hydrite is not proposing any changes that would adversely or beneficially impact areas such as groundwater and surface water impacts, modifications of topography, loss of agricultural or forest land, displacement of wildlife. Hydrite will continue to pursue improving its aesthetic impact for people in and around the facility through landscaping and maintaining the existing structures.

C.19. NR 670.014(2)(x)2.e. Identify, describe and discuss feasible alternatives including taking no action, enlargement, reduction or modification of the project.

Hydrite has no plan to expand the hazardous waste storage, transfer and recycling operations in Cottage Grove. Conversely, it is reducing the amount of hazardous waste that is stored in containers. Hydrites current recycle program helps the company compete against the large national distribution companies in the sale of organic chemicals; organic chemical sales account for 25% of Hydrites revenue. Without the solvent recycling programs to offer to our customers, Hydrite would stand to lose a number of accounts in the Midwest. The reduction in the warehouse storage requires that the existing operation cut back on the number of customers that are allowed to participate in generic programs for solvent recycling. Because the 'on-hand' feedstock will be reduced, it is expected that the business will have to supplement with virgin finished product for other manufacturers. The reduced business will have limited impact on smaller customers; but it will however, limit Hydrites ability to accept new container business.

C.20 NR 670.014(2)(x)3. The need for the proposed facility or expansion as required under s. 289.28, Stats.

The hazardous waste storage facility described herein is a significant resource to southern Wisconsin and nearby states for providing adequate capacity to properly recycle wastes. Wastes received from off-site are recycled under legitimate recovery or reclamation, either thin-film evaporation or distillation for product recovery or by fuel blending for use as a secondary fuel source by end-users (cement kilns).

In these cases, waste volumes are minimized since alternative hazardous waste treatment and/or disposal is no longer necessary. In addition, by recycling these wastes, the net quantity of hazardous waste disposal is reduced, and the quantity of virgin materials used for production is not required. For example, Hydrites Reclaimed Lacquer Thinner and Press Wash programs, make it possible for industries that utilize solvent in their paint and printing applications to use a quality reclaimed solvent instead of purchasing virgin solvent and then disposing of it.

Hydrite Chemical provides hazardous waste recycling services for a broad geographical area. The recycling activities provided by Hydrite Chemical Co. cannot be performed without on-site permitted storage. The service area of this facility extends upwards of 100 miles, and includes the largest hazardous waste production areas of the state. The capacity of the facility is needed, as there are a very limited number of permitted hazardous waste facilities for commercial use. By providing capacity in the state, we reduce the need for recycling, and greatly reduce the need for additional transportation of hazardous wastes, both within the state and to out-of-state facilities.

In 2010, Hydrite Chemical Co. recycled over 18,500,000 pounds of hazardous waste from off-site generators. Over 50% of the waste that was reclaimed was received from Wisconsin generators.

SECTION D. GROUNDWATER PROTECTION NR 670.014(3)

D.1 – D.9. NR 670.014(3). The Facility does not operate a Solid Waste Management Unit, therefore this section is not applicable.

SECTION E. CORRECTIVE ACTION AND SOLID WASTE MANAGEMENT UNITS NR 670.014(4)

E.1. NR 670.014(3). Groundwater protection for releases from a SWMU. Support documentation for Section E. is located in **Appendix EE**, unless otherwise noted.

The Department has identified historic SWMU areas, which are included in the May 9, 1996 Plan of Operation Modification. These areas included:

a. Rail Area: Hydrite shipped reclaimed solvent and secondary fuel via rail cars on a railroad spur south of its facility. A 500 to 1000 gallon spill occurred on July 31, 1987 when a rail car was overfilled.

b. Container Storage. Prior to Hydrite ownership in 1970, the previous owner, North Central Chemical, stored approximately 1,500 drums on-site. In 1978, construction activities by Hydrite revealed chemical odors below the ground surface and ground-water contamination was found in monitoring wells.

c. Tank Farm Units. Numerous spills have occurred within tank farm secondary containment areas.

d. Reclamation Units. Three thin-film evaporators and one pot still operated on site. No releases, other than to the atmosphere, are known to have occurred from these units.

e. Ground-water treatment system. A pilot ground-water treatment system was temporarily operated. No known releases occurred from this unit.

A list of documented spills from 1981 through 1988 in found in an excerpt of the October 6, 1989 RCRA Facility Investigation Report (RFI), pages 68-69.

For the years since 1996 to 2002, there were a number of releases reported to the Department. These releases are documented in the Bureau for Remediation and Redevelopment Tracking System. Copies of these records are provided.

The SWMU Spill History covers spills from 2002 to present. The releases from 1997 to present day were from SWMU areas that were in containment, with two exceptions. The SWMU areas included:

a. Container Storage. Hydrite stored hazardous waste in the North Warehouse and South Warehouse areas. These areas have recently closed or are in the process

of being closed. All releases in these areas were in containment. The active SWMU is CE100 Warehouse.

b. Tank Farm Units. Hydrite stores bulk hazardous waste in the 200 Tank Farm and 400 Tank Farm. These releases occurred within secondary containment.

c. Load/Unload Docks. All loading and unloading takes place in containment. Releases during loading/unloading procedures were captured in containment.

A Plot Plan is included to show the locations of these SWMU areas.

One exception occurred on 8/9/2009, in the Northwest Process Bldg when approximately 4000 pounds of xylene vapors were released to the atmosphere. The other exception occurred on 10/16/2011, when a tanker stored on gravel leaked approximately 20 pounds of Butyl Acrylate to the soil. Neither of the two releases involved hazardous waste. Butyl Acrylate has no RQ and is not a hazardous substance.

There have been no releases since those outlined in 1996, that required corrective action to be initiated.

The Cottage Grove RCRA Permit Renewal Corrective Action History, summarizes how Hydrite has stabilized the existing contaminant plume and use of a hydraulic barrier system to control the groundwater contamination.

The Cottage Grove RCRA Corrective Action Current Status summarizes current activities and the cost estimates for on-going Corrective Action.

Hydrite is seeking re-licensing of active SWMU which include the 200 and 400 tank farms and the CE100 warehouse.

E.2. NR 670.014(4)(a)(1). The locations of historic SWMU are referenced on several Plot Plans in the RFI, pages 47-56. The recently closed SWMU and the active SWMU are shown on the current Plot Plan.

E.3 - 5. NR 670.014(4)(a)(2)-(4). Information describing the type of historic SWMU is found in the RFI, starting on page 45. The information includes the location, type of unit, major design features, operating practices, period of operation, age, and general physical condition. There is little information available about the SWMU which existed prior to 1970 when Hydrite purchased the property from North Central Chemical.

The information does include the North and South Warehouses, Tank Storage units and tank farms, Ground-water Treatment System, and Reclamation Units that were in use in 1989. The North and South Warehouses were closed in 2012.

The type of active SWMU that Hydrite is seeking to re-license includes the 200 and 400 tank farms and the CE100 warehouse. Descriptions of these units are found in the FPOR on pages 56-58 and 60-74. CE100 was licensed for storage August 20, 2010.

E.6. NR 670.014(4)(a)(5). Wastes that were managed in the historic SWMU, to the extent available is found on page 57 of the RFI. Wastes that are managed in current SWMU are listed in the Part A Application, page 3, located in **Appendix A.**

E.7. NR 670.014(4)(b). All available information pertaining to releases of hazardous waste constituents from hazardous waste units is referenced in Section E.1.; located on page 68 of the RFI; documented on the BRRTS records sheets and/or are recorded on the SWMU Spill History Spreadsheet.

E.8. NR 670.014(4)(c). The RCRA Facility Assessment (RFA) was completed and submitted to the US EPA Region V on March 29, 1988, by the Department. The RFA includes a summary of the discovery of the environmental contamination in 1982 and the subsequent need for corrective action.

On April 24, 1992, the US EPA authorized the State of Wisconsin to implement the RCRA Corrective Action program to address releases form Solid Waste Management Units (SWMU) at facilities required to have a hazardous waste operating license. On May 9, 1996, the Department made a final determination that modified Hydrite's plan of operation approval issued May 17, 1988 to incorporate provisions for state authorized corrective action.

Extensive sampling has been conducted at the site over the past 30 years. Soil and groundwater contaminants are predominantly chlorinated and non-chlorinated volatile organic compounds (VOC's). The groundwater impacts at the site are present in three phases; dissolved, light non-aqueous phase liquids (LNAPL) and dense non-aqueous phase liquids (DNAPL). The dissolved phase contamination has migrated off-site and the down gradient contaminant plume is being remediated y the hydraulic barrier system. LNAPL is present on-site, but has substantially been reduced by interim remedial actions (air sparge-vapor extraction system) implemented in the 1990's. DNAPL has migrated downward and has accumulated in the sandstone bedrock at a depth of 150-180 feet below ground surface. The majority of the DNAPL has migrated into the sandstone matrix.

Hydrite's Corrective Action History is summarized in the Cottage Grove RCRA History.

SECTION F. LOCATION STANDARDS NR 670.014(2)(k); nr 670.014(2)(s)

F.1. NR 670.014(2)(k)3. Identify if a facility is in a 100-year floodplain and source of data.

Hydrite Chemical Co. is not located in a 100-year flood plain area. The floodplain map was purchased from the FEMA Map Service Center.

F.2. NR 670.014(2)(k)3. Copy of federal insurance administration flood map.

The Federal Insurance Administration Flood Map is located in **Appendix T.**

F.3. NR 670.014(2)(k)3. Identify 100-year flood level and other flooding factors considered in design, construction, operation or maintenance of facility to withstand washout form 100-year flood.

The Facility is not located in a 100-year flood plain area, nor is an area subject to other flooding factors, therefore there are no barriers or provisions for drainage or flood control.

F.4. – F.8. NR 670.014(2)(k)4.a., b., & c.; NR 664.0018(2)(a). and NR 670.014(2)(k)5.

The Facility is not located in a 100-year flood plain area, therefore this section is not applicable.

F.9. NR 670.014(2)(s). A dated topographic map showing a distance of 1000 feet around the facility, with a scale of no more than 1" to 200 feet, and contour intervals that clearly shows pattern of surface water flow of waste management unit.

The source for the topographic map was the Dane County Land Information website. The CDiMap update printed was the most current update, May 2, 2012. The topographic map is located in **Appendix T**. The Facility has no solid waste management unit.

F.10. NR 670.014(2(s)1. The topographic map shows map scale and date.

F.11. NR 670.014(2)(s)2. The floodplain map shows 100-year flood plain area.

F.12. NR 670.014(2)(s)3. The topographic map shows surface waters, including intermittent steams. A Dane County Surface Water and Wetlands Map is located in **Appendix T.**

F.13. NR 670.014(2)(s)4. Map showing surrounding land uses.

An Existing Land Use Map showing surrounding land uses, including residential, commercial, agricultural, and industrial is located in **Appendix T.** Additional maps showing Archaeological and Historic Resources, Surface Waters and Hydric Soils, Parks and Recreation Facilities and Zoning are also included.

F.14. NR 670.014(2)(s)5. Map showing wind rose showing prevailing wind speed and direction..

The wind rose map is located in **Appendix V.**

F.15. NR 670.014(2)(s)6. The map shows map orientation.

All maps included in this and other sections include map orientation.

F.16. NR 670.014(2)(s)7. Map shows legal boundaries of the hazardous waste facility.

The topographic map shows the legal boundaries of the hazardous waste facility. The map source was the Dane County Land Information website, under DCiMap Updates, dated May 2, 2012.

F.17. NR 670.014(2)(s)8. The map shows the access control.

The Facility Plot Plan map shows access control in the way of fences and gates. This map is located in **Appendix U.**

F.18. NR 670.014(2)(s)9. Map showing location of injection or supply wells on-site and off-site.

The Facility does not have any injection or supply wells on-site, therefore this section does not apply.

F.19. NR 670.014(2)(s)10. Map showing buildings and storage, treatment or disposal operations.

The Facility Plot Plan maps show the location of buildings, hazardous waste storage, treatment and fuel-blending tanks. This map is located in **Appendix U.**

F.20. NR 670.014(2)(s)10. Map showing roads, loading, unloading areas.

The Facility Plot Plan maps show the location of runoff control systems, roads, loading and unloading areas. This map is located **in Appendix U.**

F.21. NR 670.014(2)(s)11. Map showing barriers for drainage or flood control.

The Facility is not located in a 100-year flood plain, therefore there is no requirement to prevent run on barriers for drainage or flood control. This section does not apply.

F.22. NR 670.014(2)(s)12. Map showing the location of operational units where hazardous waste will be treated, stored or disposed.

The Facility Plot Plan maps show the location of container storage, bulk storage and reclamation units. This map is located in **Appendix U.**

F.23. NR 670.014(2)(k)6.b. Facility located in a wetland?

The Facility is not located in a wetland. The property is bounded on the north by an area designated as a wetland. It is designated by the Wisconsin Department of Natural Resources as ElKa (Emergent/wet meadow, persistent, wet soil, abandoned cropland). The wetland designation starts 50 feet from the north boundary of the permitted site.

A map of the site location is located in **Appendix I.**

F.24. NR 670.014(2)(k)6.a. The Facility located in a critical habitat for threatened or endangered species.

The Facility is not located in a critical habitat for threatened or endangered species.

SECTION G. WASTE ANALYSIS PLAN REQUIREMENTS NR 670.014(2)(C)

G.1. NR 664.0013(10(a). Before an owner or operator treats, stores or disposes of any hazardous wastes, or nonhazardous wastes if applicable under s. NR 664.0113 (4), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the wastes.

Before a waste stream is accepted for reclamation, a Waste Profile form is submitted by the Generator, accompanied by a representative preshipment, aka, "Sales" sample of the waste. A Material Safety Data Sheet can be submitted in lieu of a sample if the waste is not spent. The samples are analyzed by Facility personnel in an on-site laboratory.

The Waste Profile form is located in **Appendix C.**

An example of a "Sales" analysis is located in **Appendix D.**

G.2. NR 664.0013(1)(a)(1). Analysis by WI certified lab.

The laboratory is registered under NR 149. A copy of the Lab Registration in found in **Appendix D.**

G.3. NR 664.0013(1)(b). Description of other data to be used rather than lab analysis.

In addition to the Waste Profile form and a representative sample, the Facility may also require Material Safety Data Sheets for the materials used in the process, TCLP results and other analytical data may be submitted.

G.4. NR 670.0013(1)(d). For off-site waste, analysis upon receipt to verify waste matches description on manifest.

When a waste stream is accepted for reclamation, a Lab SOP is written for that stream detailing the chemical and physical characteristics. Each shipment of the waste stream is analyzed and compared to the SOP to ensure it matches the identity of the approved waste stream specified on the accompanying manifest or shipping document.

An example of a Lab SOP can be reviewed in **Appendix D.**

G.5. NR 670.0013(2)(a). Parameters for which waste will be analyzed and rationale.

The parameters and rationale for which waste samples will be analyzed are outlined in the Waste Analysis Plan found **in Appendix D.**

G.6. NR 664.0013(20(b). Test methods used.
The test methods used for analyzing waste samples are found in the Waste Analysis Plan, Attachment "Cottage Grove Quality Assurance Program." found in **Appendix D.**

G.7. NR 664.0013(2)(c). Sampling methods used to obtain the sample.

The sampling methods used to obtain a representative sample are found in the Waste Analysis Plan, located in **Appendix D.** Additional information is also found in the Waste Drum Sampling and Classification and Tank Truck Bulk Unloading Procedures, located in **Appendix K.**

G.8. NR 664.0013(2)(d). Frequency of repeating initial analysis to ensure it is accurate and up to date.

The initial and all subsequent waste shipments are sampled upon receipt at the Facility to ensure the description of the waste is accurate and up to date.

G.9. NR 664.0013(1)(c). At a minimum, analysis is repeated if the process generating the waste has changed or when the inspection upon receipt does not match the description on the manifest.

The initial and all subsequent waste shipments are sampled upon receipt at the Facility to ensure the description of the waste is accurate and up to date. The generator is contacted and the discrepancy reconciled whenever the analysis does not match the approved waste stream and/or the shipping document. Annual recertification letters are sent to generators requesting process or waste changes. An example of a recertification letter is located in **Appendix C.**

G.10. NR 664.0013(2)(e). For off-site waste, the waste analysis generators agree to supply.

For off-site waste, the waste generator's supply a completed Waste Profile based on Generator's knowledge or analysis accompanied with a representative sample. The approval letter generated by the Facility represents the waste analysis the generator agrees to supply. Any changes in the waste steam must be communicated to the Facility.

G.11. NR 664.0013(2)(f). The waste analysis methods for ignitable wastes, used to comply with NR 664.0017(3) are found in the Waste Analysis Plan, **Appendix D.**

G.12. NR 664.0013(2)(f) and NR 664.1034. The Facility is not subject to NR 664 subch. AA standards for process vents, per **NR 664.1030(5).** The Facility is subject to the process vent requirements outlined in a Title V Air Permit.

G.13. NR 664.0013(2)(f) and NR 664.1063(4). A waste analysis is performed for each hazardous waste to be recycled on equipment subject to subch. BB standards, to determine if the hazardous waste has an organic concentration that equals or exceeds 10% by weight. The Methods used are described in the Waste Analysis Plan.

G.14. NR 664.0013(2)(f) and NR 664.1083. A waste analysis is performed for each hazardous waste to be stored in containers or tanks subject to subch. CC standards, per the Waste Analysis Plan.

G.15. NR 664.0013(20(f) and NR 668.07. The testing performed to determine if the waste meets or exceeds Land Disposal Restriction standards are outlined in the Waste Analysis Plan. Methods that cannot be performed by Hydrite Chemical Co., such as those relating to LDR and TCLP, are performed by contract laboratories that are certified or registered by the State of Wisconsin.

G.16. NR 664.0013(2)(h). The Facility is not seeking exemption to Subch. CC.

G.17. NR 664.0013(3). Upon approval of a waste stream for acceptance into the Facility, an SOP is written denoting the hazardous waste constituents and characteristics. When the waste stream is received, it is sampled, analyzed per the Waste Analysis Plan and the results are compared to the SOP to ensure it matches the identity of the waste designated on the manifest.

Off-site waste that is to be fuel-blended is tested for fuel compatibility as described in Standard Operating Procedure Q3893CA – Testing for Fuel Compatibility **(Appendix D).** The waste is analyzed per Q1018CA – Analysis of Secondary Fuel to ensure that it meets the specifications set by the end User of this material (cement kilns). Containers are sampled as referenced above, and then stored until they are transferred to the South Dock to be pumped into a process feed tank for processing or transferred to the fuel blending tanks.

Bulk tankers are sampled and then pumped into on-site storage tanks for reclamation.

SECTION H: SECURITY REQUIREMENTS NR 670.014(2)(d)

H.1. NR 670.014(2)(d). The Facility prevents the unknowing entry, and minimizes the possibility for the unauthorized entry, of person or livestock onto the active portion of the facility by demonstrating the following:

H.2. NR 664.0014(2)(b). The facility is secured by a chain link fence with the typical means of entry being drive-through gates. Entrance through the drive-through gates is controlled by the use of a security access card at all times. The drive-through gates self-close. Other gates are kept closed and locked at all times to prevent unknowing entry or unauthorized entry onto the active portion of the facility. The plant is operated 24 hours per day, seven days a week.

Employees, contractors and visitors must complete specified training requirements before being issued a security access card.

H.3. NR 664.0014(3). In addition, signs warning, "Danger – Unauthorized Personnel Keep Out" are posted at each entrance and around the perimeter. A sign at the main gate directs visitors to the reception area. Signs are legible from a distance of 25 feet.

H.4. NR 664.0014(1). Security requirements are necessary and therefore, this does not apply.

SECTION I: GENERAL INSPECTION REQUIREMENTS NR 670.014(2)(e)

NR 670.014(2)(e). Inspections

Hydrite Chemical Co. conducts regular inspections of the facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to, release of hazardous waste constituents to the environment or pose a threat to human health. The inspection schedules are conducted often enough to identify problems in time to correct them before they harm human health or the environment

I.1. NR 664.0015(2)(a). The Facility has developed and follows a written schedule for inspections. Inspections for structural deterioration are routinely scheduled via the Maximo Assessment Management System to prevent or minimize the possibility of deterioration. This would include items such as storage tanks, pumps, and secondary containment structures. The "Internal Facility Compliance Inspection and Corrective Action Procedure," outlines the schedule for safety equipment, emergency response equipment, fire safety equipment , and air emission equipment.

Hydrite does not have any surface impoundments, waste piles, miscellaneous units, nor does it conduct any land treatment, so these inspections do not apply.

The Internal Facility Compliance Inspection and Corrective Action Procedure is located in **Appendix E**. The various inspection schedules are attached.

I.2. NR 664.0015(2)(c).

Inspections include specific items to be inspected. They will be inspected for the "Possible Problem" and at the frequency specified by the checklists. Inspection forms will be completed to document findings. Instructions and rationale for the inspections can be found at the conclusion of the inspection checklists. . All production activities, including recycling, are accomplished using standard operating procedures which document operating procedures. These procedures also document any malfunctions, if they occur.

I.3. – I.7. NR 664.1033, 1052, 1053, and 1058., NR 664.0015(2)(d). Inspections for leak testing of hazardous waste equipment and piping systems are located in **Appendix E**. It is assumed that all equipment listed is in light liquid / gas-vapor service. All hazardous waste contains > 10% VOC. Equipment that can be monitored without elevating the monitoring personnel more than 2 meters above a support surface is inspected monthly. Equipment that cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface is inspected semi-annually.

I.8. NR 664.0015(2)(d). Containers, Tank Farms and areas where spills could occur, such as unloading areas, are inspected daily. The Daily Inspection: Cottage Grove East is located **in Appendix E.**

I.9. NR 664.0015(2)(d). The inspection schedule is based on the rate of deterioration of the equipment and the probability of an environmental or human health incident. The goal is to discover the deterioration to prevent an incident from occurring.

Items where the probability is high are inspected daily. These items would include, but are not limited to, unloading areas, process lines capped or plugged, spill clean-up equipment is nearby and locker stocked with supplies. Items of less probability of deterioration, but rank high for protection of human health, such as eye washes, safety showers, and fire equipment are inspected weekly to monthly. Items where the rate of deterioration may be low are scheduled in the Maximo Assessment Management System and may be scheduled monthly to annually. These would include, but not be limited to, tank corrosion protection, secondary containment maintenance, inspecting the oil level in pumps.

I.10. NR 664.0015(3). During the inspection, if a problem is discovered that can be corrected immediately by the inspector, it is done so and noted on the inspection form. When the inspection reveals that non-emergency maintenance is needed, a work order is written up and the work order number is recorded on the inspection form. The corrective action will be completed as soon as possible to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred during the course of an inspection or any time between inspections, remedial action will be taken immediately. This action may evoke the Contingency Plan. In the event of an emergency involving the release of hazardous waste or hazardous waste constituents to the environment, efforts will be directed toward containing the release, removing it, and subsequently decontaminating the affected area. All incidents resulting in a release of hazardous waste are recorded as part of the operating record. Incident Investigations are conducted to determine root cause and prevention from reoccurrence.

The Incident Investigation SOP is found in **Appendix E.**

Additional follow-up remedial action is found in the Contingency Plans located in **Appendix L.**

I.11. NR 664.0015(4). Inspection Logs

Results of each inspection will be recorded on the appropriate inspection checklists. Information requested on the checklists includes the inspector name, date of inspection, item of inspection, observations, and the types and dates of any corrective actions.

Completed inspections are kept in the legal files, as part of the written operating records, located in the main office. Records of inspection are kept for a minimum of three years from the date of inspection.

SECTION J: CONTINGENCY PLAN REQUIREMENTS NR 670.014(2)(g)

J.1. NR 670.014(2)(g). The Contingency Plan for the Facility is integrated into the Hydrite Chemical Co., Standard Operating Procedures. Contingency Plans are located in **Appendix L.**

J.2. NR 664.0051(1). The Contingency Plan is designed to minimize hazards to human health or the environment from fire, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface waters.

J.3. NR 664.0051(2). The Contingency Plan will be evoked and carried out immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

J.4. NR 664.0052(1). In the event of a hazardous waste or hazardous waste constituent release, Facility personnel will follow the Spill Management Plan.

Every employee is trained to recognized or identify that a release has occurred and how to evaluate the hazardous, based on operator knowledge, labels, and other sources of information.

Upon recognition that a release has occurred, the employee notifies the immediate supervisor for an incidental release and the Incident Commander for an emergency level release. The Facility personnel are notified via voice page for emergency releases and/or an air horn alarm if danger to human health is imminent. All employees are authorized to sound the air horn alarm. If the air horn sounds, employees will evacuate.

All operators are trained in cleaning up incidental releases. Personnel specially trained in responding to emergency releases control the release by following such measures as stopping the source of the release, shutting down equipment or blocking off the immediate spill area with absorbents.

Once the release has been stopped and controlled, the process for clean up begins. The waste generated from the release is handled and disposed of properly. As part of the cleanup process the area, PPE, and equipment are decontaminated.

A chemical release report is completed per the Chemical Release Reporting Procedure. Employees are encouraged to report all spills to promote safety.

All chemical releases are followed by an Incident Investigation to access what may have caused the release and what could have prevented it. Corrective actions are determined and initiated.

J.5. NR 664.0052(2). The Facility has a Spill Prevention, Control and Countermeasure Plan, which is a part of the Contingency Plan and does incorporate required hazardous waste management provisions in it. The SPCC Plan is located with the rest of the Contingency Plans in **Appendix L.**

J.6. NR 664.0052(3). The Facility maintains a list for emergency response that includes the National Response Center, local emergency response agencies, hospitals and any response contractors. Copies of the Contingency Plans have been made available to agencies and contractors who would response or assist in an emergency response effort at the facility. When the Contingency Plan is revised, copies are sent to these groups to keep them apprised of the Facilities current protocols. In the event of response that would require outside assistance, the Fire Chief of the Cottage Grove Fire Department assumes the Incident Commander role.

J.7. NR 664.0052(4). As part of the Contingency Plans, a list of Primary, Secondary and Tertiary emergency coordinators, and well as qualified responders, is maintained, which includes contact information such as home address, home and cell phone numbers. The list is kept current with updates made whenever a responder is no longer able to be on the Emergency Response Team or a new responder is added.

J.8. NR 664.0052(5). The Emergency Equipment and Personnel Responsibilities SOP includes a list of all emergency equipment at the Facility, where this equipment is located, a description of the available equipment and its capabilities.

J.9. NR 664.0052(6). The Emergency Equipment and Personnel Responsibilities, in conjunction with the Emergency Procedures outlines the evacuation plan, signals, evacuation routes and designated meeting areas.

J.10. NR 664.0053. Copies of the Contingency Plans are kept at the Facility in multiple locations so are easily accessible before, during and after an emergency response. Copies of the plans are also provided to the local fire and police Departments, area hospital, State and local response agencies. When the Contingency Plan is revised, the revised copies are sent to the required agencies.

J.11. NR 664.0054. All the Standard Operating Procedure components of the Contingency Plan are reviewed per a schedule. The plan is amended and revised as necessary between the reviews.

J.12. NR 664.0055. At all times that the Facility is in operation, an Emergency Coordinator is on-site or on call. A list of the Emergency Coordinators is located in **Appendix L.**

J.13. – 14. NR 664.0055. Emergency Coordinators received additional training for this role, which includes, but is not limited to, site operations, the types of wastes that are handled, facility records and the layout of the Facility. The Emergency Coordinators are familiar with all the aspects of the contingency plan and have the authority to commit resources needed to implement it. Commander checklists are provided to ensure all aspects of the response are covered. Emergency equipment and Personnel Responsibilities are located in **Appendix L.**

J.15. NR 664.0056 (1). All employees are trained that whenever there is an imminent or actual emergency situation, they are authorized to activate internal facility alarms or communication systems to notify all Facility personnel. The employee initiating the evacuation is responsible to apprise the Emergency Coordinator. The Emergency Coordinator will notify state and local agencies or delegate this task to a trained responder.

J.16. NR 664.0056(2). The Emergency Coordinator identifies the character, source, amount and extent of any released materials. The Coordinator may do this in conjunction with personnel who first identified the release, reviewing operating records, shipping documents, and chemical analyses. A Safety Officer may be delegated to assist in this role. A hazardous materials worksheet is filled out.

J.17. NR 664.0056(3). The Emergency Coordinator concurrently assesses possible hazards to human health or the environment that may result from the release. The assessment will include both direct and indirect effects from the release, fire or explosion.

J.18. NR 664.0056(4)(a). If the Emergency Coordinator determines that the Facility has had a release, fire or explosion which could threaten human health, or the environment outside the Facility, the Emergency Coordinator or his delegate shall immediately notify appropriate local authorities. When the CG Fire Department arrives, the Fire Chief will assume the role of Incident Commander and the Emergency Coordinator shall assist if needed in deciding if local areas should be evacuated.

J.19 NR 664.0056(4)(b). If the Emergency Coordinator determines that the Facility has had a release, fire or explosion which could threaten human health, or the environment outside the Facility, the Emergency Coordinator or his delegate shall

immediately notify the local officials or the National Response Center, by following the "Release Reporting and Call-Down List, located in **Appendix L.**

J.20. NR 664.0056(5). During an emergency, all reasonable measures will be taken to ensure that fires, explosions and releases do not occur, reoccur or spread to other hazardous waste areas of the Facility. Operators are trained in emergency shut-down procedures of processing equipment. Overhead fire doors close to cut off additional oxygen supplies. Other measures may include removing tankers or containers from the area and containing any released waste.

J.21. NR 664.0056(6). If part of the emergency response is to go through emergency shut-down of processing equipment, the Emergency Coordinator or a delegate shall monitor equipment from a remote location; i.e. the Engineering Department or Emergency Command Post.

J.22. NR 664.0056(7). Following the emergency response, the Emergency Coordinator shall supply the EHS Department with a list and description of all waste materials generated from the response. EHS Department is responsible for profiling and disposing of waste according to local, state and federal protocols.

J.23. NR 664.0056(8)(a). The Emergency Coordinator, in conjunction with the EHS Department, shall ensure that no waste will be stored in the affected area, if incompatible with the released waste materials.

J.24. NR 664.0056(80(b). The Emergency Coordinator will ensure that all emergency response equipment is cleaned, recharged, restocked and returned to its proper place prior to restarting operations. This includes, but is not limited to, fire extinguishers, SCBA's and Spill Cleanup Kits.

J.25. NR 664.0056(9). Prior to resuming operations following an emergency response, the Facility Manager or delegate will notify the Department, State and Local authorities that the Facility has met the conditions of **NR 664.0056(8)** and is ready to resume operations.

J.26. NR 664.0056(10). Following the emergency response incident, an Incident Investigation will be conducted, which will include the time, date and details of the incident. This investigation will be made part of the operating record. Within 15 days after the incident, the Facility Manager or delegate will submit a written report on the incident to the Department. The report shall include the requirements found in **NR 664.0056(10).** The Incident Investigation SOP and form is located in **Appendix L.**

SECTION K: TRAINING PLAN REQUIREMENTS

K.1 NR 670.014(20(L). An outline of both the introductory and continuing training programs for personnel who work at the Facility is in the Standard Operating Procedure, "Mandatory Training Requirements" , located in **Appendix F.** All employees are trained to perform their duties in a way that ensures the Facility's Hazardous Waste Management operations are done in a safe and compliant manner. This includes, but is not limited to, daily operations, inspections, training, contingency plan and safety practices. The Facility utilizes Hands-On training by a member of the EHS Department or qualified facility personnel, Web-Based Training modules and contacting with outside organizations to meet all the training requirements.

K.2. NR 664.0016(1)(b). The training program trains personnel in hazardous waste management procedures, relevant to the positions in which they are employed. The "New and Reassigned Training Requirements" procedure contains the training requirements, by position. Job Descriptions are located in **Appendix G.**

K.3. NR 664.0016(1)(c). All employees are trained on the Contingency Plans located in **Appendix L.**, to ensure Facility personnel can respond effectively to emergencies by familiarizing them with emergency procedures, equipment and protocols. Evacuation Drills are conducted annually to document comprehension.

K.4. NR 664.0016(2). New and reassigned employees are required to complete their training within the six months of employment or the new assignment. During this time, or until they complete the training and can demonstrate understanding of the requirements, employees work under the supervision of the Hands-On training or Supervisor. This training includes all the training requirements of the "Mandatory Training Requirements" procedure **in Appendix F.**

K.5. NR 664.0016(4). Training is grouped by departments in the "New and Reassigned Training Requirements." Procedure located in **Appendix F.** Job Description titles are listed in each section. Examples of job descriptions for the positions involved with handling hazardous wastes operations are located in **Appendix G.** Each employee's training records are maintained on the Web-based system, which records their name, job title, job description, the type and amount of training required and a historical record of all the training they have received. Off-site or outside contracted training records are credited and scanned into their historical record.

K.6. NR 670.014(2)(L). All facility employees receive basic training on Hazardous Waste Awareness and the Facility Contingency Plans.

The level of training an employee receives is dependent upon the employee's level of involvement in hazardous waste management. For example, Administrative positions may be trained on shipping documents or recordkeeping procedures, but are not trained as responders to emergency response to fires or chemical releases. All Operators, Maintenance, Engineering and their Supervisors receive hazwoper training. Lab personnel receive additional training in Emergency Communications and Chemical Release Reporting.

SECTION L: CLOSURE PLAN REQUIREMENTS NR 670.014(2)(m)

L.1. NR 670.014(2)(m). Hydrite Chemical Co. will close the Facility in a manner that:

A. Minimizes the need for further maintenance, and

B. Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or the atmosphere.

This closure plan is written to describe the manner by which we would close this storage facility. Involved in the closure are hazardous waste storage tanks and drums.

The operator of this facility shall obtain prior approval to any amendments to Closure Plan, in accordance with NR 664. Amendments shall be made when operating plan or facility design affects the Closure Plan.

L.2.-L.3 NR 664.0112(2)(a). A full or partial closure of the off-site hazardous waste activities at the Facility would include all or some of the following hazardous waste units:

A. CE100 Container Storage Area. Containers of off-site waste would be processed by reclamation, fuels blending or shipped off-site with no treatment. The goal would be to reclaim the maximum number of containers possible, to minimize the amount of hazardous waste to be disposed. In the case of a partial closure, containers may also be moved to the area to remain open. The container storage area that is being closed, would then be cleaned. Partial closure would be performed in accordance with the Closure Plan. The Facility may still operate and continue to receive and process waste, as long as it does not create a threat to the environment or human health.

   a. Remove containers from the area to the South Dock for evacuation of drums to Feed Tanks for processing or to Fuel Blending Tanks; or load unto trailers for transport to an approved off-site TSDF. In the case of a partial closure of the storage area, containers may also be moved to an area that is remaining open.
   b. The storage area that is being closed, including walls, floor, and support columns would be cleaned with a high pressure washer. The floor area would additionally be washed with an industrial scrubber using clean brushes and a suitable detergent. The wash waters will be pumped out to a LQG waste storage tank.

c. Rinse the entire area with plain water and pump out to a LQG waste storage tank.
d. The entire area will receive a second rinse and the second rinsate will be sampled by an outside contractor who specializes in environmental sampling. The samples will be handled in a manner to meet required protocols.
e. The samples will be tested by a contracted lab for waste codes accepted by the Facility over the life of the container storage area.
f. Closure confirmation sampling is to ensure that the area has been successfully cleaned and that no contamination above the wastewater standards identified in Table 1 of NR 668.40 WI Admin Code remains.
g. Steps b. through e. will be repeated until sample results show that all contamination above the wastewater standards indentified in Table 1 of NR 668.40 WI Admin Code has been removed or an agreement is made with the Department to accept results.

B. 10-6650 gallon storage tanks. In a normal shutdown and full closure, all the hazardous waste material from bulk storage would be reclaimed at the Facility to minimize the amount of hazardous waste to be disposed. If process equipment was not functional, the waste would be shipped off-site in bulk as secondary fuel to an approved TSDF site. For a partial closure, the facility may still operate and continue to receive and process waste as long as it does not create a threat to the environment or human health. The empty tanks would be cleaned repurposed for other chemical storage or disposed of.

a. Remove the hazardous waste material from the permitted storage tanks by processing of transferring to bulk tankers for transport to an off-site permitted TSDF.
b. The transfer lines and equipment would be drained and the lines flushed with water. That material would go into a truck, such as a vacuum truck, and transferred to a LQG storage tank or shipped off-site for proper disposal.
c. The emptied storage tank would be washed with a high pressure washer using city water. The initial wash and rinsate water would go into a truck, such as a vacuum truck, and transferred to a LQG storage tank or shipped off-site for proper disposal.
d. A final rinsate would be sampled by a contractor who specializes in environmental sampling. The samples would be handled in a manner to meet required protocols.
e. The samples will be tested by a contracted lab for waste codes accepted by the Facility over the life of the tank. Closure confirmation sampling is to ensure that the tank has been successfully cleaned is RCRA-empty.

f. If the tank is not to be repurposed, it would be removed and a three foot diameter hole would be cut through the side of the tank. The tank would then be shipped to a metal scrap yard for steel recycling.
g. The tank closure procedure would be documented by the Wisconsin Department of Commerce who regulates the closure of storage tanks. A copy of the Checklist for Tank Closure is found in **Appendix** L.

C. 2-19750 gallon fuel blending/LQG tanks.

In a partial closure situation, where the Facility closes the container storage area or one or all of the permitted hazardous waste storage tanks, the fuel-blending tanks would not be closed. The Facility would continue to receive and process waste as long as it does not create a threat to the environment or human health.

In a situation, where the Facility remains functional as an industrial chemical plant, but no longer accepts off-site hazardous waste for storage or processing, these tanks would continue to be used as LQG storage tanks for internally generated waste. No off-site waste would be accepted at the Facility and the need for a license to fuel-blend would cease to exist.

In a full plant closure situation, where all hazardous waste activities would cease, the two fuel blending tanks would be the last units to close. The still bottoms from reclamation, evacuating hazardous waste drums, and cleaning processes would continue to be transferred to these tanks and transported off-site in bulk to a permitted TSDF site. Once the container storage area and the bulk storage tanks were closed, the fuel blending tanks would be cleaned, removed and disposed of.

a. Remove the hazardous waste material by transferring to bulk tankers for transport to an off-site permitted TSDF.
b. The transfer lines and equipment would be drained and the lines flushed with water. That material would go into a truck, such as a vacuum truck, and be shipped off-site for proper disposal at a permitted TSDF.
c. The emptied storage tank would be washed with a high pressure washer using city water. The initial wash and rinsate water would go into a truck, such as a vacuum truck, and be shipped off-site for proper disposal.
d. A final rinsate would be sampled by a contractor who specializes in environmental sampling. The samples would be handled in a manner to meet required protocols.
e. The samples will be tested by a contracted lab for waste codes accepted by the Facility over the life of the tank. Closure confirmation

sampling is to ensure that the tank has been successfully cleaned and is RCRA-empty.

f. If the tank is not to be repurposed, it would be removed and a three foot diameter hole would be cut through the side of the tank. The tank would then be shipped to a metal scrap yard for steel recycling.

g. The tank closure procedure would be documented by the Wisconsin Department of Commerce who regulates the closure of storage tanks. A copy of the Checklist for Tank Closure is found in **Appendix X.**

L.4 NR 664.0112(2)(b).

Hydrite Chemical Co. will establish the following date as a closure date for this facility. This date has been arrived at the assumption of a life of twenty (20) years on the container storage area, and the hazardous waste storage tanks. The following dates comply with the regulations. The Facility has a greater life expectancy than this period and an extension or a permit renewal as this closure time approaches may be requested. This would be contingent on a review by the US EPA or state regulatory Department.

Final Projected Closure Date: June 1, 2032

L.5. NR 664.0112(2)(c). Maximum Hazardous Waste Storage

Tank Storage of Off-Site Waste: 66,500 gallons
Tank Storage of Fuel Blending Waste: 39,500 gallons
Container Storage of Waste 110,000 gallons

L.6. NR 664.0112(2)(c). The methods used for closure or partial closure of the Facility include the following:

1. Reclamation of waste stored in tanks and containers. The still bottoms from the reclamation process will be fuel-blended.
2. Containerized waste that cannot be reclaimed, would be fuel-blended and shipped off-site as secondary fuel.
3. Secondary fuel-blended material will be manifested and transporter by bulk tankers to permitted cement kilns.
4. The rinsate from the cleaning of the storage area, tanks and containments will be transferred to an LQG tank, profiled, manifested and shipped off-site by bulk tankers to permitted TSD facilities.
5. Containers of waste resulting from the decontamination procedures will be profiled, manifested and shipped off-site for recycling, fuel-blending or incineration.
6. If the closure includes the closing of the fuel-blending / LQG tanks, the final residue and cleaning residues would be placed on a vacuum tanker, manifested and transported off-site to a permitted facility.

L.7. NR 664.0112(20(c). The types of off-site hazardous waste management that would be utilized during a partial or complete closure include:

H020 – Reclamation
H061 – Fuel Blending
H050 – Burned for Energy Recovery
H040 - Incineration

L.8 NR 664.011292)(d).

All residue and materials generated by a partial or complete closure will be managed and disposed of properly.

A. The RCRA-empty drums that were evacuated of hazardous waste for treatment would be shipped off-site to a drum reconditioner. Drums that are not empty, would be shipped to a licensed TSDF for disposal.
B. Cleaning materials such as cleaning brushes, pig pads and floor dry will be put in satellite accumulation drums and shipped off-site to a licensed TSDF for disposal.
C. Contaminated hoses used for transferring hazardous waste will be drained into satellite accumulation and then placed in cubic yard boxes. This waste will be shipped off-site to a licensed TSDF for disposal.
D. Ancillary equipment, such as pipes and pumps, will be cleaned with water flushes and reused or sent to a scrap metal recycler. If the ancillary equipment cannot be cleaned, it will be managed as hazardous waste and shipped off-site to a licensed TSDF for disposal.
E. The cleaning and decontamination of the 200 and 400 tank farm containment systems and the loading/unloading areas for the tank farms, would mirror the cleaning procedures denoted in the L.2 and 3. The tank farms have concrete pads over two feet of packed clay. The concrete is periodically checked for cracks to ensure that no migration underneath is possible. Closure on this area would consist of analysis of the clay liner under the concrete bases. Any cracks or broken concrete would be repaired and the containment surfaces recoated with sealant.
F. All closure activities will be done in containment, so that they will not be any soil affected.
G. If the secondary containments are to be removed, the cement will be removed following cleaning. The clay liner under the concrete will be removed to a depth of 3 to 6 inches. The excavated soil will be screened by a licensed contractor who specializes in environmental sampling and testing.

   PID readings will be taken of all excavated soil. PID readings that are less than the background, have no odor or sign of contamination, i.e. staining, would be marked as clean. PID readings that are greater than the

background, are odorous or sign of contamination would be marked as contaminated. Each cubic yard box of soil will be screened as it is excavated.

Contaminated soil will be shipped off-site as hazardous waste to a permitted TSDF for disposal. Soil marked clean will remain on the site.

L.9. NR 664.0112(2)(e). Other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards include the following:

a. Run-on and run-off will be controlled during closure or partial closure by conducting all the closure or partial closure activities in contained areas. Tankers and roll-offs used for transporting hazardous waste and contaminated soil will be parked on pavement and in contained areas.

b. All contamination of wash waters and collected leachate above the wastewater standards indentified in Table 1 of NR 668.40 WI Admin Code would be managed as hazardous waste.

c. The Facility is located on a contaminated groundwater site. The monitoring activity for the groundwater cleanup would continue per a scheduled agreed upon with the Department.

d. There are four collection sumps at the facility. These would hold a maximum of 500 gallons. The liquid in the tanks would be tested to determine if they are hazardous in nature. If they are not, the water would be pumped out. If they were, the material would be sent to licensed TSDF.

L.10. NR 664.0178. During the period of closure or partial closure of the Facility, all hazardous waste, hazardous waste residues and cleaning materials will be removed from the containment system. Any remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed and disposed of properly.

LR.11. NR 664.0197(1). At the closure of a tank system, all hazardous waste, hazardous waste residues, contaminated containment system components, such as liners and contaminated soils will be removed and managed as hazardous waste. The equipment and other structures will be cleaned and decontaminated or cleaned and removed per the Closure Plan.

L.12. NR 664.0112(2)(f). Closure Schedule

The closure schedule outlined below is for 120 days. Because of the Facility's geographic location, the winter weather may increase the closure time an additional 60 days.

In a normal shutdown and closure, all material which could be processed would be reclaimed to minimize the amount of hazardous waste to be disposed. Material that could not be reclaimed would be fuel-blended or shipped off-site for disposal at a permitted TSDF.

Partial closure would be performed (as closure of an area) in accordance to the Closure Plan. The facility may still operate and continue to receive and process waste as long as it does not create a threat to the environment or human health.

0-30 DAYS

If the process equipment is functional, all material would be reclaimed or fuel blended. This would reduce the waste stored in tanks and in containers. If process equipment is not functional, all material would be shipped off-site as secondary fuel.

Equipment and lines will be flushed and that material placed in the fuel-blending tanks. The waste tanks and fuel-blending tanks would be pumped out and flushed. This material would go into a truck, such as a vacuum truck, and shipped off-site for proper disposal.

Drums containing waste material that could not be reclaimed would be sent off site for proper disposal. Disposal will be one of the following methods, in order of preference:

1. Reclamation
2. Secondary Fuel Generation
3. Incineration

30-90 DAYS

Clean floor of building of residue. Properly dispose of waste derived from the cleaning process. Remove contaminated soil, if any, and dispose of properly.

The clay liner from the contain storage area, and clay liners in the 200 and 400 tank storage farm will be analyzed. For the case of this closure, it will be assumed the top layer of clay will be removed to a depth of 3 to 6 inches. This would also be the case in partial closure of these areas.

90-120 DAYS

Test plant area to check completeness of closure plan. Decide on present and future groundwater monitoring.

L.13. NR 664.0112(2)(g). The Facility does not use a trust fund to establish financial assurance, therefore this does not apply.
L.14. NR 664.0112(2)(h). The Department has not applied alternative requirements for the Facility, therefore this does not apply.

L.15. NR 664.0112(4)(a). The Closure Plan will be submitted to the US EPA regional administrator and the Wisconsin Department of Natural Resources at least 180 days before the date of expected closure. Submittal will be made no later than 15 days after:

1. Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status; or

2. Issuance of judicial decree or compliance order to cease receiving wastes or to close.

L.16. NR 664.0113(1). Within 90 days after receiving the final volume of hazardous waste or 90 days after approval of Closure Plan, if that is later, Hydrite Chemical Co. will remove from the site, or dispose of on-site, all hazardous wastes in accordance with the approved Closure Plan.

The weather in the area of the country in which the Facility is located would be the cause of extending the closure time to 180 days. This affects the outside closure but all steps will be taken to prevent threats to human health and environment.

L.17. NR 664.0113(2). Final closure activities would be completed within 180 days after receiving the final volume of hazardous waste.

Partial closure of a section of the site would be 90 days or longer, where the Facility has the capacity to receive wastes.

L. 18. NR 664.0114. During the partial and final closure periods, all contaminated equipment, structures and soils would be properly disposed of or decontaminated. The Facility is also a Large Quantity Generator and would handle all generated waste in accordance with the applicable requirements found in NR 662. Equipment and structures that are to remain intact would be cleaned. Equipment that is dismantled would be sent as scrap to a metal recycler. Contaminated soils would be shipped off-site as hazardous waste. Soil that is analyzed and tests clean will remain at the site.

L.19. NR 664.0115. Within 60 days of completion of final closure, the Facility would submit to the Department, by registered mail, a certification that the hazardous waste management unit or Facility, as applicable, has been closed in accordance with the

specifications in the approved closure plan. The certification would be signed by the owner or operator, and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification shall be furnished to the Department upon request, until the Department releases the owner from the financial assurance requirements for closure under NR 664.0143(11).

SECTION M: CLOSURE COST ESTIMATE AND FINANCIAL RESPONSIBILITY

M.1 NR 664.0115 Written Closure Cost Estimate

Bulk Hazardous Waste is being disposed of in cement kilns at a contracted cost of $0.088/gallon. Transportation of the waste to the disposal site is presently at the flat rate of $0.36/gallon, for a total of $0.45/gallon shipped.

One hundred percent of the stored waste would be reclaimed by recycling or it would be fuel blended. The estimated cost for disposing of fuel blended waste for the maximum off-site total permitted, 176,500 gallons of ignitable waste @ $0.45/gallon is $79425. If process equipment was functional and the remaining waste was recycled, the bottoms from the process would be fuel-blended and the recycled material would be returned to the original generator.

If the Facility was being shut down completely, the closure cost schedule would also include a maximum of 39,500 gallons stored in the permitted fuel-blending tanks. These tanks also are ninety-day Large Quantity Generator tanks. 39,500 gallons @ $0.45/gallon is $17,775.

There are four collection sumps at the facility. These hold a maximum of 500 gallons. The liquid in the tanks would be tested to determine if they are hazardous in nature. If they are not, the water would be pumped out. If they were, the material would be sent to a disposal facility that handles organic contaminated waters. The cost for this would be 500 gallons @ $1.20/gallon or $600.

The rinsate from cleaning the container storage area and the two secondary containment areas is estimated to be approximately 6000 gallons of contaminated water. The cost of disposal for this would be 6000 @ $1.20/gallon or $7200.

The tank water blasting cleaning is projected to be approximately $6000 per tank. This rate includes the disposal of the waters generated.

The analytical costs for testing the rinsate from the tanks, secondary containment and container storage are estimated at $350/sample. This includes the testing for all waste codes accepted from off-site at the Facility.

The tank farms have concrete pads over two feet of packed clay. The concrete is periodically checked for cracks to ensure that no migration underneath is possible. Closure on this area would consist of analysis of the clay liner under the concrete bases. The vadose zone, under these tanks, is included in the remedial actions for the Facility.

The labor cost is consistent with the present wage rate for contracted labor. The administration cost is estimated to be 5% of the total closure cost. The contingency cost of the Facility should not be greater than 10% of closure costs.

M.2 NR 664.0142(1)(a). The closure cost estimate equals the cost of final closure at the point in the facilities active life when the extent and manner of its operation would make closure the most expensive. The closure cost estimate is adjusted annually for inflation.

An estimated Closure Cost Schedule for 2012 is included in **Appendix X.**

M.3. NR 664.0142(1(b). The closure cost estimate is based on hiring a third party to close the Facility.

M.4. NR 664.0142.(1)(c). The closure cost estimate does not incorporate nay salvage value that may be realized with the sale of hazardous wastes, or Facility structures or equipment, land or other assets associated with the Facility at the time of partial or final closure.

M.5. NR 664.0142(1)(d). The closure cost estimate does not incorporate a zero cost for hazardous wastes that might have economic value.

M.6. NR 664.0143. The Facility has established financial assurance for closure of the Facility via an irrevocable Letter of Credit.

M.7. NR 664.0143. The irrevocable letter of credit meets all the applicable requirements found in NR 664.0143 (4).

M.8. NR 670.014(2)(o). This is not a new Facility, therefore NR 670.014(20(o) does not apply.

SECTION N: POLLUTION LIABILITY INSURANCE

N.1. NR 670.014(2)(q). A copy of the Certificate of Insurance as required showing compliance with NR 664.0147 is found in **Appendix X.**

N.2. NR 664.0147(1). The financial responsibility covers bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the Facility.

N.3. NR 664.0147(1). The coverage for sudden accidental occurrences is at least $1,000,000 per occurrence with annual aggregate of at least $2,000,000.

N.4. NR 670.014(2)(q). This is not a new Facility, therefore this requirement does not apply.

PART II – UNIT REQUIREMENTS – CONTAINERS

SECTION A: CONTAINER STANDARDS – INSPECTIONS NR 670.014(2)(e)

A.1. NR 664.0174. Containers and their storage areas are inspected at least weekly as outlined in NR 664.0174 and NR 664.0015(1). A copy of the Daily Inspection, which includes the container storage area is located in **Appendix E.**

A.2. NR 664.0015(2)(d). The inspection of the container storage area is done every day the Facility is operating.

A.3. NR 664.1086, NR 670.014(2)(e). Containers for hazardous waste meet the U.S. Department of Transportation (DOT) regulations for packaging hazardous materials for transportation. The containers are inspected daily for leaking due to visible cracks, holes, gaps, or other open spaces into the interior of the container. If a leaking container is discovered, it is immediately overpacked, the contents are transferred to different containers or the contents are pumped out to the fuel-blending tanks. Containers are not stored at the Facility for a period of one year or more.

A copy of the Daily Inspection, which includes the container storage area is located in **Appendix E.**

A.4. NR 664.1088, NR 670.014(2)(e). Containers and their storage areas are inspected at least weekly as outlined in NR 664.0015(1) and 664.1088. Hydrite Chemical Co. conducts regular inspections of the facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to, release of hazardous waste constituents to the environment or pose a threat to human health. The inspection schedules are conducted often enough to identify problems in time to correct them before they harm human health or the environment.

A.5. NR 664.0015(20(d). The inspection of the container storage area is done every day the Facility is operating to prevent environmental or human health incidents.

SECTION B. CONTAINER STANDARDS – CONTAINMENT NR 670.015(1)

B.1 NR 664.0175(2)(a). The CE100 Warehouse floor is constructed of reinforced concrete and is maintained to be free of cracks, forming an impervious containment base to hazardous waste stored in the warehouse. The floor is constructed with 4000 psi concrete and reinforced with 6" x 6" No. 6 wire mesh. Maintenance of the floor is handled via the Asset Management Program (Maximo).

The container storage area is inspected each operating day for evidence of leaking drums, per NR 664.0174. Spills and leaking drums are corrected immediately upon detection.

B.2 NR 664.0175(2)(b). The floor of the Warehouse is not sloped. The Facility stores all hazardous waste on pallets. This practice to elevated the containers, is done both to prevent containers from contact with standing liquids in the containment system and for ease of transporting containers by forklift. The drums are stacked more than one high and 4' x 4' rigid sheets or wooden pallets are placed between the layers of drums.

B.3 NR 64.0175(2)(c). The design of the CE100 storage warehouse is detailed in **Appendix J**. The dimensions of the warehouse are 200' by 80' and the adjoining process building is 106' by 60' for a total of 22,360 square feet. Containment is achieved by six-inch high curbs or ramps at all the wall openings. Empty, the total containment is 80,671 gallons. The warehouse / process building is sprinkled for fire protection and the building containment is sufficient for release of material and fire water. The possibility of a total release of all containers is very remote, since only one or two drums of material would normally be involved in a spill.

Containment Calculations, CE100 Warehouse and Process Building

2000 drums x 55 gal. = 110,000 gallons; containment needed is 110,000 gallons x 0.10 = 11,000 gallons

Total containment – Displacement (tanks, supports, pumps, drums)	63,728 gallons
Fire Water (900/gal/min x 20 min)	18,000 gallons
Largest Tank Volume X 110%	13,750 gallons
Total Drum Volume X 10%	11,000 gallons

Note: Calculation based on drums stacked 3 high.

Containment needed for 2000 drums is 11,000 gallons. Combined Process Building and Warehouse has the capacity for 63,728 gallons.

B.4. NR 664.0175(2)(d). Covered warehouses eliminate run-on into the containment systems, therefore this does not apply.

B.5. NR 664.0175(2)(e). Leaking or compromised containers that release their contents will be addressed promptly with absorbent materials. Major spills will be recovered utilizing a portable pump. All spills are cleaned up promptly and disposed of in compliance with hazardous waste regulations. The containment system is designed and operated to capture released materials and the chemical release response procedures are to remove them in a timely manner to prevent overflow.

B.6. NR 664.0175(4). The Facility does not accept nor generate F020 – F023 and F026 – F027 wastes, therefore this does not apply.

B.7 NR 670.0151(1)(a). The design of the CE100 storage facility is detailed in **Appendix J.** The dimensions of the CE100 Warehouse are 200" by 80" and the adjoining process building is 106" by 60" for a total of 22.360 square feet. Containment is achieved by six-inch high curbs or ramps at all wall openings. There is no curb between the warehouse and the process building. The effective containment is 63,728 gallons.

The floor of the two areas is constructed of 4000 psi concrete and reinforced with 6" x 6" No. 6 wire mesh.

The containment required for the waste containers is 11,000 gallons. It is unlikely that a release of all 2000 drums would occur at the same time.

The working capacity of the process equipment is 10,200 gallons. However, the system is designed with alarms for conductivity, pressure and temperature parameters. If the system did over-pressurize, the materials would flow to a catch tank and not be released within the process building.

The largest storage tank in the adjoining process building is 12,500 gallons which would at 110% would require 13750 gallons of containment. To prevent migration of the material into the hazardous waste storage area, operators would put down adsorption socks, pads and floor dry to contain the release. The hazardous waste containers are stored on pallets to elevate them above any released materials. The materials used in the production area are not incompatible with the hazardous waste that is received at the Facility.

The Process Equipment is designed with pressure and temperature gauges, which are closely monitored by personnel. If pressure or temperatures exceeded the process parameters, alarms alert personnel. In the unlikely event that the process vessel would over pressurize, the material would flow to a catch release tank and not be released into the process building.

B.8. NR 670.015(1)(b). All hazardous waste containers are indoors in a covered warehouse. The containers are stored on pallets to keep them from contacting standing liquids.

B.9. NR 670.015(1)(c). Capacity calculations in relation to number and volume of containers stored

2000 drums x 55 gal. = 110,000 gallons; containment needed is 110,000 gallons x 0.10 = 11,000 gallons

Total containment (80,671 gallons) – Displacement (tanks, supports, pumps, drums) equals 63,728 gallons.

B.10. NR 670.015(1)(d). All hazardous waste containers are stored indoors in a covered warehouse. Therefore, additional provisions are not required for preventing or managing run-on.

B.11. NR 670.015(1)(e). Containers of hazardous waste are marked with a manifest number and a Profile number and an Authorization number. These numbers are linked to an Incoming waste analysis of the sample taken when the shipment arrived. All incoming waste shipments are analyzed per the Waste Analysis Plan, located in **Appendix D.** Drums that are leaking upon arrival will be overpacked and sampled according to standard operating procedures. Accumulated liquids from major releases will be vacuumed up with the pot still and the material transferred to the fuel blending tank, to prevent overflow. If it was a leaking drum or a smaller amount release, absorbents such as socks or pads would be used to clean up the spill. This waste would be transferred into a Satellite Accumulation Drum and shipped off-site for disposal.

B.12 NR 670.015(2). All containers of waste are stored on pallets to protect them from contact with accumulated liquid. **NR 664.0175(3).**

B.13. NR 670.015(2)(a). The Facility reclaims solvents by thin-film evaporation or distillation processes and fuel-blends solvents. Incoming containers of hazardous waste are opened for sampling and classification. Containers that do not contain free liquids are classified per the Sampling and Classification Procedure, located in **Appendix K.** The classification is recorded on the Receipt Authorization form. Containers of waste that cannot be reclaimed or fuel-blended, are shipped off-site for disposal.

B.14. NR 670.015(2)(b). All containers of waste are stored on pallets to protect them from contact with accumulated liquid. **NR 664.0175(3).**

Section C: Container Standards – Incompatible, Reactive, Ignitable Waste NR 670.015(3) and NR 670.015(4)

C.1. NR 664.0176. The Facility does not receive off-site incompatible or reactive waste. Ignitable waste is stored at least 50 feet from the Facility property line as demonstrated in the drawing located in **Appendix I.** The permitted site is enclosed by a fence, but the property line extends further south of the fence line, as shown in the topographical map. The Wisconsin Southern Railroad has access to the property on an easement south of the fence. The railroad tracks end just east of the Facility and are there only to service Hydrite Chemical Co.

C.2. NR 664.0177(3). Containers holding hazardous waste which is incompatible with any other stored material, will be separated by means of a dike, berm, wall, or other device, such as containment pallets. No incompatible wastes are accepted at the facility.

C.3 NR 670.015(4). The Facility does not receive incompatible wastes. NR 670.015(4), NR 664.0177(1) & (2), NR 664.0017(2) & (3), do not apply.

C.4 – C.10. NR 664.0017(2)(a-e), NR 664.0017(3), NR 664.0177(2). The Facility does not receive incompatible wastes, therefore these codes do not apply.

Section D: Tank Standards – General NR 670.016(2)

D.1. NR 670.016(2). A chart summarizing the dimensions and capacity of each tank is located **in Appendix J**. Contents of the hazardous waste tanks have the following properties:

Manufacturer's drawings are located in **Appendix Q.**

The tanks are each provided with top-mounted mixers to maintain any solid particulate material in suspension. The mixers are all equipped with totally enclosed fan-cooled explosion-proof electric motors.

Tanks sides are 3/16" carbon steel and bottoms are constructed of ¼" thick carbon steel plate with significant steel bracing. Exact specifications used in tank construction were in accordance with UL 142 standards. Since the tanks are significantly less than 50,000-gallon capacity and are not pressurized, the minimum shell thickness of the tanks will be considered 1/6" (0.167").

D.2. NR 670.016(3). The tanks are fed with the use of pumps, hard piping and dedicated hoses. There are pumps located throughout the Facility, including pumps mounted on tankers. Examples of the feed system would include, but not be limited to, the following: waste pumped from tankers into the storage tanks; a pump in the South Dock is used to evacuate drums in the South Dock room and transfer the waste via hard piping to a process feed tank or fuel blending tank; a pump is used to transfer waste from the receiving tank for the thin-film evaporation process via hard piping to the fuel-blending tanks. Pumps and hard piping is used to transfer the waste from the tanks to the thin-film evaporation process. The tank feed and transfer connections and piping all utilize two-inch pipes.

The piping system is designed for flexibility of operation and material transfer. Since the pump and piping feed systems are designed to permit transfers in many directions, an automatic waste feed cutoff system would be complex and would not be inclusive of all possible transfer arrangements. Therefore, it is the operational practice for Facility personnel to be trained on and attend all material transfer operations. Second operator checks are required to check the routing for all material transfers. Piping diagrams for the waste tanks are included in **Appendix R.**

The tanks are also fitted with check valves to prevent backflow.

All the tanks are provided with submerged bottom inlets and outlets. The first valve at each tank inlet or outlet is a fusible fire link safety shutoff valve.

For pressure control, the tanks are operated at atmospheric pressure and are provided with a minimum of one two-inch diameter vent pipe fitted with a flame arrestor, a vent to

the thermal oxidizer, and a conservation vent. The diurnal exhaust breathing or "upset" emissions are routed to the thermal oxidizer and the conservation vent is installed to provide a secondary vent path if the pressure in the line to the thermal oxidizer exceeds eight ounces pressure per square inch. The conservation vent pipe extends a maximum of four feet vertically above the tanks without any elbows or restrictions. Emergency escapement relief vents are mounted on each tank as required by the state code and built to lift at 1.0 psig in the event of fire exposure.

The tank filling and withdrawal connections and piping are all two-inch pipes. Normal tank venting is adequate in accordance with NFPA 30, "Flammable and Combustible Liquids code", 1984 edition, chapter 2, section 2.4, Article 2-2.4.2 which accepts normal tanks vents as adequate if at least as large as the filling or withdrawal connection, whichever is larger, but in no case less than, 1-1/4 inch nominal inside diameter. Also, the waste tank vent design is in compliance with the NFPA requirement of Article 2-2.4.6 requiring either listed flame arrestors or normally closed vent devise for tanks storing Class 1-B and 1-C liquids.

The 400 tank farm includes a catch release tank for any hazardous waste that may escape the conservation vents. This is a 500 gallon tank.

D.3. NR 664.0194(2)(a). Diagrams detailing the piping, instrumentation and process flow for each tank system are located in **Appendix 0.**

D.4. NR 664.0194(2)(a). The piping system is designed for flexibility of operation and material transfer. By utilizing quick connect fittings from the rigid headers, hose connections are made to route flows as desired for loading, unloading, transfers, and processing.

All tanks and piping are aboveground. The piping is located out of the line of the traffic way, and in some cases, is above the traffic way, and is supported to minimize damage, contact, and abrasion.

No material will back flow since the tank is filled through a check valve arrangement.

To prevent spills, it is the operational practice for a trained operator to attend all material transfer operations. High level alarms are also utilized in all the hazardous waste and fuel-blending tanks.

As part of administrative controls, operators are trained and follow standard operating procedures, such as the Tank Truck Bulk Unload SOP and the Bulk Unload and Material Transfer checklists, found **in Appendix S.**

Spill control starts with prevention. The Facility conducts an Investigative Procedure, which includes root cause analysis and corrective action. The goal of investigating all spills is to prevent future spills from occurring.

D.5. NR 664.0194.(2)(b). To prevent overfilling of tanks, the Facility utilizes a high level alarm system. All the waste storage tanks are equipped with a high level switch that is activated by a float when the level in the tank approaches the H (High) and the HH (Highest) levels. The HH level is set two feet below the tank being full, and the H level is set two feet below the HH position. The float activates a magnetic switch, which signals the computer and activates both visual and audible alarms. When the material reaches the H level, a red ALARM BANNER appears at the top of the Operator's computer screen, signaling that the H position has been reached. The waste material is now four feet from the top of the tank. At the HH level, a second red ALARM BANNER appears at the top of the Operator's computer screen, signaling that the HH level has now been reached. At this level, the magnetic switch activates both a visual and audio alarm in the Control Room. The Alarm Panel in the Control Room has each waste tank identified, so it is easy to discern which tank is at the HH position; an alarm will be sounding and the light for that tank will be lit with a red light.

In the event that the alarm sounds in the control room, the control room operator or supervisor will radio page to the entire facility to shut down the pump to the identified tank. The operator has time to shut down the pump in response to the high level alarm before the tank would overflow. No material would back flow since the tank is filled through a check valve arrangement.

The audio and visual alarms on the Alarm Panel in the Control Room are tested daily as part of the Daily Inspection.

The high level alarms are inspected per schedule in the Maximo Assessment Management System.

All alarm equipment is suitable for a Class I, Group D, division I electrical classification.

In addition to an alarm system, the Facility's policy and practice is for an operator to be in attendance during all material transfers. Calculations are required as to the capacity of a storage tank prior to the transfer. A Bulk Tank Transfer Checklist is found in **Appendix S.**

For another preventive measure in the 200 tank farm, the storage tanks are sized larger (6650 gallons) than the largest tanker (~6000 gallons) that delivers materials to be recycled. The recycle process is a batch process, which runs until the tank is empty. This is an inherent safety system that was designed into the hazardous waste process to prevent overfilling.

D.6. NR 664.0194(2)(c). All of the waste storage tanks have fixed covers, therefore this does not apply.

SECTION E: TANK STANDARDS – INSPECTIONS NR 670.014(2)(e)

E.1 NR 664.0195(l). The audio and visual alarms located in the Facility Control Room on the Alarm Panel are tested daily per the Daily Inspection form, located in **Appendix E.**

The high level alarm switches or level gauges are inspected monthly via the Maximo Asset Management System in accordance with The Spill Prevention, Control and Countermeasure Plan (SOPP ER003CE), located in **Appendix L.**

E.2. NR 664.1095(2)(a). The tank systems, including piping, are inspected at least once each operating day to detect corrosion or releases of waste. All the tanks are located above ground and are accessible. This is documented on the Daily Inspection form located **in Appendix E.**

E.3. NR 664.195(2)(c). The construction materials of the secondary containment and the area immediately surrounding the tank systems, are inspected each operating day, to detect erosion (cracks or broken cement) or signs of releases of hazardous waste (wet spots). The Daily Inspection form is located in **Appendix E.**

The area surrounding the secondary containment is paved. The secondary containment is coated with sealant. Preventative maintenance for repairing cracks and broken cement in the secondary containment and reapplying sealant is per schedule in the Maximo Asset Management System.

E.4. NR 664.0195(2)(b). Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.

The Facility conducts a daily visual inspection of the tank systems, looking for evidence of leaking equipment, signs of corrosion or deterioration that would threaten the integrity of the system. The inspections are then reviewed by a supervisor to determine if corrective action is required. The tanks are not equipped with pressure or temperature gauges.

E.5. NR 664.0195 (3)(a). The Facility has no underground tanks nor piping, therefore there is no cathodic protection system and this section does not apply.

E.6. NR 64.0195(30(b). Inspected and/or testing of cathodic protection system does not apply.

E.7. NR 670.014(2)(e). Inspection schedule for subch. CC tank requirements as stated in NR 664.1084 and NR 664.1088.

Hazardous waste storage tanks at the Facility that would otherwise be subject to **NR 664. Subch. CC (NR 664.1080(2)(g),** are equipped with and operating air emission controls according to the requirements **in 40 CFR 63, Subch. DD**, as outlined in the current source operation permit no. 113063390-P12. None of the hazardous waste storage tank systems utilize air emission controls that include an enclosure. Therefore this section does not apply.

The owner/operator certification is located in **Appendix AA.**

Storage Tanks Exempted based on NR 664.1080(2)(g)

HW Management Unit	Air Permit Tank No.	Hydrite Position No.	Original Construction Permit	Federal Code	Capacity Permitted	Max Organic kPa
Storage Tank	D-5	T212	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-4	T213	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-3	T214	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-2	T215	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-6	T218	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	C-8	T219	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	C-9	T220	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	C-7	T221	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-102	T241	93-MEO-408	40 CFR 63, subpart DD	25	76.6
Storage Tank	D-101	T242	93-MEO-408	40 CFR 63, subpart DD	25	76.6
*Fuel Blending <90 Day	T400a	T401	06-BAP-256	40 CFR 63, subpart DD	74.75	76.6
*Fuel Blending <90 Day	T400b	T402	06-BAP-256	40 CFR 63, subpart DD	74.75	76.6

*

E.8. NR 664.0015(2)(d). Inspection frequencies required by subch. CC for tanks adequate to prevent environmental or human health incidents.

The Facility is exempt from this requirement, therefore this does not apply.

SECTION F: TANK STANDARDS – EXISTING TANKS NR 670.016(1)

The Facility is not permitting any tank systems that were installed prior to March 1, 1991, therefore this section does not apply.

SECTION G: TANK STANDARDS – NEW TANKS NR 670.016(1), NR 670.016(6)

G.1. NR 670.016(1). A tank assessment for twelve identical storage tanks that were constructed in 1992 and installed in 1993, was reviewed and certified by James R. Meverden, an independent, qualified, registered PE as to the structural integrity and suitability for handling hazardous waste on 09/29/98. Tanks in positions T204, T205, T212, T213, T214, T215, T218, T221, T241, and T242 were for off-site storage of hazardous waste. Tanks in positions T219 and T220 were for Large Quantity Generator Waste.

The certification and assessment for these tanks are located in **Appendix BB.**

A tank assessment for two identical tanks that replaced fuel-blending tanks in positions T401 and T402 in 2007, was reviewed and certified by Farhad Mohsenian, an independent, qualified, registered PE as to the structural integrity and suitability for handling hazardous waste on 12/21/07.

The certification and assessment for these tanks are located in **Appendix BB.**

The tank assessments for storage tanks T212, T213, T214, T215, T218, T219, T220, T221, T241 and T242 and fuel-blending tanks T401 and T402 were reviewed and recertified by James R. Brachtl, an independent, qualified, registered PE on 11/4/2011.

The certification for these twelve tanks is located in **Appendix BB.**

G.2. NR 664.0192(1)(a). The calculations and design specifications used in the tanks construction were in accordance with the requirements of the Underwriter's Laboratories, Inc. (UL-142) standard for "Steel Aboveground Tanks for Flammable and Combustible Liquids" for joints, thickness calculations of the ends, shell, manhole, fittings, and testing. The tanks are stamped with the UL design standard reference. The tanks are 3/16" carbon steel and the bottom is constructed of ¼" thick carbon steel plant with significant steel bracing. The tanks are all less than 50,000 gallon capacity and are not pressurized.

All of the tanks have fixed covers. The tanks are operated at atmospheric pressure and are provided with a minimum of one two-inch diameter vent pipe fitted with a flame arrestor. The vent pipes extend a maximum of four feet vertically above the tanks without any elbows or restrictions. Relief vents are routed to the thermal oxidizer for emission control. Carbon drums are used as back-up in the event the thermal oxidizer is not operating.

The tank's filling and withdrawal connections and piping re all three-inch pipes. Normal tank venting is adequate in accordance with NFPA 30, "Flammable and Combustible

Liquid code.", 1984 edition, chapter 2, section 2.4, Article 2-2.2.4.2 which accepts normal tank vents as adequate if at least as large as the filling or withdrawal connection, whichever is larger, but in no case less than, 1-1/4 inch nominal inside diameter. The emergency escapement vents on the tanks is 8 inches, based on NFPA 30. Also, the waste tank vents design is in compliance with the NFPA requirements of Article 2-2.4.6 requiring either listed flame arrestors or normally closed vent devise for tanks storing Class 1-B and 1-C liquids.

All of the tanks are equipped with a top-mounted mixer to maintain any solid particulate material in suspension. The mixers are equipped with a totally enclosed fan-cooled explosion-proof electric motor.

G.3. NR 664.0192(1)(b). The Facility reclaims and fuel blends solvents with the hazardous characteristic of ignitability and those with no hazardous characteristics. Typical contents of the tanks will have the following properties:

Liquid Specific Gravity:	0.7 – 1.6
Molecular Weight:	30-190 lb/lb-mole
Flash Point (Tag closed cup):	4°F to above 200°F
pH	5.0 – 7.0
Vapor Pressure @60°F	nil – 5.5 psia

Additional vapor pressure data for typical solvents reclaimed is located in **Appendix P.**

G.4.-G.6. NR 664.0192(1)(c)1.a-e. The tank systems and their ancillary components are above ground and located in a secondary containment tank farm constructed of re-enforced concrete, and do not come in contact with the soil. Therefore NR 664.0192(1)(c)1a.-e. does not apply.

G.7. NR 664.0192(1)(c)1. There are no underground metal structures in the tank farms to influence the tanks and their ancillary components, therefore this does not apply.

G.8. NR 664.0192(1)(c)1. All of the tanks are grounded. The Facility conducts extensive quarterly inspections of the grounding/bonding mechanisms to prevent the existence of stray electric current. A copy of the inspection form is located in **Appendix E.**

G.9. NR 664.0192(1)(c)1. All of the tanks are painted with an alkyd-based paint which is recommended for corrosion protection. The coating is inspected annually per the Maximo Assessment Management System and reapplied as needed.

G.10 – G.13.. NR 664.0192(1)(c)2.a.-c. The Facility uses a corrosion-resistant coating in the form of an alkyd-based paint to ensure the integrity of the tanks during the use of the tank systems.

G.14. NR 664.0192(1)(d). All of the tanks and ancillary equipment are located above ground and therefore this does not apply.

G.15. NR 664.0192(1)(e)1. All waste storage tanks are placed on substantial reinforced concrete slabs poured on a compacted clay oil base for secondary containment. During the engineering of the original plant facilities and subsequent expansions, numerous soil borings were conducted by Warzyn Engineering Co., Madison, Wisconsin, to determine soil bearing capacity for foundation design. The soils in the tank farms areas and throughout most of the rest of the site were reported to have a minimum design load bearing capacity of 3,000 psi. Including the weight of the concrete slab and the worst case liquid specific gravity of 1.6, the waste tanks impose less than 10.42 psi over the area under the tank.

The concrete slabs are significantly over designed. The weight of the tanks is well-distributed over the area occupied by the tanks by the structural steel base frame of the tanks.

G.16. NR 664.0192(1)(e)2. The Facility is not located in a 100-year flood plain, therefore the danger of flotation or dislodgment is remote.

G.17. NR 664.0192(1)(e)3. The steel reinforcing and thick concrete slabs are provided to resist cracking due to the frost action in the clay soils under the concrete. The tank farms were installed in 1986 and since then, there has been no unusual cracking, heaving or stress failure. There has been no indication of frost heave since installation.

G.18 NR 664.0192(1). The foundation, structural support, seams, connections and pressure controls, are adequately designed to ensure the tank system will not collapse, rupture or fail.

The tank sides are 3/16" carbon steel and bottoms are constructed of ¼" thick carbon steel plate with significant steel bracing. Exact specifications used in the tanks' construction were in accordance with UL 142 standards, to ensure the tank system will not collapse, rupture or fail. The tanks are not pressurized, so pressure controls are not needed.

Manufacturer's drawings are included in **Appendix Q.**

G.19. NR 664.0192(1). The tank system has sufficient structural strength, compatibility with the wastes to e stored or treated and corrosion protection to ensure it will not collapse, rupture or fail.

The hazardous waste storage tanks are used to store ignitable solvents. The tanks are constructed of carbon steel which is compatible with ignitable solvents. Corrosion rates less than two (2) mils per year can be expected. This data is based on pure

components and the presence of water in the waste could enhance corrosion rates. However, the resins and solids in the waste tend to coat the inside of the tank and retard corrosion. No corrosive waste (pH <2 or >12.5) is stored in the tanks.

G.20. NR 670.016(6). All of the installations of the tanks were overseen by the tank manufacturer, International Production Specialists, who delivered the tanks and certified that the integrity of the tanks was not damaged when setting the tanks.

G.21. NR 664.0192(2). Prior to the installation of the tanks, the manufacturer, International Production Specialists, inspected the tank systems for weld breaks, punctures, scrapes, cracks, corrosion and other structural damage at the time of delivery and installation.

G.22. NR 664.0192(2). Any structural damage or inadequate construction discovered by International Production Specialists during deliver or installation was remedied before the tank system was covered and placed in use.

G.23. NR 664.0192(3). None of the tank systems are underground, so backfilling with noncorrosive, porous and homogeneous materials was not required. This requirement does not apply.

G.24. NR 664.0192(4). All tanks and ancillary equipment was tested for tightness prior to be covered, enclosed and placed in use.

G.25. NR 664.0192(4). Any of the tank systems that were found not to be tight, prior to the system being covered, enclosed and placed in use, were repaired to remedy the leaks in the system. There has not been any evidence of leaks since the tanks were installed.

G.26. NR 664.0192(5). The ancillary equipment was designed for this application and sits on top of the tank for support. The piping is protected against physical damage by being insulated and covered with aluminum jackets.

G.27. NR 664.0192(6). The tanks are painted white with an alkyd-based paint which is recommended for carbon steel tanks located geographically in an area that is exposed to weather elements found in Wisconsin.

G.28 NR 664.0192(6). At the time of installation, the tanks were painted by a third party contractor who specializes in industrial applications. The coating has been reapplied annually or as needed by third party contractors who specialize in corrosion protection systems to ensure proper installation.

SECTION H: TANK STANDARDS – SECONDARY CONTAINMENT NR 670.016(7) & NR 670.016(8)

H.1. NR 670.016(7). In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section is provided. The permitted waste storage tanks T212, T213, T214, T215, T218, T219, T220, T221, T241, and T242 are located in the 200 tank farm. The fuel-blending tanks, T401 and T402 are located in the 400 tank farm. Drawings of the tank farm areas are located in **Appendix U.** The secondary containment systems meet the requirements found in NR 664.0193(1-6).

H.2. NR 664.0193(2)(a). The secondary containment systems are designed, installed and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system. The tank farm bottom is concrete poured on a twelve-inch clay soil base.

The ten permitted waste tanks are 6650 gallons each. The effective containment for the 200 tank farm is 54,739 gallons, which is well above the containment needed, should an entire tank lose its contents into containment, which also contained precipitation.

The two permitted fuel-blending tanks are 19750 gallons each. The effective containment for the 400 tank farm is 109,938 gallons, which is well above the containment needed, should an entire tank lose its contents into containment, which also contained precipitation.

Drawings of the tank farm areas are located **in Appendix U.** The containment calculations for the 200 and 400 tank farms are located in **Appendix Q.**

H.3. NR 664.0193(2)(b). The secondary containment areas have sufficient containment capacity, and are capable of collecting releases and accumulated liquids until the collected material is removed. The floor of the diked area is sloped to drain to collection sumps to collect any spillage, leakage, or precipitation. Secondary containment is inspected each operating day, and if accumulating liquid is found, it is pumped dry as required.

H.4. NR 664.0193(3)(a). The secondary containment areas are constructed of cement poured over a twelve-inch clay base, and coated with a polyurethane sealant. Erosion of the containment areas is addressed and sealant reapplied annually per the Maximo Assessment Management System, or as needed.

H.5. NR 664.0193(3)(a). The tank systems are placed on a substantial reinforced concrete slab poured on a compacted clay oil base for secondary containment. The weight of the tanks is well-distributed over the area occupied by the tank system by the structural steel base frame of the tanks. Therefore, there is little movement stress in the concrete due to the weight of the tank. The steel reinforcing and thick concrete slabs are provided to resist cracking. The containment base has sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions in Wisconsin and the stress of daily operations.

H.6. NR 664.0193(3)(b). The tank systems are placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift. Numerous soil borings were conducted and the soils throughout the tank farm areas were reported to have a minimum design load bearing capacity of 3000 psi. Including the weight of the concrete slab and the worst case liquid specific gravity of 1.6, waste tanks impose less than 10.42 psi over the area under the tank.

Waste tank load on the ground under the tank:

Pressure = Force/area
Force = maximum tanker load volume X SG X density + load of the concrete + weight of the tank

Force = 6000 X 1.6 X 8.33 + 7974 + 7500 = 95442

Area under a nine foot diameter tank = Pi X diameter squared divided by 4

3.14 X 108 X 108 / 4 = 9160 inches

Pressure = 95442 lbs force / 9160 square inches = 10.42 lbs/square inch.

Warzyn Engineering, Inc. of Madison, WI conducted the study as a subsurface investigation for the construction of the North Process Building. The 200 Tank Farm was built in conjunction with the building. The documentation for this study is found in **Appendix CC.**

H.7 NR 664.0193(3)(c). The containment areas are inspected each operating day for visual signs there has been a release of hazardous waste or accumulated liquid in the secondary containment system. The Facility operates twenty-four hours per day, seven days per week. In the unlikely event that a release occurred into the containment, because of the high level alarm system, the material will be removed within 24 hours or in as timely a manner as possible.

H.8. NR 664.0193(3)(d). The floor of the diked area is sloped to drain to collection sumps to collect any spillage, leakage, or precipitation.

H.9. NR 664.0193(3)(d). Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment. If spilled or leaked waste and accumulated precipitation cannot be removed within 24 hours, it will be so noted on the daily inspection form and the reason why. Rainwater is discharged per the Rainwater Sampling, Analysis and Discharge SOP, located in **Appendix I.**

H.10. NR 670.016(7). The secondary containment system for each tank system is designed, constructed and operated to meet s. NR 664.0193 (1), (2), (3), (4), (5) and (6).

H.11. NR 664.0193(5)(a)1. The secondary containment system is designed to contain 100% of the capacity of the largest tank within its boundary.

The effective containment capacity of the 200 tank farm is 54,739 gallons, which surpasses the requirement for a projected installation of a 10,000 gallon tank.

The largest tank in the 400 tank farm is 20,000 gallons and the effective containment capacity is 109,938 gallons.

H.12. NR 664.0193(50(a)2. The secondary containment system is designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system.

The storage tanks are located in diked containment. The diking controls run on. Run on is prevented by the outer containment walls, where the lowest point is eleven inches. In addition, there are containment pits in the North Truck Dock next to the 200 tank farm and the Southeast Truck Dock next to the 400 tank farm. These containment areas can collect 10,263 and 5618 gallons, respectively, to prevent infiltration of precipitation into the secondary containment.

The containment areas have an effective containment of 54,739 gallons in the 200 tank farm and 109,938 gallons in the 400 tank farm to collect precipitation.

The additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event. Per the Southeastern Wisconsin Regional Planning Commission, Technical Report No. 40, the 25-year, 24-hour precipitation depth is 4.41 inches.

H.13. NR 664.0193(5)(a)3. The secondary containment system is maintained to be free of cracks and gaps. The containment system is inspected per schedule and repaired annually or as needed, when indicated on the daily inspection form.

H. 14. NR 664.0193(5)(a)4. The secondary containment system is designed to completely surround the tanks systems. There is no exposed soil within the tank farm. The areas outside the containment areas are paved. Therefore, if there was a lateral and/or vertical migration of waste from the tank or tank system, no earth would come in contact with the waste.

H.15 – H.21. NR 670.016(7). The Facility does not have vault systems for the tank systems, therefore this section does not apply.

H.22 – H25. NR 670.016(7). The Facility does not have double-walled tanks systems, therefore this section does not apply.

H.26. NR 664.0193(6). The ancillary equipment and piping is located above ground and is visually inspected daily for leaks. It is contained within the secondary containment areas. The piping is joined by standard pipe threads or welded fittings. The Facility follows B31.3 ASME for required piping code and standards.

H.27 – H28. NR 670.016(8)(a&b). The Facility is not seeking an alternative to the requirements of this section, therefore, these do not apply.

SECTION I: TANK STANDARDS – IGNITABLE, REACTIVE AND INCOMPATIBLE WASTES NR 670.016(10)

I.1. NR 664.0198(1)(a)1. The Facility does not receive nor treat any reactive or incompatible waste. Ignitable waste is not treated, rendered or mixed before or immediately after placement in any tank system so that the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable.

I.2. NR 664.0198(1)(a)2. The Facility reclaims and fuel blends ignitable waste in compliance with **NR 664.0017 (2).**

1.3. – I.7. NR 664.0017(2)(a)-(e). The Facility takes precautions to prevent reactions which do any of the following:

(a) Generate extreme heat or pressure, fire or explosions or violent reactions.

(b) Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or the environment.

(c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.

(d) Damage the structural integrity of the device or facility.

(e) Through other like means threaten human health or the environment.

The precautions taken are outlined in a number of Standard Operating Policies and Procedures the Facility uses for working with ignitable materials. These SOPPs include but are not limited to, "Flammable and Combustible Liquids", "Fire Prevention/Protection Plan", "Grounding and Bonding", and "Hot Work Permits."

The SOPPs are located in **Appendix H.**

Prior to placing material in a tank, a sample is taken and analyzed and only approved and compatible wastes are accepted, per the Waste Analysis Plan and Hydrites Quality Assurance Program.

Material that is being transferred to a tank system which already contains waste, such as material being transferred to the fuel-blending tanks, will have a compatibility test done.

I.8. NR 664.0017(3). The Facility only accepts ignitable waste for reclamation and fuel-blending. No reactive or incompatible wastes are accepted. The documentation which demonstrates compliance includes preshipment (sales) sample and incoming sample analyses. The samples are analyzed per the Waste Analysis Plan and Hydrites Quality Assurance Program. These documents are located in **Appendix D.**

Whenever a tank is to be used to store or blend a waste which is substantially different from waste previously stored in that tank, the Facility shall conduct waste analyses and/or a compatibility test prior to transfer.

The "Testing for Fuel Compatibility" SOP is located in **Appendix D.**

I.9 – I.10. NR 664.0198(1)(b) & (c). An alternative to NR 664.0017(2) is not being taken, therefore this section does not apply.

I.11. NR 664.0198(2). All of the hazardous waste storage tanks may be used for ignitable waste. In accordance with NFPA 30, "Flammable and Combustible Liquids Code", Table 2.1 to 2.6, the minimum buffer zone requirements for the tanks are:

1. Tanks must be located a minimum of 15 feet from the property line which is or can be built upon, including the opposite side of a public way.

2. Tanks must be located a minimum of 5 feet from nearest side of any public way or from nearest important building on the same property.

The tank locations as detailed **in Appendix U** are in compliance with the above buffer zone requirements.

I.12. NR 664.0199(1). The Facility does not store incompatible wastes, therefore this section does not apply.

I.13. NR 664.0199(2). Hazardous waste is not placed in a tank system that previous held an incompatible waste, therefore this section does not apply.

PART II – UNIT REQUIRMENTS FOR MISCELLANEOUS UNITS

Hydrite Chemical Co. does not have any miscellaneous units on site, therefore this section does not apply.

PART III – SUBPART AA

K.1 NR 670.024(2) Per NR 664.0103(5), Subchapter AA does not apply to process vents where the Facility certifies that vents are equipped with air emission controls as required in another standard. The Facility operates under Title V Air Permit No. 113063390-P12. The Statement of Certification is located **in Appendix AA.**

Equipment subject to NR 664 and NR 670 that is covered under Title V Air Permit

Air Permit ID No.	Hydrite ID No.
P02	Distillation Column 3
P03	Distillation Column 2
P01	Distillation Column 1
P11	Luwa 1
P12	Luwa 3
P30	Luwa 4
P07	Vacuum Pot
P42	Hazardous Waste Storage Tanks T212, T213, T214, T215, T218, T219, T220, T221, T241, T242
P44	Fuel Blending Tanks T401, T402

K.2 – K.14. NR 670.024(2) – NR 670.024(3). These sections are covered under the Facility's Title V Air Permit No. 113063390-P12.

PART III – SUBPART BB

Section L: Subch. BB – Air Emission Control Standards for Equipment NR 670.025

L.1. – L.7 For each piece of equipment subject to subch. BB, the information in L.2. – L.7. NR 670.025(1)

The following items are included in the Subch. BB Master Equipment List, located in **Appendix DD.**

(a) The equipment identification number and hazardous waste management unit identification.
(b) The approximate location within the facility, as identified on the Facility Plot Plan
(c) The type of equipment
(d) The percent by weight total organics in the hazardous waste stream at each piece of equipment
(e) The hazardous waste state (gas, vapor, etc.) at each piece of equipment
(f) The method of compliance with the applicable subch. BB standard.

L.8. NR 664.1064; NR 670.025(4). Documentation demonstrating compliance with the equipment standards in NR 664.1052 – 664.1059, including records required by NR 664.1064. NR 670.025(4).

The records used for documentation include the RCRA Subch. BB Master Equipment List, the Maximo Asset Management System, the Monthly, Semi-annual and Annual Inspections and Stack Test results.

Documentation demonstrating compliance with equipment standards is included in the Leak Detection and Repair manual. (The Facility has contracted with Sage Environmental Consulting who is preparing the manual.)

L.9. NR 670.025(4). Additional documentation necessary to determine compliance with the subch. BB standards.

No additional documentation has been requested by the Department.

L.10 NR 670.025(5). The documentation demonstrating compliance with NR 664.1060, which includes the information in L.11 – L.17, is found in the Thermal Oxidizer Design Analysis, located in **Appendix DD.**

L.11 NR 670.025(5)(a). The Sources used to prepare the documentation are:

C&H Engineers, p.c.
Earthtech
MEGTEC

L.12. NR 670.025(5)(b). As required by **NR 664.1033(10),** the most recent thermal oxidizer performance test was conducted on December 23, 2008. The Stack Report is located in **Appendix DD.**

L.13. NR 670.025(5)(c). The design analysis, specifications, drawings, schematics and piping and instrumentation diagrams can be referenced in the design analysis documentation from C & H Engineers and the performance testing results.

L.14. NR 670.025(5)(c). The design analysis documentation from C & H Engineers addresses the vent stream characteristics and control device operation parameters in **NR 664.1035(2)(d)3.**

L.15. NR 670.025(5)(d). Statement signed and dated by the owner/operator certifying the operating parameters used in the design analysis reasonably represent the conditions when the unit is operating at the highest capacity level reasonably expected to occur.

The Statement of Certification, signed by Paul Honkamp on 8/25/99, is located in **Appendix AA.**

L.16. NR 670.025(5)(e). Statement signed and dated by the owner/operator certifying the control device is designed to operate at an efficiency of >95 weight %.

The 2008 Thermal Oxidizer performance test results report is located in **Appendix DD.** The cover letter is signed and dated by Angela Watry on March 20, 2009.

L.17. NR 670.025(3). The Facility is not applying to use an alternate control device, therefore this does not apply.

PART III – SUBPART CC

M.1 NR 664.1084(4)(a) or (b). NR 670.027(1)(a). Hydrite has a Title V Operating Permit, no. 113063390-P12, and certifies that all hazardous waste storage tanks and fuel-blending tanks are equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act (40 CFR part 60) and 40 CFR part 63 Subpart DD).

The certification statement is located in **Appendix AA.**

M.2. NR 670.027(1)(b). Container waste is stored in the CE100 warehouse, as identified on the facility drawing in **Appendix U.**

M.3. NR 670.027(1)(b). Hydrite Chemical Co. certifies that the requirements of subch. CC is being met for container storage areas.

The certification statement is located in **Appendix AA.**

M.4. Containers: NR 664.1086(5)(a)(2. This requirement does not apply. There are no containers that are vented inside an enclosure which is exhausted through a closed-vent system to a control device.

Tanks: NR 664.1084(4)(e). NR 670.027(1)(c). These requirements do not apply. There are no tanks located inside an enclosure.

Appendix A

OMB# 2050-0024; Expires 11/30/2011

SEND MPLETED ORM TO: The Appropriate State or Regional Office.

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for Submittal (MARK ALL BOX(ES) THAT APPLY)

Reason for Submittal:

- ☐ To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)
- ☒ To provide a Subsequent Notification (to update site identification information for this location)
- ☐ As a component of a First RCRA Hazardous Waste Part A Permit Application
- ☐ As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #_____)
- ☐ As a component of the Hazardous Waste Report (If marked, see sub-bullet below)
  - ☐ Site was a TSD facility and/or generator of ≥1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)

2. Site EPA ID Number

EPA ID Number: W I D 0 0 0 8 0 8 8 2 4

3. Site Name

Name: HYDRITE CHEMICAL CO.

4. Site Location Information

Street Address: 114 N. MAIN STREET

City, Town, or Village: COTTAGE GROVE | County: DANE

State: WISCONSIN | Country: USA | Zip Code: 53527

5. Site Land Type

☐ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

NAICS Code(s) for the Site (at least 5-digit codes)

A. 3 2 5 1 9 9 | C.

B. 5 6 2 2 1 1 | D.

7. Site Mailing Address

Street or P.O. Box: SAME AS ITEM 4.

City, Town, or Village: COTTAGE GROVE

State: WISCONSIN | Country: USA | Zip Code: 53527

8. Site Contact Person

First Name: JOSEPH | MI: J. | Last: WEISHAR

Title: VICE PRESIDENT OF OPERATIONS

Street or P.O. Box: 114 N. MAIN STREET

City, Town or Village: COTTAGE GROVE

State: WISCONSIN | Country: USA | Zip Code: 53527

Email: joe.weishar@hydrite.com

Phone: (608) 839-8100 | Ext.: 8111 | Fax: (608) 839-4293

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner: HYDRITE CHEMICAL CO. | Date Became Owner: 01/01/1970

Owner Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

Street or P.O. Box: 300 N. PATRICK BLVD.

City, Town, or Village: BROOKFIELD | Phone: (262) 792-1450

State: WISCONSIN | Country: USA | Zip Code: 53008-0948

B. Name of Site's Operator: HYDRITE CHEMICAL CO. | Date Became Operator: 01/01/1970

Operator Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

9. Type of Regulated Waste Activity (at your site)
Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-7.

Y ☒ N ☐ **1. Generator of Hazardous Waste**
If "Yes", mark only one of the following – a, b, or c.

- ☒ a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs./mo.) or more of hazardous waste; **or** Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs./mo) of acute hazardous waste; **or** Generates, in any calendar month, **or** accumulates at any time, more than 100 kg/mo (220 lbs./mo) of acute hazardous spill cleanup material.
- ☐ b. SQG: 100 to 1,000 kg/mo (220 – 2,200 lbs./mo) of non-acute hazardous waste.
- ☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo) of non-acute hazardous waste.

If "Yes" above, indicate other generator activities.

Y ☐ N ☒ d. Short-Term Generator (generate from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.

☒ N ☐ e. United States Importer of Hazardous Waste

☐ N ☒ f. Mixed Waste (hazardous and radioactive) Generator

Y ☐ N ☒ **2. Transporter of Hazardous Waste**
If "Yes", mark all that apply.
- ☐ a. Transporter
- ☐ b. Transfer Facility (at your site)

Y ☒ N ☐ **3. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste permit is required for these activities.

Y ☒ N ☐ **4. Recycler of Hazardous Waste**

Y ☐ N ☒ **5. Exempt Boiler and/or Industrial Furnace**
If "Yes", mark all that apply.
- ☐ a. Small Quantity On-site Burner Exemption
- ☐ b. Smelting, Melting, and Refining Furnace Exemption

Y ☐ N ☒ **6. Underground Injection Control**

Y ☒ N ☐ **7. Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2.

Y ☒ N ☐ **1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes", mark all that apply.**

a. Batteries	☒
b. Pesticides	☐
c. Mercury containing equipment	☐
d. Lamps	☒
e. Other (specify) _____	☐
f. Other (specify) _____	☐
g. Other (specify) _____	☐

Y ☐ N ☒ **2. Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

Y ☐ N ☒ **1. Used Oil Transporter**
If "Yes", mark all that apply.
- ☐ a. Transporter
- ☐ b. Transfer Facility (at your site)

Y ☐ N ☒ **2. Used Oil Processor and/or Re-refiner**
If "Yes", mark all that apply.
- ☐ a. Processor
- ☐ b. Re-refiner

Y ☐ N ☒ **3. Off-Specification Used Oil Burner**

Y ☐ N ☒ **4. Used Oil Fuel Marketer**
If "Yes", mark all that apply.
- ☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- ☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

- You must check with your State to determine if you are eligible to manage laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

☐ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories **See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:**

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

☐ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. **Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D002	D004	D005	D006	D007	D008
D009	D010	D011	D018	D019	D021	D022
D023	D024	D025	D026	D028	D029	D035
D036	D038	D040	D043	F003	F005	U002
U003	U019	U031	U057	U088	U112	U140
U154	U159	U161	U213	U220	U239	

B. **Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes.** Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

NONE						

12. Notification of Hazardous Secondary Material (HSM) Activity

Y☐ N☑ Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

Additional contact: Janice K Housley, Facility Compliance Coordinator, Hydrite Chemical Co., 114 N. Main Street,

Cottage Grove, WI Dane County, USA, 53527

Email: jan.housley@hydrite.com

Phone: 608-839-8110

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	JOSEPH J. WEISHAR; VP of OP	5/31 2017

PA ID Number W I D 0 0 0 8 0 8 8 2 4 OMB#: 2050-0024; Expires 11/30/2011

ADDENDUM TO THE SITE IDENTIFICATION FORM:
NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY

Before filling out this section:

- You must check with your State to determine if you are eligible to manage hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25). (See also http://www.epa.gov/epawaste/hazard/dsw/statespf.htm.)
- You must be managing hazardous secondary material, which is secondary material (e.g., spent material, by-product, or sludge) that when discarded, would be identified as hazardous waste under 40 CFR Part 261. Do not include any information regarding your hazardous wastes in this section.
- You must submit a completed Site Identification Form, including this Addendum, prior to operating under the exclusion(s) and by March 1 of each even-numbered year thereafter to your regulatory authority using the Site Identification Form as pursuant to 40 CFR 260.42. Persons who must staisfy this notification requirement can submit information at the same time as their Biennial Report (which is also due by March 1 of each even-numbered year).
- If you stop managing hazardous secondary material in accordance with the exclusions(s) and do not expect to manage any amount of hazardous secondary material under the exclusions(s) for at least one year, you must also submit a completed Site Identification Form, including this Addendum, within thirty (30) days pursuant to 40 CFR 260.42.

1. **Indicate reason for notification. Include dates where requested.**

☐ Notifying that the facility will begin managing hazardous secondary material as of _____ (mm/dd/yyyy).

☐ Re-notifying that the facility is still managing hazardous secondary material.

☐ Notifying that the facility has stopped managing hazardous secondary material as of _____ (mm/dd/yyyy).

2. **Description of hazardous secondary material (HSM) activity.** Please list the appropriate codes and quantities in **short tons** to describe your hazardous secondary material activity ONLY (do not include any information regarding your hazardous wastes in this section). Use additional pages if more space is needed.

a. **Facility code** (answer using codes listed in the Code List section of the instructions)	b. **Waste code(s) for hazardous secondary material (HSM)**	c. **Estimated short tons of HSM to be managed annually**	d. **Actual short tons of HSM that was managed during the most recent odd-numbered year**	e. **Land-based unit code** (answer using codes listed in the Code List section of the instructions)

3. **Facility has financial assurance pursuant to 40 CFR 261 Subpart H.** (Financial assurance is required for reclaimers and intermediate facilities managing hazardous secondary material under 40 CFR 261.4(a)(24) and (25))

☐ N ☐ Does this facility have financial assurance pursuant to 40 CFR 261 Subpart H?

EPA ID Number | W | I | D | 0 | 0 | 0 | 8 | 0 | 8 | 8 | 2 | 4 |

OMB#: 2050-0034; Expires 7/31/2012

United States Environmental Protection Agency

HARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact	**First Name:** JOSEPH	**MI:** J.	**Last Name:** WEISHAR
	Contact Title: VICE PRESIDENT OF OPERATIONS		
	Phone: (608) 839-8100	**Ext.:** 8111	**Email:** joe.weishar@hydrite.com
2. Facility Permit Contact Mailing Address	**Street or P.O. Box:** SAME AS ITEM 4.		
	City, Town, or Village: COTTAGE GROVE		
	State: WISCONSIN		
	Country: USA	**Zip Code:** 53527	
3. Operator Mailing Address and Telephone Number	**Street or P.O. Box:** 114 N. MAIN STREET		
	City, Town, or Village: COTTAGE GROVE		
	State: WISCONSIN	**Phone:** 608-839-8100	
	Country: USA	**Zip Code:** 53527	
4. Facility Existence Date	**Facility Existence Date (mm/dd/yyyy):** 01/01/1970		

5. Other Environmental Permits

A. Facility Type (Enter code)	B. Permit Number	C. Description
R	WID008088244	RCRA PERMIT; PART A & B
P	113063390-P01	TITLE V AIR PERMIT
R	3 2 5 1 9 9	HAZARDOUS WASTE STORAGE - CONTAINER
R	5 6 2 2 1 1	HAZARDOUS WASTE TREATMENT - TANK
R		HAZARDOUS WASTE STORAGE - TANK
P	99-BAP-910	AIR (REACTORS)
P	00-BAP-942	AIR (BLEND TANKS, TANKS, CENTRIFUGE)
P	01-BAP-968	AIR (REACTOR, TANKS)
N	IP-26	INDUSTRIAL WASTEWATER DISCHARGE PERMIT
N	NTO-86E	WASTEWATER DISCHARGE PERMIT
N	WI-S067857-3	WPDES INDUSTRIAL STORM WATER DISCHARGE

6. Nature of Business:

HYDRITE CHEMICAL CO. IS A RECLAMATION FACILITY THAT RECYCLES OFF-SITE HAZARDOUS WASTE VIA THIN-FILM EVAPORATION AND DISTILLATION. OFF-SITE WASTES ARE ALSO FUEL-BLENDED (COMMINGLED WITH LQG WASTE) FOR USE AS SECONDARY FUEL FOR THE CEMENT KILN INDUSTRY.

7. Process Codes and Design Capacities – Enter information in the Section on Form Page 3

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.

B. PROCESS DESIGN CAPACITY – For each code entered in Item 7.A; enter the capacity of the process.

1. AMOUNT – Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
2. UNIT OF MEASURE – For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS – Enter the total number of units for each corresponding process code.

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
Disposal		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet; Hectares-meter; Acres; Cubic Meters; Hectares; Cubic Yards
D81	Land Treatment	Acres or Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards
D99	Other Disposal	Any Unit of Measure Listed Below
Storage		
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment	Gallons; Liters; Cubic Meters; or Cubic Yards
S05	Drip Pad	Gallons; Liters; Cubic Meters; Hectares; or Cubic Yards
	Containment Building Storage	Cubic Yards or Cubic Meters
S99	Other Storage	Any Unit of Measure Listed Below
Treatment		
T01	Tank Treatment	Gallons Per Day; Liters Per Day
T02	Surface Impoundment	Gallons Per Day; Liters Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; or Million BTU Per Hour

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity (for T81 – T94)
Treatment (Continued)		
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour; Kilograms Per Hour; or Million BTU Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, or Refining Furnace	
T88	Titanium Dioxide Chloride Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid	
T92	Halogen Acid Furnaces	
T93	Other Industrial Furnaces Listed in 40 CFR 260.10	
T94	Containment Building Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTU Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
Miscellaneous (Subpart X)		
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; or Million BTU Per Hour
X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
X99	Other Subpart X	Any Unit of Measure Listed Below

Unit of Measure	Unit of Measure Code
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
[illegible]rs	L
[illegible]rs Per Hour	H
Liters Per Day	V

Unit of Measure	Unit of Measure Code
Short Tons Per Hour	D
Short Tons Per Day	N
Metric Tons Per Hour	W
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	X
Million BTU Per Hour	X

Unit of Measure	Unit of Measure Code
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
BTU Per Hour	I

Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 7 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	(2) Unit of Measure	C. Process Total Number of Units	For Official Use Only
X	1	S	0	2	533.788	G	001	
	1	S	0	1	110,000	G	2000 DRUMS	
	2	S	0	2	66500	G	10 TANKS	
	3	T	0	1	19750	G	2 TANKS	
	4							
	5							
	6							
	7							
	8							
	9							
1	0							
1	1							
1	2							
1	3							

Note: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the line sequentially, taking into account any lines that will be used for "other" process (i.e., D99, S99, T04, and X99) in Item 8.

8. Other Processes (Follow instructions from Item 7 for D99, S99, T04, and X99 process codes)

Line Number (Enter #s in sequence with Item 7)		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	(2) Unit of Measure	C. Process Total Number of Units	For Official Use Only
X	2	T	0	4	100.00	U	001	

9. Description of Hazardous Wastes - Enter Information in the Sections on Form Page 5

A. EPA HAZARDOUS WASTE NUMBER – Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY – For each listed waste entered in Item 9.A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Item 9.A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE – For each quantity entered in Item 9.B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all listed hazardous wastes.

For non-listed waste: For each characteristic or toxic contaminant entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item 9.D(1).
3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 9.E.

2. PROCESS DESCRIPTION: If code is not listed for a process that will be used, describe the process in Item 9.D(2) or in Item 9.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in Item 9.A. On the same line complete Items 9.B, 9.C, and 9.D by estimating the total annual quantity of the waste and describing all the processes to be used to store, treat, and/or dispose of the waste.
2. In Item 9.A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Item 9.D.2 on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 9 (shown in line numbers X-1, X-2, X-3, and X-4 below) – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

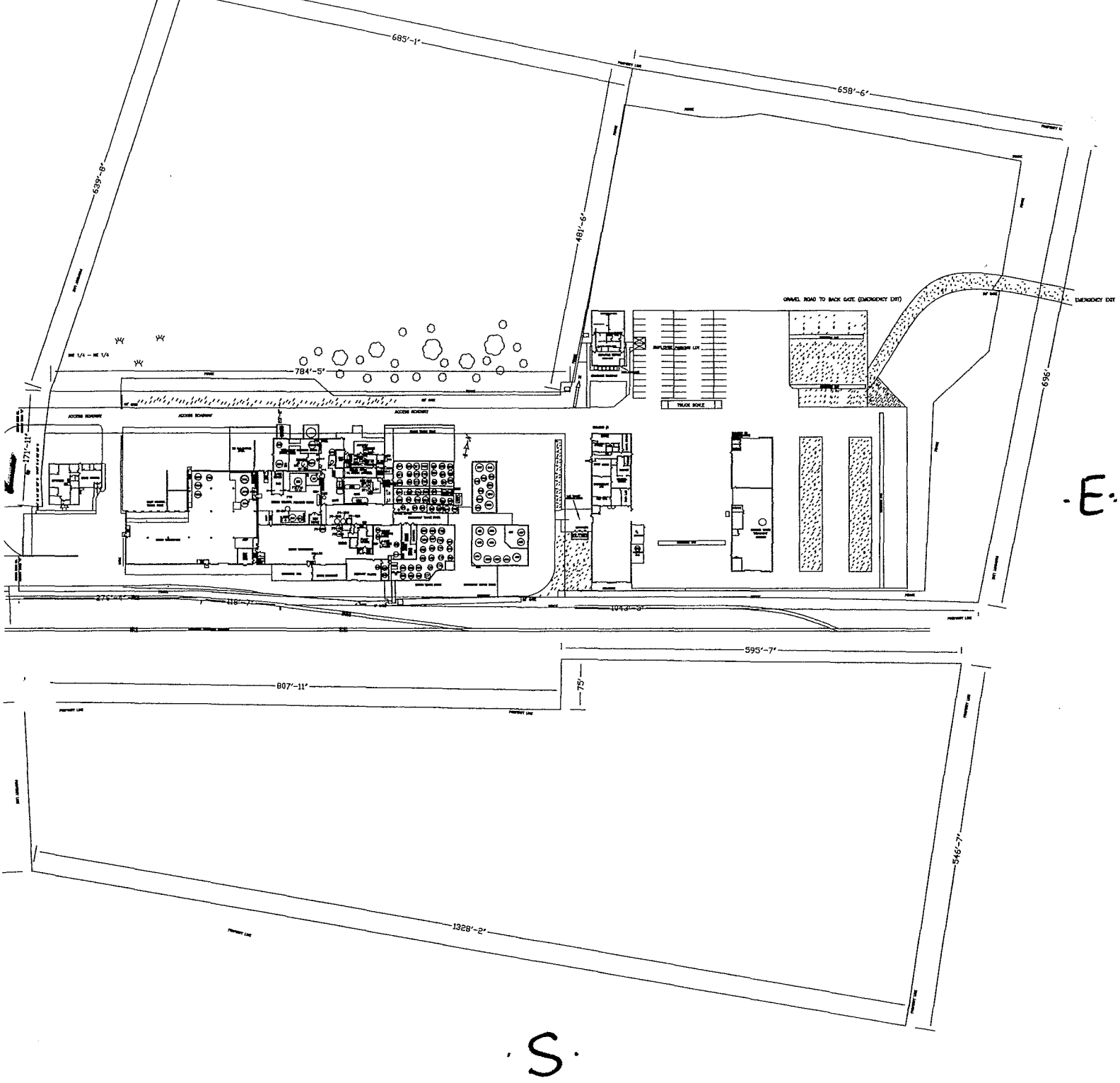
Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter Code)								(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))
X	1	K	0	5	4	900	P	T	0	3	D	8	0			
X	2	D	0	0	2	400	P	T	0	3	D	8	0			
X	3	D	0	0	1	100	P	T	0	3	D	8	0			
	4	D	0	0	2											Included With Above

Description of Hazardous Wastes *(Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)*

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter Code)									(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))
	1	F	0	0	5	7600000	P	S	0	1	S	0	2	T	0	1	
	2	F	0	0	3	4500000	P	S	0	1	S	0	2	T	0	2	
	3	D	0	0	1	5900000	P	S	0	1	S	0	2	T	0	2	
	4	D	0	0	2		P	D	9	9							SHIP OFF-SITE
	5	D	0	0	4												INCLUDED ABOVE
	6	D	0	0	5												INCLUDED ABOVE
	7	D	0	0	6												INCLUDED ABOVE
	8	D	0	0	7												INCLUDED ABOVE
	9	D	0	0	8												INCLUDED ABOVE
1	0	D	0	0	9												INCLUDED ABOVE
1	1	D	0	1	0												INCLUDED ABOVE
1	2	D	0	1	1												INCLUDED ABOVE
1	3	D	0	1	8												INCLUDED ABOVE
1	4	D	0	1	9												INCLUDED ABOVE
1	5	D	0	2	1												INCLUDED ABOVE
1	6	D	0	2	2												INCLUDED ABOVE
1	7	D	0	2	3												INCLUDED ABOVE
1	8	D	0	2	4												INCLUDED ABOVE
1	9	D	0	2	5												INCLUDED ABOVE
2	0	D	0	2	6												INCLUDED ABOVE
2	1	D	0	2	8												INCLUDED ABOVE
2	2	D	0	2	9												INCLUDED ABOVE
2	3	D	0	3	5												INCLUDED ABOVE
2	4	D	0	3	6												INCLUDED ABOVE
2	5	D	0	3	8												INCLUDED ABOVE
2	6	D	0	4	0												INCLUDED ABOVE
2	7	D	0	4	3												INCLUDED ABOVE
2	8	U	0	0	2												INCLUDED ABOVE
2	9	U	0	0	3												INCLUDED ABOVE
3	0	U	0	1	9												INCLUDED ABOVE
3	1	U	0	3	1												INCLUDED ABOVE
3	2	U	0	5	7												INCLUDED ABOVE
3	3	U	0	8	8												INCLUDED ABOVE
3	4	U	1	1	2												INCLUDED ABOVE
	5	U	1	4	0												INCLUDED ABOVE
3	6	U	1	5	4												INCLUDED ABOVE

9. Description of Hazardous Wastes *(Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)*

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter Code)									D. PROCESSES (2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
3	7	U	1	5	9												INCLUDED ABOVE
3	8	U	1	6	1												INCLUDED ABOVE
3	9	U	2	1	3												INCLUDED ABOVE
4	0	U	2	2	0												INCLUDED ABOVE
4	1	U	2	3	9												INCLUDED ABOVE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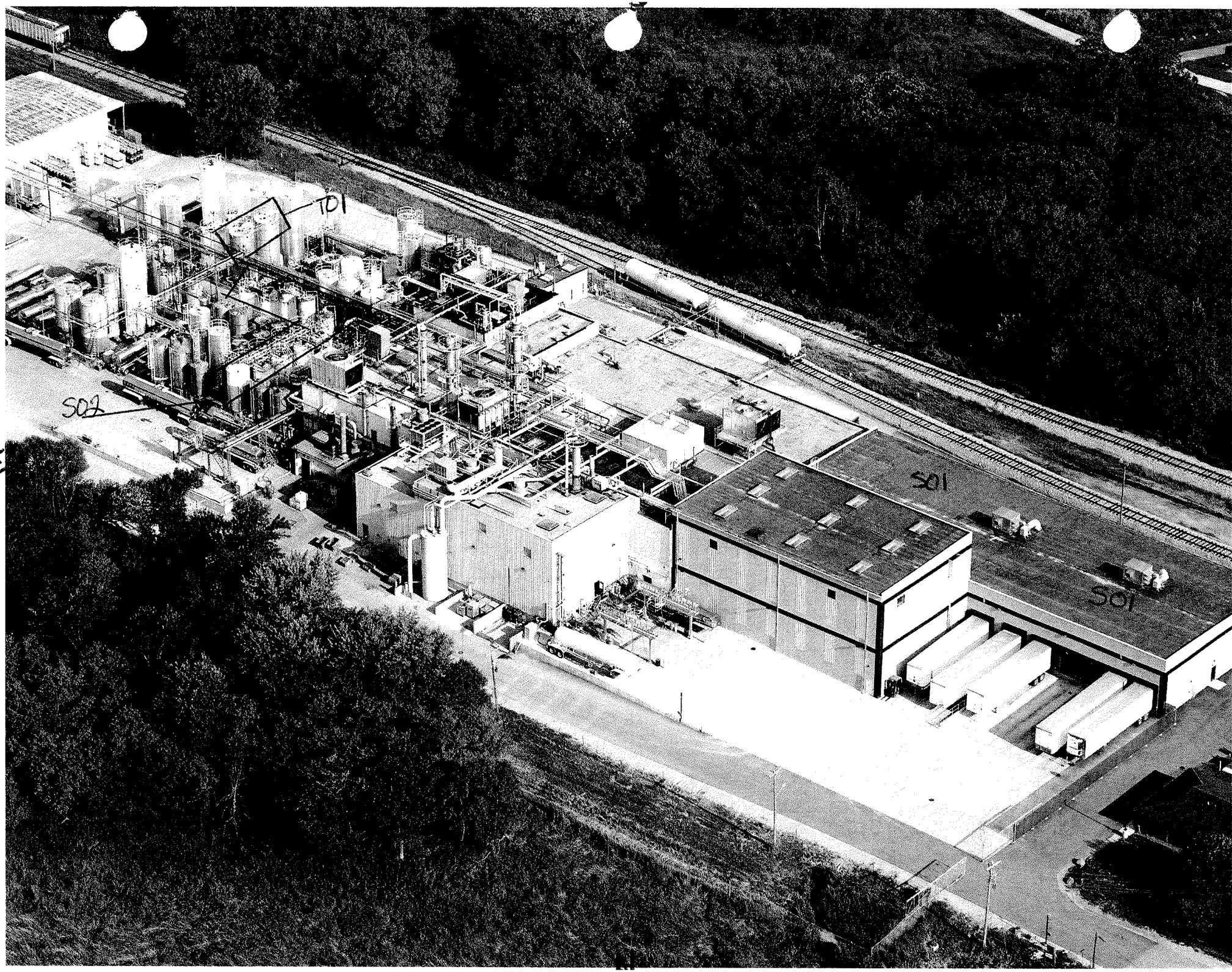
658'-6"
639'-8"
481'-6"
784'-5"
696'
171'-11"
595'-7"
807'-11"
75'
546'-7"
1328'-2"
GRAVEL ROAD TO BACK GATE (EMERGENCY EXIT)
EMERGENCY EXIT
TRUCK SCALE
ACCESS ROADWAY
E
S


T01
S02
S01
S01

HYDRITE® CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

PUBLIC MEETING

RE: Relicensing of **Hydrite Chemical Co.** – a Hazardous Waste Treatment and Storage Facility

Flynn Hall

116 Reynolds Street

Cottage Grove, WI

Friday, November 4, 2011

5:00 PM

For questions or special access needs, contact:

Jan Housley, Hydrite Chemical Co., 114 N. Main Street, Cottage Grove. 608-839-8110 or jan.housley@hydrite.com

HYDRITE® CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

The public is invited to attend a meeting regarding the relicensing of Hydrite Chemical Co. in Cottage Grove, as a Hazardous Waste Treatment and Storage facility. The meeting will be held 5:00 PM on Friday, November 4, 2011 at Flynn Hall, located at 116 Reynolds Street in Cottage Grove, WI. For more information or for special access needs, contact:

Jan Housley, Hydrite Chemical Co., 114 N. Main Street, Cottage Grove, WI 53527

Phone No. 608-839-8110

Email: jan.housley@hydrite.com

Capital Newspapers Proof of Publication Affidavit

Ad #: 1827476 Price: $46.85 Ad ID: Relicensing Notice

Retain this portion for your records.
Please do not remit payment until you receive your advertising invoice.

Mail to:

Hydrite Chemical Co
Angela Watry
114 N Main St
Cottage Grove, WI 53527

STATE OF WISCONSIN } ss.

otice of Reapplication to License Hydrite Chemical Co., Cottage Grove, Wisconsin, EPA ID#: WID000808824; License 6006 (Hazardous Waste Storage – Container), 3774 (Hazardous Waste Storage – Tank), and 4437 (Hazardous Waste Treatment – Tank). Hydrite Chemical Co. (Hydrite) operates a licensed Hazardous Waste Storage and Recycling Facility at 114 N. Main Street, Cottage Grove, WI. A Plan of Operation approval was issued by the Department May 17, 1988 and the initial hazardous waste facility operating license was issued on April 1, 1989. The facility license was re-issued on May 7, 2002 for a 10-year period, and will expire on May 7, 2012. Hydrite has notified the Department of its plan to continue operating its licensed hazardous waste facility and has begun the re-licensing procedure. The application for relicensing does not propose to change any waste management practices nor does it change the amount or types of hazardous waste storage currently permitted.

The public is invited to attend a presentation about Hydrite Chemical Co. to review the proposed license and to provide comments. This meeting will be held at 5:00 PM on Friday, November 4, 2011 at FLYNN HALL, 116 Reynolds St., Cottage Grove, WI. For further information, or if special access to participate in the meeting is required, please contact Jan Housley at Hydrite Chemical Co., 608-839-8110 at least 72 hours before the meeting. Mr. Mike Ellenbecker, Wisconsin Department of Natural Resources, 262-884-2342 is the Plan Reviewer and Department contact person.

PUB. WSJ: October 4, 2011
#1827476 WNAXLP

MATT MIJOLEVIC

being duly sworn, doth depose and say that he (she) is an authorized representative of Capital Newspapers, publishers of

Wisconsin State Journal

a newspaper, at Madison, the seat of government of said State, and that an advertisement of which the annexed is a true copy, taken from said paper, was published therein on October 4th, 2011

(Signed) _____

(Title) Principal Clerk

Subscribed and sworn to before me on

10-4-11

_____
Notary Public, Dane County, Wisconsin

My Commission expires April 15th, 2015

PROOF OF PUBLICATION

STATE OF WISCONSIN } ss.
DANE COUNTY }

Andy Pennington, being duly sworn, both depose and say that he is the general manager of the Herald-Independent, a newspaper published at the City of Monona, in the County of Dane, State of Wisconsin, and that an advertisement of which the annexed is a true copy, taken from said paper, was published therein on

10/27/11

(Signed) _____
General Manager

Subscribed and sworn before me this 27th day of Oct, 2011.

Joan E Squires
Notary Public, State of Wisconsin

My Commission expires 5-19, 2013.

No. Lines 42 No. Times 1 Affidavit Fees $ 1.00
Printers Fees $ 17.32
Total $ 18.32

JOAN E SQUIRES
Notary Public
State of Wisconsin

PUBLIC MEETING

Hydrite Chemical Co. operates a licensed Hazardous Waste Storage and Recycling facility at 114 N. Main St., Cottage Grove. A license was first issued April 1, 1989 and was re-issued on May 7, 2002 for a 10-year period. The current license will expire on May 7, 2012. Hydrite is applying for relicensing. The application does not propose to change any waste management practices nor does it change the amount or types of hazardous waste storage currently permitted.

The public is invited to attend a preapplication meeting to review the proposed license and to provide comments. This meeting will be held at **FLYNN HALL, 116 Reynolds St., Cottage Grove, November 4, 2011 at 5:00 PM.** For more information, contact Jan Housley at Hydrite Chemical, 608-839-8110. Mr. Mike Ellenbecker, Wisconsin Department of Natural Resources, 262-884-2342 is the Plan Reviewer and Department contact person. Hydrite's compliance history since April 1, 1989 is available from the department.

PUB. The Herald-Independent: October 27, 2011
WNAXLP

HYDRITE® CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

PUBLIC MEETING
FLYNN HALL
116 REYNOLDS STREET
COTTAGE GROVE, WI
FRIDAY, 11/4/11

RELICENSING OF HYDRITE CHEMICAL CO. FOR STORAGE AND TREATMENT OF HAZARDOUS WASTE

NAME (Please Print)	ADDRESS (If you wish to receive updates to proposal)
Joe Starr	4533 Baxter Road CG 53527
ED Conway	746 WEALD BRIDGE RD. CG
Jim Fiezer	114 N. MAIN St. - Hydrite
Garett Lafayette	201 Dentaria (Dentaria) DRIVE CG
Michael Richichi	205 Dentaria Dr CG
Patrick Shaw	517 Scything Grange CG
Megan Miller	824 N. Clover Ln #1A CG
Susan Travis	515 Hawthorn Ct CG
CLIFF MILLER	Herald-Independent 202 W. Cottage Grove Rd, CG
[illegible]	Vil of Cottage Grove DPW 3648 T-Bird Way CG
David Travis	515 Hawthorn Ct.
Jan Elmore	31 Heather Dr
Jennifer Greco	520 E Dentaria Dr.
Amy Unitan	525 Hawthorn Court
Andy Greco	520 E Dentaria Dr
Amy Agnew	153 Taylor St
Larry Schoenemann	205 Yarrow Hill Dr. CG
Jan Housley	Hydrite
John Adams	Hydrite
Dave Volenberg	Hydrite
Susan Welsch	500 E. Dentaria Dr. CG

PUBLIC MEETING ATTENDEES / CONTACT INFO

(Not everyone signed in, although they were all asked)

All Attendees who signed in (and not part of Hydrite Chemical) were from Cottage Grove, WI 53527

JOE STARR	4533 BAXTER ROAD	
ED LEMAY	746 WEALD BRIDGE RD	
GARETT LAFAYETTER	201 DENTARIA DRIVE	
MICHAEL RICHICHI	205 DENTARIA DRIVE	MJRICHICHI@YAHOO.COM
PATRICK SHAW	517 SOUTHING GRANGE	
MEGAN MILLER	824 N. CLOVER LN #A	
DAVID & SUSAN TRAVIS	515 HAWTHORN CT.	
CLIFF MILLER	202 W. COTTAGE GROVE RD.	HERALD INDEPENDENT
JIM HESSLING	3648 T-BIRD WAY	VILLAGE OF CG
JIM ELACRE	31 HEATHER DRIVE	
ANDY & JENNIFER GRECO	520 E. DENTARIA DRIVE	839-0257 AAGRECO@YAHOO.COM
AMY UNITAN	525 HAWTHORN CT.	839-9125 UNITAN@CHARTERMI.NET
AMY AGNEW	153 TAYLOR ST.	
LARRY & ANNE SCHOENEMANN	205 YARROW HILL DR.	839-8045 ACM071061@CHARTER.NET

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

Public Meeting for Relicensing for Storage and Treatment of Hazardous Waste
COMMENTS AND QUESTIONS

NAME: Andy Greco

ADDRESS: 520 E. Dentana Dr
Cottage Grove WI 53527

PHONE: 839-0257

EMAIL: aagreco@yahoo.com

COMMENTS / QUESTIONS: If you have any comments or questions about tonight's topic and/or any questions regarding Hydrite Chemical Co., please complete this form. These will all be submitted to the WDNR as part of the application to relicense submittal

① How long are tanker vehicles parked in the back - either on paved or unpaved ground? It seems to be permanent storage, filled w/ turnover of trucks, constant chem. storage.

[redacted]

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

Public Meeting for Relicensing for Storage and Treatment of Hazardous Waste

COMMENTS AND QUESTIONS

NAME: Michael Richichi

ADDRESS: 205 Dentrella Dr
Cottage Grove

PHONE:

EMAIL: MJRichichi@yahoo.com

COMMENTS / QUESTIONS: If you have any comments or questions about tonight's topic and/or any questions regarding Hydrite Chemical Co., please complete this form. These will all be submitted to the WDNR as part of the application to relicense submittal

- text message system + prompt notification in event of spill
- NO trucks on fence line
- NO temp. storage of chem.
- Open house / joint Mtg village reps + Hydrite
- Notification of what the emergency response plan entails
- Notice to all CG residents (~within x miles) of public hearings related to Hydrite in advance + directly (mailbox flyers/emails)

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

Public Meeting for Relicensing for Storage and Treatment of Hazardous Waste

COMMENTS AND QUESTIONS

NAME: Larry & Anne Schoenemann — Anita Schultz (next to park)

ADDRESS: 205 [illegible] Hill Dr
CG

PHONE: 839-8045

EMAIL: [illegible]@charter.net

→ Wayne has reported this a couple of times over the past 2-3 years.

COMMENTS / QUESTIONS: If you have any comments or questions about tonight's topic and/or any questions regarding Hydrite Chemical Co., please complete this form. These will all be submitted to the WDNR as part of the application to relicense submittal

- The ~~[illegible]~~ hill behind plant was never seeded - very weedy.
- Water going into yard next to fire gravel driveway.

I thought the trailers were empty behind the last building. This is the first I have heard they had chemicals in them. 16 years ago we were told ~~they~~ the trailers were empty + for ~~storage~~ parking only.

People obtained waste vs. product

PROVIDING CREATIVE SOLUTIONS

HYDRITE CHEMICAL CO.

114 North Main Street
Cottage Grove, WI 53527
Main 608.839.4571
Fax 608.839.4293
www.hydrite.com

November 5, 2011

RE: Re-licensure of Hydrite to store and process hazardous waste meeting

Dear Attendees:

Thank you for coming to the Public Meeting last evening. To recap, the main points to the relicensing are as follows:

1. Currently Hydrite Chemical is licensed to store 297,000 gallons of off-site hazardous waste (as defined at the meeting); 231,000 gallon in containers and 66,500 in tanks.
2. Hydrite proposes to increase its bulk tank storage to 94,000 gallons and decrease its container storage to 203,500 gallons.
3. Hydrite is also proposing to include CW5 Warehouse (West of Main Street) for container storage.
4. The total maximum amount of permitted storage will remain at a total of 297,000 gallons.

Based on the comments cards turned in, and the comments and questions at the meeting, there were no concerns expressed regarding the changes listed above.

There were some issues raised regarding general operations at Hydrite Chemical. Mrs. Travis is emailing me a list and a second letter will be sent in response.

Sincerely,

Jan Housley
Hydrite Chemical Co.

CC: Mike Ellenbecker - WDNR

FRONT PAGE

Hydrite Co. applies for relicensing

By Cliff Miller
Herald-Independent

Hydrite Chemical Co. invited neighbors to a meeting Friday evening, Nov. 4, to discuss the proposed 10-year renewal of Hydrite's hazardous chemical license, but about 20 neighbors used the session to interrogate company officials on a broader range of chemical and neighborhood safety issues.

The more than 90-minute exchange seemed headed toward reviving an abandoned practice of annual open-house tours of the chemical recycling plant that straddles N. Main Street at the railroad crossing.

The neighbors barraged the company with issues including suspected chemical storage in railroad cars, semi-trailer tank trucks and outdoor spaces on company property; a recent chemical spill from a loose valve on a truck; water runoff from company land onto Huston Park adjoining company property to the northeast; and suspicious smells periodically wafting from the plant.

They asked for an improved, formal system for notifying the village and neighborhood when there is leakage or a spill. The company spokesmen agreed

See **HYDRITE**, page 3

HYDRITE: Public shares thoughts at relicensing hearing

Continued from page 1

to consider the suggestion.

Hydrite recycles industrial solvents and other chemicals, returning used chemicals to customers after removing foreign substances and converting them to industrial fuels, representatives explained.

The company is asking the state Department of Natural Resources for a 10-year extension of its operating license that allows processing of hazardous chemicals and storage in bulk tanks and containers on the site.

One of the neighbors, University of Wisconsin-Whitewater meteorologist David Travis, helped collect and organize a fistful of documents and questions providing groundwork for the discussion.

Hydrite staff hazardous waste regulatory specialist Jan Housley took questions and moderated the discussion, which, though at times sharp, was orderly and polite. Plant operations manager John Adams and safety manager David Bolenberg also took part.

Housely said hazardous waste is any solid, liquid or gas that is ignitable, corrosive, reactive with moisture or other solvents or toxic. She said no hazardous chemicals are stored outside the plant's buildings. Trucks and the company's two rail tank cars are never used for long-term hazardous waste storage, she said.

Many other tank cars often parked on the rail siding adjacent to the plant belong to railroad customers other than Hydrite, she said.

Housely promised that all neighborhood comments and questions would be reported both to the DNR and other company officials. She said the remarks from the meeting will be included in Hydrite's DNR file even thought the agency may regard some of the issues as irrelevant to the license renewal application.

Considerable discussion surrounded a three-day leak of 20 pounds of a liquid chemical from a truck parked on company property, discovered on Oct. 16. The chemical, butyl acrylate, is a flammable solvent, according to the DNR report, that can cause severe irritation of eyes, respiratory system or skin, either in liquid or vapor form.

The company excavated the spill site and shipped 14,580 pounds of contaminated soil to a disposal company to be incinerated. In his summary of concerns Travis listed "increased frequency of strong solvent based odors" outside the plant; "more than 20 tanker trucks" parked near the southeast corner of company property next to homes and a park; the butyl acrylate leak and questions it raises about how such incidents become public or don't.

Travis's written summary and remarks by neighbors stressed that they regard Hydrite as an important employer that they want to encourage to stay in Cottage Grove but to improve its practices for informing the community about hazards and preventive measures by the company.

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

May 10, 2011

Clerk
Township of Cottage Grove
4058 Hwy N
Cottage Grove, WI 53527

Clerk
Village of Cottage Grove
221 E. Cottage Grove Road
Cottage Grove, WI 53527

Clerk
Dane County
210 Martin Luther King Jr. Blvd
Madison, WI 53703

Pinney Branch Library
204 Cottage Grove Road
Madison, WI 53716

SUBJ: Hydrite Chemical Co., Re-Licensure of Hazardous Waste Facility

To Affected Municipalities:

The Wisconsin Department of Natural Resources initially issued a hazardous waste operating license to Hydrite Chemical Co., 114 North Main Street, Cottage Grove, WI, on April 1989. The facility license was re-issued on May 7, 2002 for a 10-year period, and will expire on May 7, 2012. Hydrite plans to continue operating its licensed hazardous waste facility and is initiating the re-licensing procedure.

Per Wis. Stats. sec. 289.22(lm), Hydrite is requesting from each affected municipality local approvals as defined in sec. 289.33(3)(d), Wis. Stats. This would include any requirement, restriction, condition, or prohibition imposed by a municipality on a waste facility site by ordinance, resolution, or regulation.

The law also requires that Hydrite submit a standard notice from the Waste Facility Siting Board. This notice informs the affected municipalities of time

limits and requirements for participation in the negotiation and arbitration process for the siting of a solid or hazardous waste facility under sec. 289.33, Wis. Stats. This standard notice is attached.

Thank you for your prompt attention to this matter.

Sincerely,

Janice K. Housley

Janice K. Housley
Facility Compliance Coordinator

Attachment: Standard Notice

CC: David H. Schwarz – Waste Facility Siting Board
Dennis Mack, P.E. – SCR, Fitchburg
Jae Lee – US EPA Region 5
Jill Schoen – jill.schoen@wisconsin.gov (e-copy)
Cynde English – cynthia.english@wisconsin.gov (e-copy)
Ed Lynch – edward.lynch@wisconsin.gov (e-copy)
Pat Chabot – patricia.chabot@wisconsin.gov (e-copy)
Mike Schmoller – michael.schmoller@wisconsin.gov (e-copy)
Jennifer Hamill – jennifer.hamill@wisconsin.gov (e-copy)
Russ Anderson – Russell.anderson@wisconsin.gov (e-copy)
Jane Furst, DOA – jane.furst@wisconsin.gov (e-copy)

State of Wisconsin
Waste Facility Siting Board
5005 University Avenue, Suite 201, Madison, WI 53705-5400
Phone: (608) 266-7709
Fax: (608) 264-9885
e-mail: dha.mail@wisconsin.gov

James W. Schuerman
Chairman

David H. Schwarz
Executive Director

STANDARD NOTICE

TIME LIMITS AND REQUIREMENTS FOR MUNICIPALITIES TO PARTICIPATE IN THE NEGOTIATION AND ARBITRATION PROCESS FOR THE SITING OF A SOLID OR HAZARDOUS WASTE FACILITY UNDER SEC. 289.33, WISCONSIN STATUTES.

PLEASE READ ALL PAGES CAREFULLY.

This notice informs a municipality of the actions and deadlines required to qualify for participation in negotiations and arbitration concerning the proposed siting of all new or expanded solid or hazardous waste facilities in the state of Wisconsin.

This standard notice shall be submitted with any written requests for local approvals by the applicant to the clerk of each affected municipality and to the main public library in each affected municipality. s. 289.22(1m)(2) and s. 289.32, Wis. Stats.

Who is the Waste Facility Siting Board?

The Waste Facility Siting Board is an impartial body composed of six members. These members include the secretaries, or their formally appointed designees, of the Departments of Agriculture, Trade and Consumer Protection; Commerce; and Transportation; and two town elected officials and one county elected official appointed by the governor for three year terms.

What does the Waste Facility Siting Board do?

The Waste Facility Siting Board administers the negotiation and arbitration process for the siting of every solid and hazardous waste facility in the state of Wisconsin.

The board's authority is created by law in Chapter 289, Subchapter III, Wis. Stats. The intent of the law is to create and maintain a comprehensive and effective policy of negotiation and arbitration between an applicant for a waste facility license and a local committee representing the affected municipalities.

Who is an Applicant?

An "applicant" is any person applying for a license or the owner or operator of a facility.

What is an Affected Municipality?

An affected municipality is any town, village, city, or county:

(a) where any or all of the proposed waste site will be located, or
(b) whose boundary is within 1500 feet of the facility designated in the feasibility report for the disposal of solid waste or the treatment, storage or disposal of hazardous waste.

An applicant that is a municipality or is under contract with a municipality for development of the site, is not considered an affected municipality for purposes of negotiation.

What is an Additional Municipality?

An additional municipality is any town, city, village, or county which does not qualify as an affected municipality but is included in the negotiation and arbitration process by written agreement of the applicant and the participating affected municipalities.

How does the negotiation-arbitration process begin?

The process is initiated by the applicant. Before submitting a feasibility report to the Department of Natural Resources (DNR), the applicant must submit by certified mail to the clerk of each affected municipality a written request for specification of all applicable local approvals. The municipality has 15 days to respond.

What is a "local approval"?

The term "local approval" is defined in s. 289.33(3)(d), Stats. It essentially means any requirement, restriction, condition, or prohibition imposed by a municipality on a waste facility site by ordinance, resolution, or regulation.

The law gives special weight to "pre-existing local approvals." Pre-existing local approvals are those that have been in effect at least 15 months before the applicant submits to DNR an initial site report or a feasibility report, whichever happens first. A new or expanded waste facility is subject to pre-existing local approvals unless specified as inapplicable in a negotiated agreement or an arbitration award. A new or expanded waste facility is not subject to other local approvals unless specified as applicable in a negotiated agreement.

If an Affected Municipality wants to negotiate with the applicant concerning the site what is required?

There are three requirements.

First, an affected municipality must pass a siting resolution within 60 days of receipt of the applicant's initial written request for local approvals. If this deadline is missed, a municipality

may not participate in negotiations. A copy of the siting resolution must be sent to the board within 7 days of passage.

Each affected municipality that wishes to negotiate with the applicant about the proposed facility must pass a siting resolution which shall state the following:

(1) the name and location of the municipality,
(2) the name and location of the applicant,
(3) the specific location of the proposed facility, and
(4) the municipality's intent to negotiate and, if necessary, arbitrate with the applicant concerning the proposed facility.

Second, an affected municipality must appoint members to the local committee within 60 days of receipt of the applicant's request for local approvals. Names and addresses of local committee members must be sent to the Waste Facility Siting Board within 7 days of appointment.

Each affected municipality that wishes to negotiate with the applicant must appoint members to the local negotiating committee. Each town, village, or city where all or part of the proposed waste facility is to be located may appoint 4 members, or 2 more than the total number of all other members, whichever number is greater; no more than 2, however, may be elected officials or municipal employees. Each county where all or any part of the proposed waste facility will be located may appoint 2 members. Every other town, village, city, or county within 1500 feet of the proposed waste facility may appoint 1 member. Appointment of members may be included in the siting resolution or in a separate resolution.

Third, each member appointed to the local committee must file with the Waste Facility Siting Board a Statement of Economic Interests within 15 days of appointment. A member who fails to file a Statement of Economic Interests may not serve on the local committee.

These forms are available at no cost from the Waste Facility Siting Board.

What is required if an Additional Municipality wants to negotiate with the applicant concerning the site?

There are four requirements.

First, an additional municipality must receive written agreement of all parties to be added to the process.

Second, an additional municipality must pass a siting resolution within 30 days of the agreement between the parties to allow participation by the additional municipality. A copy of the siting resolution must be sent to the board within 7 days of passage.

The siting resolution must state the following:

(1) the name and location of the municipality,
(2) the name and location of the applicant,
(3) the specific location of the proposed facility, and
(4) the municipality's intent to negotiate and, if necessary,

arbitrate with the applicant concerning the proposed facility.

Third, an additional municipality must appoint one member to the local committee within 60 days. The name and address of the local committee member must be sent to the Waste Facility Siting Board within 7 days of appointment.

Fourth, the appointed member to the local committee must file with the Waste Facility Siting Board a Statement of Economic Interests within 15 days of appointment. A member who fails to file a Statement of Economic Interests may not serve on the local committee.

These forms are available at no cost from the Waste Facility Siting Board.

When may negotiations begin?

Negotiations may begin at any time after notification by the Waste Facility Siting Board. The board will send a notification of participation to the applicant and the clerk of each participating municipality within 5 days after the board receives copies of the resolutions and names and addresses of members appointed to the local committee, or within 72 days after all affected municipalities have received written request for local approvals. This notice will identify the participating municipalities, identify the names of the members of the local committee, and inform the parties that negotiations may begin.

If, for error or change in plans, the applicant must add any other affected municipality following the board's notification of participation, that affected municipality shall have the same rights and obligations as outlined above. The board may issue an order delaying negotiations until that affected municipality has time to act. This procedure is outlined in s. 289.33(6)(c), Stats.

Either the applicant or the local committee may initiate negotiations. The time and place of negotiating sessions are determined by agreement between the applicant and the local committee. Negotiating sessions must be open to the public.

What issues can be negotiated?

Any subject may be negotiated except the need for the facility and any proposal that would make the applicant's responsibilities less stringent than required by the Department of Natural Resources. Either party may petition the board in writing for a determination as to whether a proposal is negotiable. The board will conduct a hearing and issue a binding decision in 14 days.

If a negotiated settlement is reached, what is required?

There are two requirements.

First, the agreement must be approved by all appropriate bodies.

An appropriate body is the governing body of each town, city, or village where all or a portion of the waste facility is to be located. If the agreement is approved by all of the appropriate bodies, the agreement is binding on all participating municipalities.

Second, if the agreement is approved, the applicant shall send a copy or notice of any negotiated agreement to the Waste Facility Siting Board and to the Department of Natural Resources within 10 days after the agreement is approved by all appropriate bodies. If the agreement is not approved by all of the appropriate bodies, the agreement is void. The parties may resume negotiations, begin mediation, or initiate arbitration.

Who initiates mediation?

Either party may request a mediator at any time during the negotiation.

Who is the mediator?

The board maintains a list of competent, impartial, disinterested persons consisting of lawyers, retired judges, and professional mediators who serve as mediators.

Who chooses the mediator?

Upon receipt of a request for a mediator, the board will immediately send the parties a list of 5 mediators. The parties shall alternately strike names until one name is left who will be appointed by the board.

What is the role of the mediator?

The role of the mediator is to encourage a voluntary settlement. The mediator may not impose a settlement on either party.

Who pays for the mediator?

Unless specified in the negotiated agreement or the arbitration award, the costs of the mediator will be shared equally by the applicant and the local committee.

What happens if the mediator fails to bring settlement?

The parties may resume negotiations or initiate arbitration.

Who initiates arbitration?

The applicant or the local committee may petition the board jointly or separately to initiate arbitration.

Arbitration may not be initiated until at least 120 days after the appointment of the local committee.

A statement in response to a unilateral arbitration petition must be filed within 14 days.

What issues can be arbitrated?

Only eight issues can be arbitrated. These issues are:

1. Compensation to any person for substantial economic impacts which are a direct result of the facility including insurance and damages not covered by the waste management fund.

1m. Reimbursement of reasonable costs, but not to exceed $20,0000, incurred by the local committee relating to negotiations, mediation and arbitration activities under this section.

2. Screening and fencing related to the appearance of the facility. This item may not affect the design capacity of the facility.
3. Operational concerns including, but not limited to, noise, dust, debris, odors and hours of operation but excluding design capacity.
4. Traffic flows and patterns resulting from the facility.
5. Uses of the site where the facility is located after closing the facility.
6. Economically feasible methods to recycle or reduce the quantities of waste to the facility. At facilities for which the applicant will not provide or contract for collection and transportation services, this item is limited to methods provided at the facility.
7. The applicability or non-applicability of any pre-existing local approvals.

If requested by either party, the board will rule on the arbitrability of a specific issue.

Once initiated, how does the arbitration process work?

Within 15 days of receipt of a petition to initiate arbitration, the board will issue a decision either to have the parties continue negotiation for at least 30 days, delay arbitration until a feasibility report is submitted, or order the parties to submit their final offers within 90 days. If, when ordered by the board, the applicant fails to submit a final offer within 90 days, the applicant may not construct or operate the facility. If the local committee fails to submit a final offer in 90 days the local committee loses all rights to further negotiation and the facility is not subject to any local approval.

Within 30 days after the last day for submitting final offers, the board shall conduct a public meeting for the parties to explain their final offers.

Within 90 days after the last day for submitting final offers, the board will issue an arbitration award. If the board fails to issue an award because it lacks the necessary five votes, the governor will issue an arbitration award within 120 days after the last day for submitting final offers.

The board's arbitration award is binding on the applicant and the participating municipalities.

The information presented here serves as a guide to help affected and additional municipalities comply with the negotiation-arbitration laws concerning siting of solid and hazardous waste facilities under s. 289.33, Stats. For specific legal advice, or changes in the statute or administrative rules, an applicant or affected municipality should consult its attorney or contact the Waste Facility Siting Board, 5005 University Avenue, Suite 201, Madison, Wisconsin 53705-5400, (608) 266-7709, FAX: (608) 264-9885.

STANDARD NOTICE
Revised: 01/31/11
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Appendix B

HYDRITE CHEMICAL CO.

114 N. MAIN STREET (53527-9702)
P.O. BOX 247
COTTAGE GROVE, WI 53527-0247
608/257-5892
FACSIMILE: 608/839-4293

May 15, 1998

Mr. Allen Wojtas
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago, ILL 60603

Ms. Linda Hanefeld
WDNR
3911 S. Fish Hatchery Rd.
Fitchberg, WI 53711

Re: Notification of Intent to
Import Hazardous Waste

Dear Mr. Wojtas and Ms. Hanefeld,

Pursuant to the requirements of WIS. Adm. Code NR 630.10(1) and 40 CFR 264.12(a), Hydrite Chemical Co., located in Cottage Grove, WI., (EPA ID No.: WID000808824) is providing notice for the receipt of the following hazardous waste from the following foreign source:

Foreign Source:
Rhone-Poulenc Canada Inc.
2000 Argentia Rd. Plaza 3, Suite 400
Messissauga, Ontario, Canada L5N 1V9
Phone no. 905-821-4450

Waste:
Waste Amine, Liquid (Aminoethylethanolamine)
D002 ,Corrosive Liquid, UN2735

This notification is being submitted at least four weeks in advance of the date the waste is expected to arrive at the facility. I an enclosing an MSDS for your information. I f you have any questions, please call me at 414-792-8730.

Sincerely,

Anthony Aurit, CHMM
Regulatory Specialist

Appendix C

Bibliography

HYDRITE® CHEMICAL CO.

142976

WASTE PROFILE PACKET

SALES REP.	BRANCH	EPA I.D. NUMBER

TSD FACILITY	STATE I.D. NUMBER	GENERATOR STATUS
		☐ LQG ☐ SQG ☐ VSQG or CEG

CUSTOMER BILL TO

CUSTOMER | ACCOUNT #

ADDRESS

CITY | STATE | ZIP

CONTACT 1 | PHONE # / EMAIL

CONTACT 2 | PHONE # / EMAIL

24 HOUR EMERGENCY # | FAX#

☐ CHEMTEL
☐ OTHER

GENERATOR SITE INFO

GENERATOR / PICK UP LOCATION

CONTACT (REGULATORY / TECHNICAL) | PHONE # / EMAIL

MANIFEST ATTN. TO:

ADDRESS

CITY | STATE | ZIP

PICK UP INSTRUCTIONS

HOURS	LIFT GATE	TRUCK PUMP	HOSE LENGTH
	☐ Y ☐ N	☐ Y ☐ N	

☐ VAPOR RECOVERY: CONNECTOR SIZE & TYPE:

WASTE INFORMATION

GENERATOR'S WASTE NAME:

PROCESS GENERATING WASTE: ☐ PAINTING ☐ PRINTING ☐ CLEANING ☐ UNUSED PRODUCT
☐ ILL CLEANUP ☐ LAB PACK ☐ OFF-SPEC MATERIAL ☐ OTHER: _____

WASTE IS
☐ VIRGIN ☐ SPENT ☐ DEGREASER

MANDATORY REPORTING CODES:
SOURCE CODE _____ FORM CODE _____ MGMT CODE _____

METHOD OF SHIPMENT
☐ METAL DRUM ☐ POLY DRUM ☐ TOTES ☐ PAIL ☐ CUBIC BOX ☐ BULK ☐ OTHER _____

QUANTITY | PER SHIPMENT ☐ WK ☐ MO ☐ YR ☐ ONE TIME | TOTAL ANNUAL VOLUME

PHYSICAL PROPERTIES @ 25° C (77°F)

SINGLE LAYER ☐ YES ☐ NO | TOTAL HALOGENS % | ODOR ☐ NONE ☐ MILD ☐ STRONG

PHYSICAL STATE
_____ % LIQUID _____ % SLUDGE
_____ % SOLID _____ % POWDER
_____ % OTHER (DESCRIBE) _____

Btu/Lb.
☐ < 3,000
☐ 3,000 - 5,000
☐ > 5,000
EXACT_____

pH
☐ < 2.0
☐ 2.0 - 12.5
☐ > 12.5
EXACT_____

FLASHPOINT
☐ ≤ 140° F
☐ 141° - 200° F
☐ > 200° F
EXACT_____

COMPOSITION OF WASTE	% RANGE
	— %
	— %
	— %
	— %
	— %
	— %
WATER	— %
TOTAL OF MAX. CONCENTRATION MUST BE ≥ 100%	%

MAJOR SOLIDS COMPOSITION

☐ URETHANE ☐ WASTE OIL
☐ SOIL ☐ NITROCELLULOSE
☐ EPOXY ☐ RAGS/FILTERS
☐ VINYL ☐ OIL ABSORBANTS
☐ METALS ☐ CARBON
☐ OTHER ( )

OTHER COMPONENTS

☐ CYANIDES ☐ AMINES
☐ SULFIDES ☐ PCB'S
☐ MONOMERS ☐ PHENOLICS
☐ ISOCYNATES
☐ OTHER ( )

HAZARDOUS PROPERTIES

☐ NONE
☐ WATER REACTIVE
☐ SHOCK REACTIVE
☐ RADIOACTIVE
☐ CORROSIVE
☐ HERBICIDE
☐ BENZENE NESHAP
☐ AIR REACTIVE
☐ PYROPHORIC
☐ PESTICIDE INSECTICIDE
☐ OXIDIZER
☐ EXPLOSIVE
☐ POLYMERIZABLE
☐ PATHOGEN
☐ MARINE POLLUTANT

OTHER

☐ MSDS ATTACHED (REQUIRED)
☐ TCLP RESULTS ATTACHED
☐ OTHER ANALYTICAL DATA ATTACHED

HYDRITE COPY

142976

RCRA DETERMINATION

1. Is this material "Hazardous Waste" under 40CFR 261.3? Yes No
2. Is this a "Characteristic Waste"? Yes No
   Yes" is it: ☐ D001 Ignitable ☐ D002 Corrosive ☐ D003 Reactive
   ☐ D004 - D043 Toxic, give specific codes: _____
3. If this an "F" or a "K" listed waste or mixed with one? Yes No
   If "yes" give the waste codes from 40CFR 261.31 and/or 261.32: _____
4. Is this a commercial chemical product or spill cleanup that would carry a "U" or "P" listed waste code under 40CFR 261.33 (e) or (f) Yes No
   If "Yes" give the listed waste code: _____
5. Is this material exempt due to legitimate reclamation under 40 CFR 261.4 (a)(24)? Yes No

INORGANIC CHARACTERISTICS

Based on knowledge or analysis, provide an actual value or value for TCLP concentrations or total metal concentrations in ppm.

D004	Arsenic	5.0	_____
D005	Barium	100.0	_____
D006	Cadmium	1.0	_____
D007	Chromium	5.0	_____
D008	Lead	5.0	_____
D009	Mercury	0.2	_____
D010	Selenium	1.0	_____
D011	Silver	5.0	_____

ORGANIC CHARACTERISTICS

D012	Endrin	0.02	_____	D023	o-Cresol	200.0	_____	D034	Hexachloroethane	3.0	_____
D013	Lindane	0.4	_____	D024	m-Cresol	200.0	_____	D035	Methyl Ethyl Ketone	200.0	_____
D014	Methoxychlor	10.0	_____	D025	p-Cresol	200.0	_____	D036	Nitrobenzene	2.0	_____
D015	Toxaphene	0.5	_____	D026	Cresol	200.0	_____	D037	Pentachlorophenol	100.0	_____
D016	2, 4-Dichlorophenoxyacetic Acid	10.0	_____	D027	1, 4-Dichlorobenzene	7.5	_____	D038	Pyridine	5.0	_____
D017	2, 4, 5-TP (Silvex)	1.0	_____	D028	1, 2-Dichloroethane	0.5	_____	D039	Tetrachloroethylene	0.7	_____
D018	Benzene	0.5	_____	D029	1, 1-Dichloroethylene	0.7	_____	D040	Trichloroethylene	0.5	_____
D019	Carbon Tetrachloride	0.5	_____	D030	2, 4-Dinitrotolune	0.13	_____	D041	2, 4, 5-Trichlorophenol	400.0	_____
D020	Chlordane	0.03	_____	D031	Heptachlor (and it's epoxide)	0.008	_____	D042	2, 4, 6-Trichlorophenol	2.0	_____
D021	Chlorobenzene	100.0	_____	D032	Hexachlorobenzene	0.13	_____	D043	Vinyl Chloride	0.2	_____
D022	Chloroform	6.0	_____	D033	Hexachlorobutadiene	0.5	_____				

DOT CHARACTERIZATION

UN/NA #	PROPER SHIPPING NAME	HAZARD CLASS	PACKING GROUP

TWO PRIMARY HAZARDOUS CONSTITUENTS | RQ #

CUSTOM RECYCLE - SAMPLE REQUIRED

RECYCLE TYPE

☐ . ☐ PAINT ☐ OTHER _____

HOW CURED

☐ ULTRAVIOLET ☐ CATALYTIC ☐ HEAT (TEMP.) _____

RECYCLE APPLICATION

RETURN SPECIFICATIONS, REQUIRED

SPECIAL RETURN INSTRUCTIONS

☐ DRUMS ☐ BULK ☐ TOTE

IF DRUMS, ☐ RECON/LINED ☐ NEW/LINED ☐ OTHER _____

☐ FULL TANKER; UNLOAD

☐ CENTER ☐ REAR ☐ DOES NOT MATTER

IF BULK, MAXIMUM RETURN QUANTITY: _____

SAMPLE CHAIN OF CUSTODY

DATE COLLECTED	TIME COLLECTED	PLACE COLLECTED
	AM / PM	

COLLECTED BY (PRINT NAME) | SIGNATURE

ADDITIONAL SERVICES REQUESTED

DO YOU WANT HYDRITE TO PREPARE SHIPPING FORMS (i.e. MANIFEST, LAND, BAN, LABELS)? YES NO

DO YOU WANT HYDRITE'S 24 EMERGENCY RESPONSE? YES NO

IF YOU ANSWERED YES, REFER TO THE TERMS AND CONDITIONS OF SALE.

GENERATOR CERTIFICATION STATEMENT

I hereby certify that all the information, to the best of my knowledge, on this and any attached documents, is complete, correct, and that all known hazards are accurate and have been disclosed. If this waste changes in any manner, Hydrite will immediately be notified in writing.

GENERATOR NAME | GENERATOR SIGNATURE | DATE | PO #

HYDRITE COPY

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608-839-4571
FACSIMILE: 608-839-4293

November 1, 2011

WASTE STREAM APPROVAL LETTER

Customer: EXAMPLE Generator: Same

In accordance with 40 CFR 264.12(b) and Wisconsin Administrative Code, NR 664.0012(2), "Required Notices", this letter is to inform you that Hydrite Chemical Co. has the appropriate permits for, and will accept the waste described below. This approval is based on the Waste Profile information provided by the Generator/Broker and the analytical results from the representative sample. Hydrite reserves the right to utilize waste management processes alternate to the Waste Management Code listed below.

Profile Number:	134282 – Waste Paint Related Material
DOT Shipping Name:	Waste Paint Related Material
Hazard Class:	3
UN/NA ID:	UN1263
Packing Group:	II
RQ:	D001 (100#)
Waste Codes:	F005, F003, D001, D035
Waste Mgmt Code:	H020

CUSTOMER PROCEDURES FOR PROCESS SHIPMENTS

1. When your material is ready for shipment, call Hydrite's Customer Service Department, and indicate your Profile Number. Customer Service will then issue an Authorization Number. The information needed to supply this number includes your Profile Number, the quantity to be shipped, date of shipment and any special information.

2. To facilitate the expedited receipt and process of the above waste, Hydrite requires that the Profile Number and the issued Authorization Number appear on the associated shipping document and containers.

3. Hazardous materials must be shipped in conformance with DOT regulations.

HYDRITE CHEMICAL CO.

RECEIPT AUTHORIZATION REPORT

DATE	QTY	OPERATOR

DATE	QTY	OPERATOR

WASTE RECEIPT

DATE RECEIVED	DRUMS / BOXES IN	BULK LBS	SPEC GRAVITY (SG)	GALLONS IN
				(SG x 8.33)
INCOMING BOL/MANIFEST	HAULED BY			LOCATION PUT TO
	☐ HYDRITE ( ) ☐ CLEANSTREAM ☐ TWI ☐ OTHER ( )			

DISPOSAL DRUMS CLASSIFICATION AND NUMBER OF UNITS

#1	#2A	#2B	#3
PS	RF	BOX	WEIGHT
	☐ HAZARDOUS ☐ NON HAZARDOUS	☐ HAZARDOUS ☐ NON HAZARDOUS	
LOW BTU 1	LOW BTU 2	LOW BTU 3	INSPECTED BY

COMMENTS:

PROCESS BATCH

DATE PROCESSED	OPERATOR	BATCH NUMBER	FROM TANK #	TO TANK #	BOTTOMS TANK #
TAPE START	TAPE END	STILL HOURS	GALLONS PROCESSED	GALLONS DISPOSED	DRUMS DISPOSED

GALLONS PRODUCED

BEFORE DECANT	DECANT GALLONS	PRODUCT DRUMS	ACTUAL GALLONS RETURNED	ACTUAL YIELD %

COMMENTS:

SPEC UP ADDED

QUANTITY	CLASSIFICATION	VENDOR NAME	BOL/MANIFEST NUMBER

OFFICE COPY

AND CERTIFICATION FORM

HYDRITE CHEMICAL CO

GENERATOR	HYDRITE AUTHORIZATION #	STATE MANIFEST #

EPA WASTE CODE NUMBERS							

Is this waste ☐ Non-wastewater or ☐ Wastewater? (see 40 CFR 268.2) Check ONE
Indicate all the Universal Treatment Standards and/ or EPA Waste Codes as they apply to your waste by checking the appropriate boxes in sections A, B, C, D.
For those treatment standards not listed in sections A, B, C, or D, list their waste Code, Regulated Constituent, and treatment level in Section E.

SECTION A — IGNITABLE WASTE TREATMENT STANDARDS

WASTE CODE	Waste Description and Treatment/Regulatory Subcategory	WASTEWATER Concentration in mg/L or Technology Code	NON-WASTEWATER Concentration in mg/L unless noted as "mg/L TCLF or Technology Code
☐ D001	Ignitable Characteristic Wastes, except for the §261.21(a)(1) High TOC Subcategory, that are managed in non-CWA / non-CWA-equivalent / non-Class I SDWA systems.	DEACT and meet §268.48 Standards; or RORGS; or CMBST	DEACT and meet §268 • j standards or RORGS; or CMBST
☐ D001	High TOC Ignitable Characteristic Liquids Subcategory based on 40 CFR 261.21(a)(1) - Greater than or equal to 10% total organic carbon. (Note: This subcategory consists of non-wastewater only.)	N/A	RORGS; or CMBST

SECTION B — CORROSIVE WASTE TREATMENT STANDARDS

☐ D002	Corrosive Characteristic Wastes that are managed in non-CWA / non-CWA equivalent / non-Class I SDWA systems.	DEACT and meet §268.48 standards	DEACT and meet §268.48 standards
☐ D002	Corrosive Characteristic Wastes that are managed in CWA, CWA-equivalent, or Class I SDWA systems.	DEACT	DEACT

SECTION C — METAL WASTE TREATMENT STANDARDS

REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/L-TCLP	REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/L-TCLP	REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/L-TCLP
☐ Antimony	1.9	1.15	☐ Chromium (total) (D007)	2.77	0.60	☐ Selenium (D010)	0.82	5.7
☐ Arsenic (D004)	1.4	5.0	☐ Lead (D008)	0.69	0.75	☐ Silver (D011)	0.43	0.14
☐ Barium (D005)	1.2	21.0	☐ Mercury (non-wastewater from Retort)	N/A	0.20	☐ Thallium	1.4	0.20
☐ Beryllium	0.82	1.22	☐ Mercury - all others	0.15	0.025	☐ Vanadium	4.3	1.6
☐ Cadmium (D006)	0.69	0.11	☐ Nickel	3.98	11.0	☐ Zinc	2.61	4.3

SECTION D — WASTE TREATMENT STANDARDS

REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/kg (*mg/L-TCLP)	REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/kg (*mg/L-TCLP)	REGULATED CONSTITUENT	WASTEWATER mg/L	NON-WASTEWATER mg/kg (*mg/L-TCLP)
☐ tone	0.28	160	☐ 1,2 Dichloroethane	0.21	6.0	☐ Pyridine	0.014	16
☐ Benzene	0.14	10	☐ Ethyl acetate	0.34	33	☐ Tetrachloroethylene	0.056	6.0
☐ n-Butyl alcohol	5.6	2.6	☐ Ethyl Benzene	0.057	10	☐ Toluene	0.080	10
☐ Carbon disulfide	3.8	N/A	☐ Ethyl ether	0.12	160	☐ 1,1,1-Trichloroethane	0.054	6.0
☐ Carbon tetrachloride	0.057	6.0	☐ Isobutyl alcohol	5.6	170	☐ 1,1,2-Trichloroethane	0.054	6.0
☐ Chlorobenzene	0.057	6.0	☐ Methanol	5.6	0.75*	☐ 1,1,2-Trichloro-1,2,2 trifluoroethane	0.057	3.0
☐ Chloroform	0.046	6.0	☐ Methylene chloride	0.089	30	☐ Trichloroethylene	0.054	6.0
☐ O-Cresols	0.11	5.6	☐ Methyl ethyl ketone	0.28	36	☐ Trichloromonofluoromethane	0.020	30
☐ M & P Cresols	0.77	5.6	☐ Methyl isobutyl ketone	0.14	33	☐ Vinyl chloride	0.27	6.0
☐ Cyclohexanone	0.36	0.75*	☐ Nitrobenzene	0.068	14	☐ Xylene	0.32	30

SECTION E — WASTE TREATMENT STANDARDS NOT LISTED ABOVE

WASTE CODE	REGULATED CONSTITUENT	WASTEWATER	NON-WASTEWATER

SECTION F — CALIFORNIA LIST WASTES

☐ Liquid hazardous wastes having a pH less than or equal to two (2)
☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/L
☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/L
☐ One or more of the following metals greater than or equal to the following: Arsenic and/or compounds: 500 mg/L; Cadmium and/or compounds: 100 mg/L; Chromium and/or compounds: mg/L; Lead and/or compounds: 500 mg/L; Mercury and/or compounds: 20 mg/L; Nickel and/or compounds: 134 mg/L; Selenium and/or compounds: 100 mg/L; Thallium and/or pounds: 130 mg/L.

SECTION G — UNDERLYING HAZARDOUS CONSTITUENTS

If there are underlying hazardous constituents of concern which do not meet the treatment standard of 40 CFR 268.48, Table UST-Universal Treatment Standard, then mark all underlying constituents on page #2.
D001, D002, or D012-D043 to be treated in a non-CWA system, and that contain underlying hazardous constituents - Check all underlying hazardous constituents present.
An underlying hazardous constituent is defined at 40 CFR 268.2(i) as any constituent listed in the universal treatment standards table (40 CFR 268.48), present at a concentration above th constituent-specific treatment standard. These constituents and their treatment standards are listed on next page. D001 wastes (only) treated by incineration, fuels substitution, or organics recovery system do not require identification of underlying hazardous constituents.

§268.48 Table UTS — Universal Treatment Standards

Regulated constituent - common name	Wastewater standard. Concentration in mg/L	Nonwastewater std. Con. in mg/kg[2] unless noted as "mg/L TCLP"[2]
☐ Acenaphthylene	0.059	3.4
☐ Acenaphthene	0.059	3.4
☐ Acetone	0.28	160
☐ Acetonitrile	5.6	1.8
☐ Acetophenone	0.010	9.7
☐ 2-Acetylaminofluorene	0.059	140
☐ Acrolein	0.29	NA
☐ Acrylamide	19	23
☐ Acrylonitrile	0.24	84
☐ Aldrin	0.021	0.066
☐ 4-Aminobiphenyl	0.13	NA
☐ Aniline	0.81	14
☐ Anthracene	0.059	3.4
☐ Aramite	0.36	NA
☐ alpha-BHC	0.00014	0.066
☐ beta-BHC	0.00014	0.066
☐ delta-BHC	0.023	0.066
☐ gamma-BHC	0.0017	0.066
☐ Benzene	0.14	10
☐ Benz(a)anthracene	0.059	3.4
☐ Benzal chloride	0.055	6.0
☐ Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene).	0.11	6.8
☐ Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene).	0.11	6.8
☐ Benzo(g,h,i)perylene	0.0055	1.8
☐ Benzo(a)pyrene	0.061	3.4
☐ Bromodichloromethane	0.35	15
☐ Methyl bromide (Bromomethane)	0.11	15
☐ 4-Bromophenyl phenyl ether	0.055	15
☐ n-Butyl alcohol	5.6	2.6
☐ Butyl benzyl phthalate	0.017	28
☐ 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	0.066	2.5
☐ Carbon disulfide	3.8	4.8 mg/L TCLP
☐ Carbon tetrachloride	0.057	6.0
☐ Chlordane (alpha and gamma isomers)	0.0033	0.26
☐ p-Chloroaniline	0.46	16
☐ Chlorobenzene	0.057	6.0
☐ Chlorobenzilate	0.10	NA
☐ 2-Chloro-1,3-butadiene	0.057	0.28
☐ Chlorodibromomethane	0.057	15
☐ Chloroethane	0.27	6.0
☐ bis(2-Chloroethoxy)methane	0.036	7.2
☐ bis(2-Chloroethyl-ether)	0.033	6.0
☐ Chloroform	0.046	6.0
☐ bis(2-Chloroisopropyl)ether	0.055	7.2
☐ p-Chloro-m-cresol	0.018	14
☐ 2-Chloroethyl vinyl ether	0.062	NA
☐ Chloromethane (Methyl chloride)	0.19	30
☐ 2-Chloronaphthalene	0.055	5.6
☐ 2-Chlorophenol	0.044	5.7
☐ 3-Chloropropylene	0.036	30
☐ Chrysene	0.059	3.4
☐ o-Cresol	0.11	5.6
☐ m-Cresol (difficult to distinguish from p-cresol)	0.77	5.6
☐ p-Cresol (difficult to distinguish from m-cresol)	0.77	5.6
☐ Cyclohexanone	0.36	0.75 mg/L TCLP
☐ 1,2-Dibromo-3-chloropropane	0.11	15
☐ Ethylene dibromide (1,2-Dibromoethane)	0.028	15
☐ Dibromomethane	0.11	15
☐ 2,4-D (2,4-Dichlorophenoxyacetic acid)	0.72	10
☐ o,p'-DDD	0.023	0.087
☐ p,p'-DDD	0.023	0.087
☐ o,p'-DDE	0.031	0.087
☐ p,p'-DDE	0.031	0.087
☐ o,p'-DDT	0.0039	0.087
☐ p,p'-DDT	0.0039	0.087
☐ Dibenz(a,h)anthracene	0.055	8.2
☐ Dibenz(a,e)pyrene	0.061	NA
☐ m-Dichlorobenzene	0.036	6.0
☐ o-Dichlorobenzene	0.088	6.0
☐ p-Dichlorobenzene	0.090	6.0
☐ Dichlorodifluoromethane	0.23	7.2
☐ 1,1-Dichloroethane	0.059	6.0
☐ 1,2-Dichloroethane	0.21	6.0
☐ 1,1-Dichloroethylene	0.025	6.0
☐ trans-1,2-Dichloroethylene	0.054	30
☐ 2,4-Dichlorophenol	0.044	14
☐ 2,6-Dichlorophenol	0.044	14
☐ 1,2-Dichloropropane	0.85	18
☐ cis-1,3-Dichloropropylene	0.036	18
☐ trans-1,3-Dichloropropylene	0.036	18
☐ Dieldrin	0.017	0.13
☐ Diethyl phthalate	0.20	28
☐ 2-4-Dimethyl phenol	0.036	14
☐ Dimethyl phthalate	0.047	28
☐ Di-n-butyl phthalate	0.057	28
☐ 1,4-Dinitrobenzene	0.32	2.3
☐ 4,6-Dinitro-o-cresol	0.28	160
☐ 2,4-Dinitrophenol	0.12	160
☐ 2,4-Dinitrotoluene	0.32	140
☐ 2,6-Dinitrotoluene	0.55	28
☐ Di-n-octyl phthalate	0.017	28
☐ p-Dimethylaminoazobenzene	0.13	NA
☐ Di-n-propylnitrosamine	0.40	14
☐ 1,4-Dioxane	NA	170
☐ Diphenylamine (difficult to distinguish from diphenylnitrosamine).	0.92	13
☐ Diphenylnitrosamine (difficult to distinguish from diphenylamine).	0.92	13
☐ 1,2-Diphenylhydrazine	0.087	NA
☐ Disulfoton	0.017	6.2
☐ Endosulfan I	0.023	0.066
☐ Endosulfan II	0.029	0.13
☐ Endosulfan sulfate	0.029	0.13
☐ Endrin	0.0028	0.13
☐ Endrin aldehyde	0.025	0.13
☐ Ethyl acetate	0.34	33
☐ Ethyl cyanide (Propanenitrile)	0.24	360
☐ Ethyl benzene	0.057	10
☐ Ethyl ether	0.12	160
☐ bis(2-Ethylhexyl) phthalate	0.28	28
☐ Ethyl methacrylate	0.14	160
☐ Ethylene oxide	0.12	NA
☐ Famphur	0.017	15
☐ Fluoranthene	0.068	3.4
☐ Fluorene	0.059	3.4
☐ Heptachlor	0.0012	0.066
☐ Heptachlor epoxide	0.016	0.066
☐ Hexachlorobenzene	0.055	10
☐ Hexachlorobutadiene	0.055	5.6
☐ Hexachlorocyclopentadiene	0.057	2.4
☐ HxCDDs (All Hexachlorodibenzo-p-dioxins)	0.000063	0.001
☐ HxCDFs (All Hexachlorodibenzofurans)	0.000063	0.001
☐ Hexachloroethane	0.055	30
☐ Hexachloropropylene	0.035	30
☐ Indeno (1,2,3-c,d) pyrene	0.0055	3.4
☐ Iodomethane	0.19	65
☐ Isobutyl alcohol	5.6	170
☐ Isodrin	0.021	0.066
☐ Isosafrole	0.081	2.6
☐ Kepone	0.0011	0.13
☐ Methacrylonitrile	0.24	84
☐ Methanol	5.6	0.75 mg/L TCLP
☐ Methapyrilene	0.081	1.5
☐ Methoxychlor	0.25	0.18
☐ 3-Methylcholanthrene	0.0055	15
☐ 4,4-Methylene bis (2-chloroaniline)	0.50	30
☐ Methylene chloride	0.089	30
☐ Methyl ethyl ketone	0.28	36
☐ Methyl isobutyl ketone	0.14	33
☐ Methyl methacrylate	0.14	160
☐ Methyl methansulfonate	0.018	NA
☐ Methyl parathion	0.014	4.6
☐ Naphthalene	0.059	5.6
☐ 2-Naphthylamine	0.52	NA
☐ o-Nitroaniline	0.27	14
☐ p-Nitroaniline	0.028	28
☐ Nitrobenzene	0.068	14
☐ 5-Nitro-o-toluidine	0.32	28
☐ o-Nitrophenol	0.028	13
☐ p-Nitrophenol	0.12	[illegible]
☐ N-Nitrosodiethylamine	0.40	[illegible]
☐ N-Nitrosodimethylamine	0.40	[illegible]
☐ N-Nitroso-di-n-butylamine	0.40	17
☐ N-Nitrosomethylethylamine	0.40	2.3
☐ N-Nitrosomorpholine	0.40	2.3
☐ N-Nitrosopiperidine	0.013	35
☐ N-Nitrosopyrrolidine	0.013	35
☐ Parathion	0.014	4.6
☐ Total PCBs (sum of all PCB isomers, or all Aroclors)	0.10	10
☐ Pentachlorobenzene	0.055	10
☐ PeCDDs (All Pentachlorodibenzo-p-dioxins)	0.000063	0.001
☐ PeCDFs (All Pentachlorodibenzofurans)	0.000035	0.001
☐ Pentachloroethane	0.055	6.0
☐ Pentachloronitrobenzene	0.055	4.8
☐ Pentachlorophenol	0.089	7.4
☐ Phenacetin	0.081	16
☐ Phenanthrene	0.059	5.6
☐ Phenol	0.039	6.2
☐ Phorate	0.021	4.6
☐ Phthalic Acid	0.055	28
☐ Phthalic anhydride	0.055	28
☐ Pronamide	0.093	1.5
☐ Pyrene	0.067	8.2
☐ Pyridine	0.014	16
☐ Safrole	0.081	22
☐ Silvex (2,4,5-TP)	0.72	7.9
☐ 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.72	7.9
☐ 1,2,4,5-Tetrachlorobenzene	0.055	14
☐ TCDDs (All Tetrachlorodibenzo-p-dioxins)	0.000063	0.001
☐ TCDFs (All Tetrachlorodibenzofurans)	0.000063	0.001
☐ 1,1,1,2-Tetrachloroethane	0.057	6.0
☐ 1,1,2,2-Tetrachloroethane	0.057	6.0
☐ Tetrachloroethylene	0.056	6.0
☐ 2,3,4,6-Tetrachlorophenol	0.030	[illegible]
☐ Toluene	0.080	[illegible]
☐ Toxaphene	0.0095	[illegible]
☐ Bromoform (Tribromomethane)	0.63	15
☐ 1,2,4-Trichlorobenzene	0.055	19
☐ 1,1,1-Trichloroethane	0.054	6.0
☐ 1,1,2-Trichloroethane	0.054	6.0
☐ Trichloroethylene	0.054	6.0
☐ Trichloromonofluoromethane	0.020	30
☐ 2,4,5-Trichlorophenol	0.18	7.4
☐ 2,4,6-Trichlorophenol	0.035	7.4
☐ 1,2,3-Trichloropropane	0.85	30
☐ 1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
☐ tris-(2,3-Dibromopropyl) phosphate	0.11	0.10
☐ Vinyl chloride	0.27	6.0
☐ Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations).	0.32	30
☐ Antimony	1.9	1.15 mg/L TCL
☐ Arsenic	1.4	5.0 mg/L TCLI
☐ Barium	1.2	21.0 mg/L TCL
☐ Beryllium	0.82	1.22 mg/L TCL
☐ Cadmium	0.69	0.11 mg/L TCL
☐ Chromium (Total)	2.77	0.60 mg/L TCL
☐ Cyanides (Total)[4]	1.2	590
☐ Cyanides (Amenable)[4]	0.86	30
☐ Fluoride	35	NA
☐ Lead	0.69	0.75 mg/L TCL
☐ Mercury-Nonwastewater from Retort	NA	0.20 mg/L TCL
☐ Mercury-All Others	0.15	0.025 mg/L TCL
☐ Nickel	3.98	11.0 mg/L TCL
☐ Selenium	0.82	5.7 mg/L TCLI
☐ Silver	0.43	0.14 mg/L TCL
☐ Sulfide	14	NA
☐ Thallium	1.4	[illegible] mg/L TCLI
☐ Vanadium[5]	4.3	TCLI
☐ Zinc[5]	2.61	TCLI

*For foot notes see 40CFR 268.48

Certification Standards

I certify that I have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I submitted is true, accurate and complete.

Signature _____ Title _____ Date _____

HYDRITE COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number 004733464 FLE

5. Generator's Name and Mailing Address | Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name | U.S. EPA ID Number

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address | U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.					
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____

Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

INT'L

TR ANSPORTER

GNATED FACILITY

HYDRITE CHEMICAL CO.
114 N. MAIN ST.
COTTAGE GROVE, WI 53527
OFFICE: 608-839-4571

KEN OZMENT
DECOSTAR INDUSTRIES
1 DECOMA DRIVE
CARROLLTON, GA 30117

5/31/12

RE: WASTE RECERTIFICATION NOTIFICATION FORM

In accordance with and as required by federal environmental regulations (40 CFR 264.13 and 268.7), a periodic evaluation must be performed of all active waste streams approved into HYDRITE CHEMICAL CO. - COTTAGE GROVE.
The purpose of the evaluation is to determine if any physical or chemical changes have occurred in the process generating the waste stream.

Please complete this Waste Profile Recertification Form and return to:
HYDRITE CHEMICAL CO., 114 N. MAIN ST., COTTAGE GROVE, WI 53527
FAX: 608-839-4293
EMAIL: CottageGrove.Sales@Hydrite.com

If your waste stream has changed, please complete the attached Addendum and include with this form.

Please return within thirty (30) days to keep your waste profile active.

Waste Profile#	Waste Name	Generating Process Changed? (Yes/No)	Cancel
139393	DECOSTAR WASTE SOLVENT FROM PAINT LINE		

I hereby certify that the process generating the waste stream listed above has not changed and the waste profile is representative of the current waste stream.

Authorized Signature _____ Title _____ Date _____

cc: CG Waste Coordinator
Account Rep 18

Appendix D

Original SOP Effective Date:11/1/96	Supersedes SOP Dated: 1/1/09	Effective Date:12/1/11	Procedure No.: QC017SF
Facility: CA, CE	Approval Name & Signature: John Adams		Revision No.: 5
Review Frequency: 5 years	Approval Title: Regional Operations Manager		Page 1 of 8
Without a green control label to the right of this statement, this procedure is a draft. A draft or an uncontrolled copy cannot be used to manage a process or task.			

I. TITLE: WASTE ANALYSIS PLAN

II. KEY WORDS: NR 664, TSD Facility, Waste

III. PURPOSE: To provide compliance with Wisconsin Administrative Code Chapter NR 664 Storage, Treatment and Disposal Facility General Standards.

IV. APPLICATION: This procedure applies to operators inspecting and sampling wastes and to laboratory personnel verifying and analyzing waste streams.

V. DEFINITIONS: N/A

VI. ASSOCIATED MATERIAL(S): Quality Assurance Program (QC017SFa.doc, attached)
Analysis of Secondary Fuel (Q1018CA doc, attached)
Wisconsin Administrative Code Chapter NR 664 Storage Treatment and Disposal Facility General Standards

VII. PROCEDURE:

1. WASTE ANALYSIS PLAN: NR 664.0013(2) & (3)

1.1. 1.1 In accordance with the Wisconsin Administrative Code Chapter NR 664 (Storage, Treatment and Disposal Facility General Standards), Hydrite Chemical Co. maintains the following Waste Analysis Plan that describes the methodologies for conducting the analyses required to properly receive, store and process hazardous wastes.

2. PARAMETERS AND RATIONALE: NR 664.0013(2) & (3)

WASTE CODE	PARAMETER	RATIONALE
D001	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
D002	pH	Corrositivity
D004	Arsenic	Toxicity, Characteristic
D005	Barium	Toxicity, Characteristic
D006	Cadmium	Toxicity, Characteristic
D007	Chromium	Toxicity, Characteristic
D008	Lead	Toxicity, Characteristic
D009	Mercury	Toxicity, Characteristic
D010	Selenium	Toxicity, Characteristic
D011	Silver	Toxicity, Characteristic
D018	Benzene	Toxicity, Characteristic
D019	Carbon Tetrachloride	Toxicity, Characteristic

D021	Chlorobenzene	Toxicity, Characteristic
D022	Chloroform	Toxicity, Characteristic
D023	o-Cresol	Toxicity, Characteristic
D024	m-Cresol	Toxicity, Characteristic
D025	p-Cresol	Toxicity, Characteristic
D026	Cresol	Toxicity, Characteristic
D028	1,2-Dichloroethane	Toxicity, Characteristic
D029	1,1-Dichloroethylene	Toxicity, Characteristic
D035	Methyl Ethyl Ketone	Toxicity, Characteristic
D036	Nitrobenzene	Toxicity, Characteristic
D038	Pyridine	Toxicity, Characteristic
D039	Tetrachloroethylene	Toxicity, Characteristic
D040	Trichloroethylene	Toxicity, Characteristic
D043	Vinyl Chloride	Toxicity, Characteristic
F003	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
F005	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U002	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U003	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U031	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U057	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U088	Organic solvent fingerprint	Acceptability for recycling
U112	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U140	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U154	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U159	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U161	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U213	Flash point	Ignitability
U220	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling
U239	Flash point, Organic solvent fingerprint	Ignitability, Acceptability for recycling

3. TEST METHODS: NR 664.13(1)(b)

3.1.

PARAMETER	TEST METHOD
Flash Point	ASTM D6450-99; CCFP
Fuel Potential	ASTM D240; Parr BombCalorimeter
Organic Solvent Fingerprint	Conformational Capillary Gas Chromatography via Split Injection and Thermal Conductivity Detection
pH	SW-846; 9040B, 9045C & 9041A
Total Halides	Argentometric (silver nitrate) titration of bomb calorimeter residue solution for halide determination
Density	ASTM D2935
Arsenic	Method 1311 TCLP, SW-846*
Barium	Method 1311 TCLP, SW
Cadmium	Method 1311 TCLP, SW
Chromium	Method 1311 TCLP, SW
Lead	Method 1311 TCLP, SW
Mercury	Method 1311 TCLP, SW
Selenium	Method 1311 TCLP, SW
Silver	Method 1311 TCLP, SW
Benzene	Method 1311 TCLP, SW
Carbon Tetrachloride	Method 1311 TCLP, SW
Chlorobenzene	Method 1311 TCLP, SW
Chloroform	Method 1311 TCLP, SW
o-Cresol	Method 1311 TCLP, SW
m-Cresol	Method 1311 TCLP, SW
p-Cresol	Method 1311 TCLP, SW
Cresol	Method 1311 TCLP, SW
1,2-Dichloroethane	Method 1311 TCLP, SW
1,1-Dichloroethylene	Method 1311 TCLP, SW
Methyl Ethyl Ketone	Method 1311 TCLP, SW
Nitrobenzene	Method 1311 TCLP, SW
Pyridine	Method 1311 TCLP, SW
Tetrachloroethylene	Method 1311 TCLP, SW
Trichloroethylene	Method 1311 TCLP, SW
Vinyl Chloride	Method 1311 TCLP, SW

3.1 (*) Methods that cannot be performed by Hydrite Chemical Co. (notably, those relating to the Toxicity Characteristic Leaching Procedure (TCLP)) are performed by contract laboratories that are certified or registered by the State of Wisconsin for the analysis listed above.

4. SAMPLING METHOD: NR 664.0013(2) & (3)

4.1. Sampling Device

4.1.1. A Coliwasa device, glass thief or non sparking metallic thief will be used for sampling liquids.

4.1.2. Devices used must reach the bottom of the container or vessel to collect a cross-section of the material.

4.1.3. The sampling device is drained into a container for collection and mixing.

4.1.4. The sampling device and collection and/or mixing vessels must be decontaminated between each container or composite lot sample that is collected.

4.2. Sample Bottle

4.2.1. Glass French Square or High Density Polyethylene (HDPE) bottle, 2 or 4 oz.

4.3. Inspection of Sampling Equipment

4.3.1. The sampling apparatus must be examined to confirm it is clean, dry and free of contaminates.

4.3.2. The sample bottle and cap must be examined to confirm it is clean, dry and free of contaminates.

4.3.3. The collection/mixing vessel must be examined to confirm it is clean, dry and free of contaminates.

4.3.4. Gloves must be inspected to confirm they are clean and cannot contaminate the sample.

4.4. Container Sampling

4.4.1. The sampling device must be inserted to the bottom of the container to collect a cross-section of the material.

4.4.2. When full, the sampling device is raised up and out of the container and the contents transferred to a collection vessel.

4.4.3. A composite sample will be made of containers having a single lot (authorization) number.

4.4.3.1. The same sample device and method of collection as above is used with the samples from each container added into the collection/mixing vessel.

4.4.4. After thorough mixing of the collection vessel, a representative subsample is poured into a glass or HDPE sample bottle.

4.4.5. The sample bottle must be labeled as indicated in Section 4.7.

4.5. Bulk Tanker Sampling

4.5.1. The sampling device must be inserted to the bottom of the vessel to collect a cross-section of the material.

4.5.2. When full, the sampling device is raised up and out of the vessel and the contents transferred to a collection vessel.

4.5.3. After thorough mixing of the collection vessel, a representative subsample is poured into a glass or HDPE sample bottle.

4.5.4. The sample bottle must be labeled as indicated in Section 4.7.

4.6. Tank Sampling

4.6.1. Tanks will be sampled via sample port or discharge valve.

4.6.2. The sample will be collected directly into the sample bottle.

4.6.3. The sample bottle must be labeled as indicated in Section 4.7.

4.7. Sample Bottle Labeling

4.7.1. Sample bottles must be labeled immediately.

4.7.2. All sample bottles must be labeled to indicate:

4.7.2.1. The waste being sampled (customer & authorization number)

4.7.2.2. Date sample was collected

4.7.2.3. Initials of person collecting the sample

4.8. Chain of Custody

4.8.1 After collection, the sample must be placed in the designated, laboratory sample receiving area.

4.8.2 The analyst taking the sample from the receiving area must log the sample in a "sample chain of custody log".

4.8.3 The "sample chain of custody log" must include, but is not limited to:

4.8.3.1 Date

4.8.3.2 Time sample arrived in the laboratory

4.8.3.3 The initials of the employee who delivered the sample to the laboratory

4.8.3.4 Generator's waste stream, number or sample name

4.8.3.5 The initials of the analyst taking the sample

4.9. The sample will be considered suspect under any of the following circumstances and referred to the appropriate operator/supervisor before analysis:

4.9.1. The sample bottle is damaged or defective.

4.9.2. There is any doubt as to the contents of the sample bottle because of an old label, incorrect markings, or insufficient identification.

4.10. One or more of the following forms will be used to track the waste samples and waste shipments:

4.10.1. Hazardous Waste Manifest

4.10.2. Receipt Authorization Sheet

4.10.3. Waste Profile Master

4.10.4. Laboratory Analysis Report

4.10.5. Land Disposal Notification & Certification Form

4.10.6. Bill of Lading

4.10.7. Sample Chain of Custody Log

4.10.8. Computer Tracking System

4.10.9. Job Sheet

5. FREQUENCY OF ANALYSIS: NR 664.0013(2) & (3)

5.1 For wastes that will be received at the facility, each waste stream will be characterized by testing the waste, or by using generator knowledge of the waste before any shipments of that waste are received, to determine if the waste is restricted from land disposal.

5.2 All subsequent shipments of that particular waste will be inspected and analyzed in accordance with the waste analysis plan required by s. NR664.0013 to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper, and that the waste matches the waste type Hydrite has agreed to accept.

6. ADDITIONAL REQUIREMENTS FOR WASTE GENERATED OFF SITE: NR 664.0013

6.1. Hazardous Waste Generators Supplied Information

6.1.1. The Generator of the waste shall identify the hazardous waste constituents by using procedures permitted in NR 662.011.

6.1.1.1. Written confirmation of the waste constituents shall be included with the waste profile. This can be met by:

6.1.1.1.1. Waste analysis for hazardous constituents, or

6.1.1.1.2. MSDS or Technical bulletin with a list of hazardous constituents.

6.1.2. The Generator shall notify Hydrite of any changes in their waste streams.

6.1.3. The Generator shall ship wastes in proper U.S. Department of Transportation containers which are marked and labeled in accordance with 49 CFR 100-177.

6.1.4. The Generator shall supply completed Hazardous Waste Manifest, Bill of Lading, and Land Disposal Notification.

6.2. Identification

6.2.1. For wastes that will be received at the facility, a Generator Waste Profile Packet must be completed and submitted to Hydrite along with MSDS's or other technical information before any waste shipments are received from the Generator.

6.2.2. All subsequent waste shipments that can be sampled using the sampling methods described in section 4 of this plan, will be sampled. Tests performed on these samples may include:

6.2.2.1. GC analysis of distillate or headspace

6.2.2.2. Density

6.2.2.3. Percent yield of solvent from waste or percent non-volatile residue

6.2.2.4. Fuel potential via Parr bomb calorimeter

6.2.2.5. Halogen content by Parr bomb calorimeter

6.2.2.6. Contract laboratory analysis

6.2.2.7. pH

6.2.2.8. Flash Point

6.2.3. All waste streams that are accepted from the initial waste profile are issued a waste master number that will be unique to that waste stream.

6.2.4. Each waste stream will be assigned a unique authorization number by Hydrite Chemical Co. prior to receiving each waste shipment.

6.2.4.1. This number is unique to the generator, waste stream, and particular shipment.

6.2.5. The number will follow this waste stream through the waste management process.

7. ADDITIONAL REQUIREMENTS: NR 664.0013(1); NR 664.0017

7.1. All ignitable wastes must be separated from sources of ignition.

7.2. Smoking and open flames will be confined to areas away from the storage area and from the tank farms, with the exception of a properly authorized hot work permit.

7.2.1. "No Smoking" signs will be conspicuously placed in the storage area and at the tank farms.

7.3. All waste will be segregated for storage according to requirements set forth in NR 670.015.

8. REQUIREMENTS FOR CERTIFIED OR REGISTERED LABORATORY: NR 664.0013(1)(a)1

8.1. The Hydrite Chemical Co. - Cottage Grove East laboratory located at 114 N. Main St., Cottage Grove, WI is registered under the provisions of ch. NR 149, Wisconsin Administrative Code.

8.2. The Hydrite Chemical Co. Laboratory ID Number is 113063390.

9. PLAN REVISIONS

9.1 All revisions to this Waste Analysis Plan or the associated Quality Assurance Program must be approved by the Corporate SQRA Department prior to finalization. These documents are part of the Cottage Grove Part B Permit. The Wisconsin DNR must approve all revisions.

COTTAGE GROVE QUALITY ASSURANCE PROGRAM

3.0 PROJECT DESCRIPTION

3.1 Introduction

Hydrite Chemical Co., owns and operates a permitted hazardous waste storage and solvent reclamation facility at 114 N. Main Street, Cottage Grove, WI.

The Waste Analysis Plan and Cottage Grove Quality Assurance Program are developed to include the essential elements and format prescribed by RCRA. The Waste Analysis Plan demonstrates that the standard operating procedures for waste analysis and associated laboratory practices both meet the intent and letter of the regulations for proper waste characterization.

3.2 Facility Description

The Hydrite Chemical Co., plant at 114 N. Main St., Cottage Grove, WI is primarily concerned with custom/toll manufacturing. The facility is also involved in the reclaiming of solvent as described by the U.S.EPA Hazardous Waste Codes listed below. The hazardous wastes listed below are stored in containers and tanks.

D001: General ignitable waste solvents (flash point less than 140 degrees F).

D002: A solid waste exhibiting the characteristic of corrosivity (pH less than or equal to 2 or greater than or equal to 12.5).

D004: A solid waste that equals or exceeds 5.0 mg/1 of Arsenic as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D005: A solid waste that equals or exceeds 100.0 mg/1 of Barium as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D006: A solid waste that equals or exceeds 1.0 mg/1 of Cadmium as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D007: A solid waste that equals or exceeds 5.0 mg/1 of Chromium as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D008: A solid waste that equals or exceeds 5.0 mg/1 of Lead as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D009: A solid waste that equals or exceeds 0.2 mg/1 of Mercury as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D010: A solid waste that equals or exceeds 1.0 mg/1 Selenium as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D011: A solid waste that equals or exceeds 5.0 mg/1 of Silver as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D018: A solid waste that equals or exceeds 0.5 mg/1 Benzene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D019: A solid waste that equals or exceeds 0.5 mg/1 of Carbon Tetrachloride as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D021: A solid waste that equals or exceeds 100.0 mg/1 of Chlorobenzene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D022: A solid waste that equals or exceeds 6.0 mg/1 of Chloroform as determined by the toxicity Characteristic Leachate Procedure (TCLP).

D023: A solid waste that equals or exceeds 200.0 mg/1 of o-Cresol as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D024: A solid waste that equals or exceeds 200.0 mg/1 of m-Cresol as determined by the Toxicity of Characteristic Leachate Procedure (TCLP).

D025: A solid waste that equals or exceeds 200.0 mg/1 a of p-Cresol as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D026: A solid waste that equals or exceeds 200.0 mg/1 of Cresol as determined by the Toxicity Characteristic Leachate Procedure (TCLP);.

D028: A solid waste that equals or exceeds 0.5 mg/a of 1,2-Dichloroethane as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D029: A solid waste that equals or exceeds 0.7 mg/1 of 1,1-Dichloroethylene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D035: A solid waste that equals or exceeds 200.0 mg/1 of Methyl Ethyl Ketone as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D036: A solid waste that equals or exceeds 2.0 mg/1 of Nitrobenzene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D038: A solid waste that equals or exceeds 5.0 mg/1 of Pyridine as determined by the Toxicity Characteristic Leachate Procedure (TCLP).

D039:	A solid waste that equals or exceeds 0.7 mg/1 of Tetrachloroethylene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).
D040:	A solid waste that equals or exceeds 0.5 mg/1 of Trichloroethylene as determined by the Toxicity Characteristic Leachate Procedure (TCLP).
D043:	A solid waste that equals or exceeds 0.2 mg/1 of Vinyl Chloride as determined by the Toxicity Characteristic Leachate Procedure (TCLP).
F003:	The spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures /blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005:	The spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitro propane; all spent solvent mixtures/blends containing, before use, a total of ten percent of more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
U002:	Acetone
U003:	Acetonitrile
U031:	1-Butanol
U057:	Cyclohexanone
U088:	Diethyl phthalate
U112:	Ethyl acetate
U140:	Isobutyl alcohol
U154:	Methyl Alcohol
U159:	Methyl ethyl ketone (MEK)
U161:	Methyl isobutyl ketone

U213: Tetrahydrofuran

U220: Toluene

U239: Xylene

Waste is shipped to the plant by truck. This is either in bulk tankers or containerized material. Containers are most often 55-gallon drums.

Before a waste stream is accepted for reclamation, a representative sample of the waste is received and analyzed before any shipments of that waste are received. All subsequent shipments of that particular waste will be inspected and analyzed in accordance with the waste analysis plan required by s. NR664.0013 to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper, and that the waste matches the waste type Hydrite has agreed to accept. The sampling and analysis procedures are described in the "Waste Analysis Plan".

Containers are sampled as referenced above, and then sorted. The bulk tanks are sampled and then pumped into storage tanks. Containerized materials of common characteristics are transferred into a tank for processing.

The wastes are reclaimed by one or more of the following processes:

a. Gravity Separation: separates liquid from solids and liquids from liquid by solubilities.

b. Simple Distillation: separates liquid from solids and liquids from liquid by use of boiling points.

c. Fractional Distillation: is the finer separation of liquids from liquids by use of boiling points.

d. Fuel blended to achieve a specification secondary fuel for BTU recovery.

3.3 Project Objectives

The primary objectives of the Waste Analysis Plan are to:

1. Guarantee the correct identification and classification of all waste materials having the potential of being received at the facility.

2. Assure the correct identification and classification of waste materials as they are received at the facility and demonstrate their conformance with established agreements and processing potentials.

3. Assure the proper processing and disposition of waste materials.

4. Assure the specification and proper disposition of on-site generated wastes and blended secondary fuels from those wastes and wastes received for that purpose.

5. Assure proper identification and analysis of site containment waters for proper disposition.

6. Assure protection of human health and the environment.

3.3.1 Intended Data Usage

The data collected in accordance with the Waste Analysis Plan, of which this QAPP is a part, will be used to meet the objectives stated above.

3.3.2 Data Quality Objectives

Data Quality Objectives (DQOs) are based on the concept that different data uses may require different levels of data quality. Data quality is defined as the degree of certainty of a data set with respect to precision, accuracy, reproducibility, comparability and completeness. DQOs are qualitative and quantitative statements specifying the required quality of data required to support standard operating activities. The DQOs are also predicated on over 20 years of practical and successful operations in the solvent recycling and waste handling business, as well as a recognition of meeting the requirements of appropriate federal and state statues. The four levels of data quality are as follows:

1. Screening (DQO Level 1): This level provides the lowest data quality but the most rapid results. Analyses performed under this DQO are not practicably amendable to QA/QC verification procedures; however, measures are taken through appropriate training and standard practices to assure comparability between analysts.

2. Operational (DQO Level 2): This level provides data of good quality but is employed where information is required to make sound operational decisions. Analyses performed under this DQO require calibrated instruments or labware and standardized laboratory practices utilizing a modified QA/QC program outlined in Section 5.0 Quality Assurance Objectives.

3. Conformational (DQO Level 3): This level provides accurate and precise data using calibrated instruments or labware and standardized laboratory practices utilizing a modified QA/QC program outlined in Section 5.0 Quality Assurance Objectives. Although the methods employed do not follow authoritative guidelines (e.g. SW-846), the methods are well founded through experience and adaptation from authoritative sources, and will all be standardized, accurate and reproducible.

4. Environmental (DQO Level 4): This level provides accurate and precise data following approved methods and QA/QC programs outlined in authoritative sources.

The following table summarizes the test methods, their applicability at meeting the Project Objectives and the appropriate DQO:

Parameter	Applicable Project Objective	DQO
Flash Point	Waste characterization,	2
Fuel Potential	Waste (fuels) specification, product quality	2
Organic Solvent Fingerprint	Waste characterization, waste (fuels) specification, product quality, contaminant identification, process control	2
pH	Waste characterization, waste (fuels) specification, process control, product quality	2
Total Halogen	Waste (fuels) specification, product quality	2
TCLP Analysis	Waste characterization, waste (fuels) specification, product quality, protection of human health and the environment	4
Density	Process control, product quality	1

4.0 PROJECT ORGANIZATION AND RESPONSIBILITY

The Waste Analysis Plan is administered entirely by Hydrite Chemical Co., personnel. Responsibilities fall both in technical and operational areas.

The Manager of QC/QA for the Cottage Grove Facility of Hydrite Chemical Co. is the main contact for issues regarding the Waste Analysis Plan, QAPP, technical information and laboratory performance.

The Regional Operations Manager for the Cottage Grove Facility of Hydrite Chemical Co. has responsibility for the daily administration of the Waste Analysis Plan.

References: Cottage Grove Office, Lab and Engineering Organization Chart, Local Server

5.0 QUALITY ASSURANCE OBJECTIVES

The overall QA objective is to develop and implement procedures for production sampling, chain-of-custody, laboratory analysis, documentation, and reporting that will provide legally defensible data. Specific procedures to be used for sampling, chain-of-custody, calibration of laboratory instruments, laboratory analysis, reporting, internal quality control, audits, preventive maintenance, and corrective actions are described in other sections of this QAPP. This section defines the goals for levels of QA effort: accuracy, precision, completeness, representativeness, and comparability.

5.1 Level of Quality Control

The level of Quality Control used by Hydrite Chemical varies with the necessary data Quality Objectives outlined in Section 3.3.2.

A DQO of "1" has no documented QC program. In this circumstance, our operations team requires only "rough" numbers to make quick decisions on waste segregation.

For a DQO of "2", all analyses are performed on instruments calibrated on a regular basis (See Section 8.0 Calibration Procedures and Frequency). Calibrations include: Parr Bomb (BTU) calibration with benzoic acid; balances calibrated with certified weights; pH meter calibrated with certified buffer solutions; and argentometric titrations performed only with certified reagents.

For a DQO of "4", only approved methods utilizing approved QA/QC protocols will be utilized. All analyses requiring a DQO of "4" are performed by an outside State-certified laboratory.

5.2 Accuracy

Limits are set for standards and control samples that are appropriate to the degree of accuracy required. Limits are based on historical laboratory data and/or instrument manufacturer's recommendations.

5.3 Precision

Precision is measured by the ability to stay within the acceptable limits set for standards and control samples.

5.4 Control Limits

Control charts shall be maintained for the following parameters;

1. Percent recovery for selected standards or control samples

Control limits will be established at $\pm$ 3 sigma based on a predetermined and appropriate number of observations. Analytical results reported when a procedure is operating "out of control" will be considered suspect.

5.5 Document and Record Control

Document and Record control procedures ensure that documents and records used in or associated with analyses are retained, controlled and maintained.

References: Applicable Quality Control Laboratory Procedures, Local Server
Document Control Procedures, Vol. 3.0, SOPP
Records Management, Vol. 5.0, SOPP

6.0 SAMPLING PROCEDURES

Samples will be taken by methods in the "Test Methods for Evaluating solid Waste Physical/Chemical Methods", Vol. II, 3rd edition, SW-846, U.S. EPA.

6.1 Drums

A Coliwasa device, glass thief, or non-sparking metallic thief, shall be used in sampling liquid in drums. The devices used must be inserted to the bottom of the container to collect a cross section of the material. The device is drained into a container. The sample can then be poured into a glass or high density polyethylene (HDPE) sample container with a solvent resistant cap, both of which shall be clean and free of contaminants.

A composite sample will be made of drums composing a single lot (authorization) number. The same device and method as above is used in composite sampling, except that samples from each drum are added into one container. After thorough mixing, the composite can be poured into a glass or HDPE sample container with a solvent resistant cap, both of which shall be clean and fee of contaminants.

The sampling device and any mixing containers must be decontaminated between each drum or composite lot sample that is collected. Decontamination consists of rinsing the device or mixing container with pure solvent and dried prior to reuse.

Composite sampling in drums containing non-uniform or solid material should be done by taking three or four samples in the one drum.

All samples shall be properly labeled to indicate the customer's waste stream, date of sample, and person taking the sample.

For PCB analyses, a composite sample can be made of drums of multiple lot (authorization) numbers.

An auger bit and sampler may be used in sampling of certain solids, e.g., resins. After the auger bit is rotated into the solid, the sampler is inserted into the augured solids to collect a cross-section of the material. The core sample is released into a sample collection container. After collecting a core sample from each drum, a composite sample can be made of drums composing of a single lot (authorization) number.

6.2 Bulk Tankers

A Coliwasa device, glass thief, or non-sparking metallic thief, shall be used in sampling liquid in bulk tankers. The devices used must be inserted to the bottom of the tanker to collect a cross section of the material. The device is drained into a container. After mixing, the sample

can then be poured into a glass or HDPE sample container with a solvent resistant cap, both of which shall be clean and free of contaminants.

The sampling device and any mixing containers must be decontaminated between each sample that is collected. Decontamination consists of rinsing the device or mixing container with pure solvent and dried prior to reuse.

All samples shall be properly labeled to indicate the customer's waste stream, date of sample, and person taking the sample.

6.3 Tanks

Samples are taken by draining directly from the tank into the sample container. The sample container shall be a glass or high density polyethylene (HDPE) sample container with a solvent resistant cap, both of which shall be clean and free of contaminants.

All samples shall be properly labeled to indicate the customer's waste stream, date of sample, and person taking the sample.

One or all of the following will be used to track the waste samples and waste shipments:

a. Hazardous Waste Manifest

b. Receipt Authorization Sheet

c. Laboratory Analysis Form

d. Waste Profile Master

e. Computerized Tracking System (PRISM)

References: Waste Analysis Plan, Vol. 22.0 SOPP
Waste Drum Sampling and Classification Procedure, Vol. 15.0, SOPP
Receiving Procedures, Vol. 15.0, SOPP
Liquid Chemical Sampling, Vol. 22.0, SOPP

7.0 SAMPLE CUSTODY

7.1 Custody Definition

1. It is in their actual physical possession, or

2. It is in their view, after being in their physical possession, or

3. It is in their physical possession and locked up so that no one could tamper with it, or

4. It is kept in a secured area restricted to authorized personnel only.

7.2 Production Sampling Operations

The production sampler will take all samples by prescribed methods. The sample will be placed in a container, with a sample label:

Customer _____
Auth. No. _____
Date _____
Operator _____

The sample remains in the custody of the sampler, as described in 7.1 above.

7.3 Transfer of Custody

Samples collected will remain in the custody of a sampler until delivery to the laboratory. Upon delivery to the laboratory, the laboratory staff personnel will log in the sample in the appropriate log and place the sample in the designated "sample storage area(s)."

7.4 Laboratory Custody Procedures

The following procedures will be followed by the laboratory:

1. All samples will be handled by a minimum number of people.

2. The laboratory will set aside a "sample storage area(s)." This area(s) is a clean, isolated section of the laboratory dedicated to sample receipt and logging.

3. The laboratory will maintain a log to record, for each sample, the person delivering the sample, the person analyzing the sample, date received, source of sample, sample authorization number, and lab log number.

4. The laboratory will ensure that sample materials having unusual physical characteristics, or requiring special handling, are properly stored and maintained prior to analysis.

6. The laboratory area will be maintained as a secured area, restricted to authorized personnel only.

7. Laboratory personnel are responsible for the care and custody of the sample once it is handed over to them, and should be prepared to testify that the sample was in their possession and view or secured in the laboratory at all times from the moment it was received from the sampler until the time the analyses are completed.

8.0 CALIBRATION PROCEDURES AND FREQUENCY

Calibration procedures and frequency of calibration are specified for every analytical test, or instrumentation used therein, described in the Waste Analysis Plan. It must be kept in mind that the majority of procedures are adaptations of standard methods and developed from greater than twenty years of practical laboratory experience related to the management of hazardous wastes and the recycling of solvents. The following table summarizes the calibration procedures:

PARAMETER	INSTRUMENT/ITEM CALIBRATED	FREQUENCY	CRITERIA	SUMMARY OF METHODOLOGY
Flashpoint	Pressure Sensor	Weekly & Annual	Dodecane or Anisole within +/- 4° F	ASTM D-6450. Calibrated annually by mfg.
Fuel Potential (BTU Value)	Parr Bomb Systems (manual)	Weekly & Annual	Within QA limits for % recovery	Calibrated annually using benzoic acid standard per manufacturers' recommendation. Analyze weekly control sample by SOP and record % recovery
Organic Solvent Fingerprint	Thermal Conductivity Detector (TCD)	Weekly	Within QA limits for % recovery	Analyze control sample by SOP and record percent recovery (quantitative)
pH	pH Meter	Daily	7.0 $\pm$ 0.5 pH units Slope: 0.95 to 1.03	Calibrate meter with 3 certified buffer solutions
Total Halogen	Normality of Reagents	N/A	N/A	Use only certified reagents.
TCLP	N/A	N/A	N/A	Done by state-certified contract laboratory
Density	Balance	Quarterly	Within QA limits	Calibration by contract service using NIST traceable weights

*Criteria for acceptability of data or instrument performance. Otherwise calibration will be repeated or instrument will not be used until repaired or replaced.

References: Applicable Laboratory Instrumentation, Calibration and Maintenance Procedures, Local Server
Cottage Grove East Laboratory Quality Control Policy, Vol. 22.0, SOPP

9.0 ANALYTICAL PROCEDURES

Whereas Hydrite Chemical Co., operates a solvent recovery operation with subsequent disposition of wastes as secondary fuels, the majority of analytical procedures have been developed to facilitate those operations. In general, procedures defined by SW-846, or other associated standard methods, are not wholly applicable to operations. The procedures that have been developed are based on greater than twenty years of practical experience in the hazardous waste management, solvent recycling, and fuels blending businesses. As best as practicable, methods are designed to meet both the practical business aspects as well as the intent of SW-846 prescribed analyses to include: confirm the waste characteristics of ignitability, corrosivity, reactivity and TCLP; confirm the appropriate description and designation of listed wastes; determine recoverability; assure fuels specifications; assure compatibility of wastes; and, in general, protect human health and the environment. To that end, this section describes the analytical procedures performed to meet these criteria.

9.1 Gas Chromatography

Hydrite Chemical employs conformational gas chromatography by split injection onto capillary columns (one polar and one non-polar column connected by a "Y" splitter) and Thermal Conductivity Detection. Whereas SW-846 would specify the methods by which volatile halogenated compounds, aromatic hydrocarbons and other highly specific compounds are determined within their respective classes, we are required by the nature of our business and purpose of analysis to analyze for a much wider variety of components. Identification by single column techniques, or limited to SW-846 methodology, poses the possibility of misidentification of mutually interfering components. We have determined through 20 years of experience that dual column analysis affords us the best possible identification of the solvent systems and components, which we encounter in normal operations. The presence of "unknown" compounds in waste stream distillates that cannot be resolved by conformational gas chromatography constitutes a non-conforming waste. Hydrite Chemical has purchased a Hewlett-Packard GCD Gas Chromatography System for the purpose of identifying unknown compounds. This system employs a capillary column in conjunction with an Electron Ionization Detector. A chromatogram with retention times and area counts is obtained along with the capability to analyze each peak for its mass spectra, which can be matched through a NIST PBM Library search. A NIST Structures Database is also available with the library. Trace TCLP compounds are analyzed by a state-certified contract laboratory when required.

9.2 Flash Point Test

The Flash Point by Continuously Closed Cup (CCFP) Tester is used to determine the flash point of solvents. The CCFP is commonly used in the solvent industry. Reference is made to ASTM D 6450-99.

9.3 Fuel Potential Test

A Parr Bomb Calorimeter is used to determine BTU of waste still solvents and sludge which would be incinerated or used in secondary fuels. This method is not used to test hazardous constituents and therefore is not listed in SW-846. Analyses are performed in accordance with manufacturer's specifications.

9.4 pH Test

This test is somewhat subjective because pH measurement is truly relevant only for aqueous solutions, not hydrocarbon solvents. It is, however, a practical measure of "acidity" or corrosivity. The pH test follows SW-846, 9040B, 9041A, 9045C.

9.6 Total Halogen Test

This is done by Argentometric (Volhard) titration of an aqueous solution of the Bomb Calorimeter residue. This is done for secondary fuel waste generated at the plant to determine halogen levels.

10.0 DATA REDUCTION, VALIDATION AND REPORTING

10.1 Data Reduction

10.1.1 Gas Chromatographic Techniques

The two chromatographic techniques are concerned with the analysis of solvents, generated either from waste samples by laboratory distillation or by headspace analysis.

Distillate or Headspace Solvent Analysis

Samples or headspace vapors are injected into the gas chromatographs. The analytes elute and are detected in accordance with the protocols of the Analytical Procedures Section. The detector signals are recorded on a PC yielding a chromatogram and tabulated data for retention time, area count and normalized area percent. Due to the universal response of the TCD, all analytes are assumed to have the same response factor. Therefore, the area percents are recorded as the quantitative value for solvent constituents identified by fingerprint analysis. Fingerprint standard retention times are updated annually and after major maintenance. No further data reduction is required.

10.1.2 Flash Point Test (Ignitability)

No further data reduction is required.

10.1.3 Fuel Potential Test

Parr Bomb Calorimetric procedures are given in ASTM D 240-92. Calibration Standards are run employing benzoic acid to produce BTU value versus T (recorded on the calorimeter) standards. Temperature changes during a trial may therefore be correlated to a BTU content per weight basis for the tested material.

10.1.4 pH Test

pH testing is subjective. No further data reduction is necessary.

10.1.6 Total Halogen Test

The total halogens test is described in the laboratory SOP. The test is a straight titrimetric procedure yielding percent halides. No further data reduction is necessary.

10.2 Data Validation

The principal criteria that will be used to validate the data's integrity during collection and reporting are:

1. All analytical interpretation shall be reviewed by a second analyst to confirm both qualification and quantification of chromatographic data.

2. Confirming that the goals for precision and accuracy on standards and control samples are met.

3. Verification on a monthly basis by QC personnel that all raw data generated in the preceding month has been stored in hard copy in the specified locations. Certain raw data may be stored on magnetic tape, disks or CD-ROM when appropriate.

10.3 Data Reporting

Upon completion of an analysis, the analyst reports the result(s) on the laboratory worksheet, and initials and dates the worksheet. In compliance with the criteria for the Quality Control program at Hydrite Chemical Co., a Quality Control Data Sheet is completed when the analyst's results are entered. All completed laboratory worksheets are reviewed by a second analyst, to check for obvious errors and worksheet completeness.

References: Records Management, Vol. 5.0, SOPP

11.0 INTERNAL QUALITY CONTROL

Internal Quality Control procedures include the following:

1. Control Samples

2. Reference (Calibration) standards

Control samples are run as a measure and confirmation of laboratory precision. When performance is found to fall outside of established criteria, the laboratory is deemed to be "out of control" and corrective measures are taken to remedy the problem(s).

Reference or calibration standards are also routinely run to establish qualitative and quantitative standards, as well as QA/QC performance criteria. Any level of contamination not attributable to the reagents employed in the preparation of standards is a measure of the uncleanness of the laboratory, improper equipment operation, poor laboratory practices, etc. A level of contamination which contributes to an "out of control" condition or which reduces the degree of completeness (quantitative) to less than 95% is unsatisfactory. In such cases, the standards will be rerun and/or re-prepared.

The following table summarizes the Quality Control procedures for each analysis:

PARAMETER	CONTROL SAMPLES
Gas Chromatography Organic Fingerprinting	1 test per year
Flash Point Test	1 test per week
Total Halogens	1 test per week

References: Applicable Quality Control Laboratory Procedures, Local Server
Cottage Grove East Quality Control Policy, Vol. 22.0, SOPP

12.0 PREVENTIVE MAINTENANCE

The recommended equipment performance and maintenance schedule is shown in the following table:

Equipment Performance and Maintenance Schedule

Each Use	As Needed	Weekly (W), Monthly (M), Quarterly (Q), Annually (A)
Analytical Balances 1) Clean after each use	1) Request repair if inaccurate or malfunctioning	1) Check accuracy with weights (M) 2) Calibration Service visit (Q)
Flash Point Tester 1) Clean after each use	1) Repair as required	1) Calibration by mfg (A)
Gas Chromatographs 1) Check instrument parameters	1) Run standards, 2) Change gas cylinders, septa, run compensations, condition columns, change injection port liners	1) Inspect injection port systems (W) 2)Check gas flows/standardize (W) 3) Monitor detector response (W)
Parr Bomb 1) Clean/inspect each use	1) Repair as required	1) Hydrostatic Test (A) 2) Standardize (A) & after major maintenance
pH Meter 1) Rinse electrodes 2) Check electrodes	1) Replace electrodes	Daily buffer calibration

References: Applicable Laboratory Instrumentation, Calibration and Maintenance Procedures, Local Server
Cottage Grove East Quality Control Policy, Vol. 22.0, SOPP
Major Laboratory Equipment/Instrument List, Vol. 22.0, SOPP

13.0 SPECIFIC ROUTINE PROCEDURES USED TO ASSESS DATA PRECISION, ACCURACY AND COMPLETENESS

A full explanation of precision, accuracy and completeness procedures is given in Section 5.0, Quality Assurance Objectives. The processes described in Section 8.0, Calibration Procedures and Frequency are also incorporated into the data assessment process. Deviations from these standards and controls will signal an out of control situation, and appropriate corrective action will be taken in accordance with Section 14.0, Corrective Action.

14.0 CORRECTIVE ACTION

For each analytical method employed, the laboratory regularly tracks precision and accuracy in accordance with Section 5.0, Quality Assurance Objectives. These statistics will be updated as additional analyses are performed and more experience is gained. When either the precision and/or the accuracy from recovery data exceeds the goals, the procedure will be checked for a calibration, quality of the standards and analytical techniques. The analysis will be stopped and corrective action taken.

Corrective actions will include, but not necessarily be limited to:

1. Recalibration of instruments using freshly prepared calibration standards

2. Additional training of laboratory personnel in correct implementation of sample preparation and analysis methods.

3. Reassignment of personnel, if necessary, to improve the overlap between operator skills and method requirements.

After the corrective actions have been taken and satisfactory quality control sample results are obtained, samples will be rerun.

References: Cottage Grove East Quality Control Policy, Vol. 22.0, SOPP
Control of Non-conforming Products and Processes, Vol. 3.0, SOPP
Corrective and Preventive Action, Vol. 3.0, SOPP
Incident Investigation, Reporting and Corrective Action Procedure, Vol. 5.0, SOPP

15.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

On a periodic basis, the Manager of QC/QA or his or her designee reviews the quality assurance program. An assessment of the adequacy of the quality control/quality assurance program will be made. Any deficiencies will be corrected. The Manager of QC/QA also reviews the QA/QC plan periodically to make sure all sections are current and accurate and to direct the preparation of any necessary revisions.

CHANGE HISTORY LOG

	Change Identified			
Rev #	**Date**	**Initials**	**Level of Change** *Note: Each change should have a Level associated with it.*	**Description of Change**
2	10/15/03	GL/CN/MM/KB	1	Added Change History Log
			1	Updated facility description to show shift of primary business from the waste business to toll mfg (3.2)
			1	Added U057: Cyclohexanone, U154: Methyl Alcohol, U158: 4,4'-Methylenebis (2-chloroaniline) to the listing of US EPA Hazardous Waste Codes. These are already listed in the Part B Permit Section II-I General.
			1	Removed statement that plant has capability of receiving hazardous waste materials via rail (3.2.)
			2	Changed boiling points to solubilities (3.2 a)
			2	Changed DQO of Flashpoint from 3 to 2, Fuel Potential from 3 to 2, Organic Solvent Fingerprint from 3 to 2, Total Halogen from 3 to 2 as these are more true descriptions of the level of data quality required. (3.3.2)
			3	Removed %Solids/%Solvents, Water Content, Process Water Testing in 3.3.2 and throughout the entire QAPP. These tests are not required to characterize waste. (sections 3.3.2, 8.0, 9.0, 10.1, 11.0)
			3	Removed standards and volatile organic mixtures under DQO "2". Standards, other than already listed, are not needed and the GC is not "calibrated". Replaced NBS traceable Class S weights with certif. weights, removed ACS (5.0)
			3	Removed reference to Duplicate and Spike samples throughout QAPP, and replaced with Control Samples. Control Samples provide a more realistic and complete measurement of the analytical system. (sections 5.1, 5.4, 10.2, 11.0, 15.0)
			2	Removed DQO "3" as no tests require this level of data quality
			2	Redefined how accuracy and precision are measured in the lab (5.2, 5.3)
			3	Revised observation limit to number of observations that is appropriate (i.e. > or < 10) (5.4) and added "sigma"
			1	Added HPDE sample bottles (6.0)
			1	Clarifications for electronically logging samples by Lab staff (7.3)
			3	Updated instrument calibration procedures to better reflect needs of laboratory, removed Water Content/Autotitrator & manual bomb, changed specific gravity to density, (8.0). Flashpoint: monthly changed to weekly & annual by mfg. Bomb: weekly control sample instead of standardization, annual standardization instead of monthly. GC: control sample monthly instead of daily. PH: corrected pH units to mfg calibration procedure and added slope. Total halogen: us only certified reagents. PCB GC: every 24 hours w/in use run a standard. Balance: quarterly calibration by contract service.
			1	Changed 60-meter column to capillary column (9.1)
			1	Updated flash point test from TAG closed cup to CCCFP ASTM D6450 (9.2)
			1	Updated method designations for pH (9.4)

			2	Updated GC configuration by removing one GC equipped with an ECD and adding the extra ECD in storage, removed glass packed column and specific column types (9.8).
			3	Added headspace analysis for solvent analysis. Removed "normalized" from "normalized area percent" as it was not needed. Added references to fingerprint standard. (10.1.1.)
			3	Material with a suspected positive PCB screen is not quantified by the Cottage Grove Lab, material will always be sent to a contract lab (10.1.1)
			1	Corrected test method designation for Fuel Potential Test to ASTM D240-92, from incorrect method D56-87.
			1	Summary updated per changes to section 8.0 (11.0)
			3	Removed Blind Samples. (12.3)
			3	Updated instrument preventive maintenance procedures to better meet needs of laboratory. Balances: Quarterly calibration. Flash Point: Annual calibration by mfg. Bomb: Annual standardization, repair as required. (13.0)
			3	Bi-monthly review replaces monthly adequacy review of QAPP, periodic review of entire QAPP replaces annual review (16.0)
3	5/1/08	JH	1	Removed F500 WI ADM CODE / no longer required
4	6/1/08	JH	2	Removed and Added Tracking Forms
		JH	3	Remove Hydrite PCB analysis; Added that PCB Qualitative test will be done by outside lab
		JH	2	PCB screens will be done for initial samples and some incoming waste nonconforming samples
5	1/1/09	JH	3	Updated control sample test from monthly to weekly (TCD, Section 8.0).
		JH	3	Updated control sample test from monthly to yearly (Organic Fingerprinting Standard, Section 11.0).
		JH	3	Updated monitor detector response from 'M' to 'W' (Section 13.0).
		JH	1	Formatting / spelling corrections
		JH	1	Addition of References
6	12/1/11	JH	1	(Section 3.2) Multiple waste codes that are no longer received or stored at CG were removed.
		JH	3	Removed all references to PCB Analysis (3.3.2, 8.0, 9.8, 10.1.1)
		GL	3	Removed Section 12.0 Performance and System Audits. Renumbered subsequent sections.
		GL	2	Removed reference to QC data summaries and semi-annual frequency of assessments in Section 15.0 Quality Assurance Reports to Management.

HYDRITE CHEMICAL CO.

114 N. MAIN STREET
COTTAGE GROVE, WI 53527
OFFICE: 608/839-4571
FACSIMILE: 608/839-4293

HYDRITE CGE LAB ANALYSIS

Company	Case Corporation	Lab #	S801-003
Auth #	137851-MK	Date	05-Feb-08
Salesperson	Covey	Part #	RM004000

Density	0.8140	60 F	Waste	
	0.8027	60 F	Distillate	
pH	6	50% v/v H2O extracted		
Water by KF	0.0703	% w/w	Waste	
	0.0948	% w/w	Distillate	
Color	Black		Waste	
	1	APHA	Distillate	
Odor	Ketone			
Non-Volatile Residue		3.62%	w/w	
Flash Point	26 F	Calculated		
Total Halogens		w/w		
Btu/Lb.				
Lbs/Gal.	6.766	25 C	Waste	
	6.672	25 C	Distillate	

Chromatography

	N-Butanol
	Ethanol
	Isobutanol
	Methanol
0.1	Water
Trace	Isopropanol
	N-Propanol
	Heptane
	Hexane
	Min. Spirits
	100 Solvent
	Stoddard
	Toluene
	Xylenes
	VM & P
	Methylene Chloride
	Perchloroethylene
	Trichloroethylene
Trace	Acetone
0.2	N-Butyl Acetate
	Ethyl Acetate
	Glycol Ether EB
	Ester EEP
	Isopropyl Acetate
	Isobutyl Acetate
	Methyl N-Propyl Ketone
99.2	Methyl Ethyl Ketone
	Methyl Isobutyl Ketone
	N-Propyl Acetate
	Glycol Ether PM
	Glycol Ether PMA
	Tetrahydrofuran
	Cyclohexanone

Other GC Compounds

0.2	Methyl Amyl Ketone
0.3	Traces
100.0	% TOTAL

Comments:

GC analysis in in volume % on distillate.
See attached comment sheet.

Approved by: M. Milbradt

SALES SAMPLE COMMENT SHEET

Case Corporation **Waste Master #** **137851-MK** **S801-003**

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Distillation Data:

Initial Boiling Point	61 C	142 F	
10/100 ml	78 C	172 F	
20/100 ml	79 C	174 F	
30/100 ml	79 C	174 F	
40/100 ml	80 C	176 F	
50/100 ml	80 C	176 F	
60/100 ml	80 C	176 F	
70/100 ml	81 C	178 F	
80/100 ml	82 C	180 F	Bottoms build up on flask sides
85/100 ml	83 C	181 F	Remove Heat

Distillation ran smoothly. Some bottoms build up around 80% v/v, but bottoms remained mostly flowable at 85% v/v when heat was removed to avoid burning bottoms and pulling over color. Estimate plant yield at 75-80%.

Good MEK for LT Feedstock.

PCB Screen - Negative

INCOMING SAMPLE ANALYSIS FORM

LAB NUMBER: I110-123
DATE: 10/21/2011
LAB TYPE:
LOT NUMBER:

COMPANY: CASE CORPORATION

WASTE MASTER: 137851
AUTH NUMBER: 246254
DISTRIBUTOR: MK
MATERIAL: WASTE MEK 365# TPD
SALESPERSON: JEREMY COVEY
PART NUMBER: RI002501
CUSTOMER# 00121048

WET CHEMISTRY DATA

SOLVENT DENSITY: 0.8285
PH: 7
TOTAL DIST:
PERCENT YIELD:
SOLIDS: 5.4%
BTU PER LB:
CHLORIDES:
WATER BY KF:
COLOR APHA:
ACID ACCEPTANCE:
FLASHPOINT:
PCB NUMBER:
COMMENTS:
11 DRUMS

	N Butanol
	Ethanol
	Isobutanol
	Methanol
	Water
	Isopropanol
	N Propanol
	Heptane
	Hexane
	Mineral Spirits
	100 Solvent
	Toluene
	Xylene
	VMP Naphtha
	Methylene Chloride
	Perchloroethylene
	Trichloroethylene
	Acetone
1.0%	N Butyl Acetate
	Ethyl Acetate
	Glycol Ether EB
	Glycol Ether EE
	Glycol Ether EEAC
	Isobutyl acetate
	Isopropyl Acetate
94.4%	Methyl Ethyl Ketone
	Methyl Isobutyl Ketone
	N Propyl Acetate
	Glycol Ether PM
	Glycol Ether PMA
	Tetrahydrofuran
	Cyclohexanone
	Butyl Propasol
	Propyl Propasol
2.4%	Methyl Amyl Ketone
	Methyl Isoamyl Ketone
	Glycol Ether EE
	Glycol Ether EM
	Glycol Ether EEP
	Glycol Ether EP
	Stoddard
	111 Trichloroethane
	Freon
0.6%	Methyl Acetate
1.6%	NOS / Others
100.0%	**TOTAL**

ANALYSISBY: EK APPROVEDBY: AS

RETAIN QUALITY ASSURANCE STATEMENT

COMPANY	DATE	LAB NUMBER
HYDRITE - COTTAGE GROVE	10/16/2011	F110-043

MATERIAL	BRANCH	AUTH. NUMBER
FUELS	CG	246099

WASTE MASTER NO	CUSTOMER NUMBER	LOT NUMBER
1757	00304821	

WET CHEMISTRY DATA

SOLVENT DENSITY: **0.9564**

WATER BY KARL FISCHER: **20.44**

ACID ACCEPTANCE:

COLOR APHA:

SOLIDS:

BOMB CALORIMETRY DATA

BTU/LB: 10768

%CHLORIDES:

CHROMATOGRAPHIC ANALYSIS

Alcohol

17.0% Methanol
24.0% Water
16.0% N Propanol

Diluents

1.0% Heptane
5.0% 100 Solvent
9.0% Toluene
9.0% Xylene
1.0% VMP Naphtha

Chlorinated

Actives

2.0% Acetone
3.0% N Butyl Acetate
1.0% Methyl Ethyl Ketone
2.0% Methyl Isobutyl Ketone
7.0% N Propyl Acetate
1.0% Glycol Ether PMA

Other

1.0% Methyl Acetate
1.0% NOS / Others

TOTALS

24.0% WATER
33.0% ALCOHOL
25.0% DILUENTS
0.0% CHLORINATED
16.0% ACTIVES
2.0% OTHER
100.0% **TOTAL**

COMMENTS

TWI-7934 / T402

ANALYZED BY: EK

APPROVED BY: ER

Original SOP Effective Date: 10/05/10	Supersedes SOP Dated: 03/01/11	Effective Date: 03/21/12	Procedure No.: Q9168CA
Facility: CA	Approval Name: Gaye Lehman		Revision No.: 6
Review Frequency: 5 Years	Approval Title: Manager of QC/QA		Page 1 of 7
THIS IS AN UNCONTROLLED DOCUMENT IF IT IS ONE MONTH PAST 5/31/12 2:23 PM. AN UNCONTROLLED DOCUMENT CANNOT BE USED TO MANAGE A PROCEDURE.			
Revised Section(s): See Change History Log.			

I. TITLE: ANALYSIS OF PPG INDUSTRIES / DECOSTAR RECYCLED SOLVENT AND SPECTRACLEAN PURGE GXS66601RH

II. KEY WORDS: PPG, Decostar, Spectraclean Purge GX66601RH, Recycle

I. PURPOSE: To provide a uniform procedure for the analysis of PPG Industries / Decostar Industries Waste Purge Solvent, CL-144 and Spectraclean Purge GXS66601RH.

II. APPLICATION: This procedure applies to all laboratory staff analyzing samples of PPG Industries / Decostar Industries Waste Purge Solvent, CL-144 and Spectraclean Purge GXS66601RH.

III. PROFILE INFO:

Waste Master Number:	00139393
Customer Number:	417295
Branch:	CG
Salesperson:	Covey
Incoming Resource Number:	RI009600
Incoming Resource Name:	Decostar Waste Purge Solvent
Pre-Spec Up Resource Number:	RE009600
Pre-Spec Up Resource Name:	CL-144
Final Product Outgoing Resource Number:	RS666000
Final Product Outgoing Resource Name:	Spectraclean Purge GXS66601RH
Incoming Proper Shipping Name:	Waste Flammable Liquid, N.O.S. (Xylene, Methyl isobutyl Ketone)
Outgoing Proper Shipping Name:	Paint Related Material

IV. ASSOCIATED MATERIAL(S): Required Procedures for Cottage Grove East Laboratory Staff QC019CA
Cottage Grove East Laboratory Quality Control Policy QC033CA
Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database QC040CA

V. PROCEDURE:

1. Incoming Acceptance Ranges for Decostar Waste Purge Solvent (RI0096)

Parameter	Specifications
Water by Karl Fisher	5.0% MAX ** Refer to Incoming Analysis Instructions section*
Solids	15.0% MAX
Waste Type	Flammable Liquid, N.O.S. (contains Xylene, Methyl isobutyl Ketone)

2. Pre-Spec up Specifications for CL-144 (RE0096)

Parameter	Customer Specifications
Visual Appearance	Clear, Water White, no particulates **Refer to Determination of Appearance section*
Specific Gravity	Run & Record at 25°C
Water by KF	0.60% MAX
Color	15 APHA MAX
Acetone	19 – 27%
Methyl Isobutyl Ketone	22 – 30%
n-Butyl Acetate	4 – 8%
Xylene	25 -31%
100 Solvent (aromatic naptha)	7 – 14 %
Total of Others that are each 1.0% or greater *(Others are solvents not individually listed above)*	10% MAX

3. Final Product Outgoing Specifications for Spectraclean Purge GXS66601RH (RS6660)

Parameter	Customer Specifications
Visual Appearance	Clear, Water White, no particulates **Refer to Determination of Appearance section*
Density	Run & Record
Water by KF	1.0 % MAX
Color	15 APHA MAX
Acetone	27 – 30 %
Methyl Isobutyl Ketone	23 – 29 %
n-Butyl Acetate	1 – 7 %
Xylene	21 – 30 %
100 Solvent (aromatic naphtha)	8 – 14 %
Total of Others that are each 1.0% or greater *(Others are solvents not individually listed above)*	10.0 % MAX

4. Process Overview

4.1. Decostar Waste Purge Solvent (RI0096) is initially recycled through the Luwa, dried in the electrodryer, and run through the luwa a second time to remove any color from the drier to generate CL-144 (RE0096). CL-144 (RE0096) is spec'd up at Cottage Grove West with

virgin solvents and PPG Oak Creek Low MEK CL-127 (RS0076) to make the final product Spectraclean Purge GXS66601RH (RS6660).

4.1.1. Should CL-144 (RE0096) not meet the Pre-Spec Up Specifications listed above in Section 2, the North Process Building Manager will determine if the material will be reworked or if the final product specifications for Spectraclean Purge GXS66601R (RS6660) can still be met.

4.1.2. CL-144 (RE0096) may (on rare occasion) also be shipped to PPG's distributor, Univar, for spec-up to the final product Spectraclean Purge GXS66601RH (RS6660). When CL-144 (RE0096) is shipped to Univar, it must meet the Pre-Spec Up Specifications for CL-144 (RE0096) listed above in Section 2. If it does not meet these specifications Hydrite must obtain written approval from PPG for shipment.

5. Incoming Analysis Instructions

5.1. Follow the Analysis and Documentation of Incoming Recycles Q1005CA.

5.2. Nonconforming Incoming Material

5.2.1. Water Content by Karl Fischer

5.2.1.1. If the Karl Fisher Water is ≤5%, complete the full incoming analysis.

5.2.1.2. If the Karl Fisher Water is >5%, request a **resample immediately.**

5.2.1.3. If the resample is still >5%, complete the full analytical which has the lowest KF Water.

5.2.2. Complete the Incoming Material Nonconformance form.

5.2.3. Notify the Building Manager of any incoming nonconformances.

5.2.3.1. The building manager is responsible for informing the customer of the nonconformance.

5.2.4. Do not enter or email the nonconforming incoming analysis until the building manager has given the approval to do so.

5.2.4.1. Document the status of the material on the Incoming Material Nonconformance form (i.e. pending resample, pending approval or approved by the building manager).

5.2.4.2. If the material is pending approval by the building manager or pending a resample, place the paperwork in the "Pending" handing folder outside the laboratory.

5.3. Notify Building Manager if Total Halogenated Compounds are > 0.5%.

5.3.1. Write in the comments section of the CGE Lab Analysis form the total halogenated compounds.

5.3.1.1. 4-Chlorobenzotrifluoride is exempt and is not included in the total halogenated compounds.

5.3.2. This is for notification to the Building Manager only. It is not a specification to determine conformance.

5.3.2.1. It is not necessary to complete a non-conforming form.

6. Incoming Analytical Distribution

6.1. Follow Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database QC040CA for instructions on entering the incoming analysis into the database.

6.2. Nonconforming Incoming Material

6.2.1. Confirm with the North Process Room Building Manager that the analysis should be entered and emailed to PPG. For example, if the material is going to be resampled, PPG does not need to receive a copy of the initial, out of spec analysis.

6.2.1.1. If the material is pending approval by the building manager or pending a resample, place the paperwork in the "Pending" handing folder outside the laboratory.

6.2.2. If the material is nonconforming, note any nonconforming parameters in the comments section per customer requirement.

6.2.2.1. Refer to section Nonconforming Analyses in SOP QC040CA, Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database.

6.3. Email a copy of the incoming lab analysis to:

6.3.1. Jonathan Warren: jwarren@ppg.com

6.3.2. Bob Fox: bfox@ppg.com

7. Outgoing Analysis Instructions

7.1. Follow Analysis of Tank Samples Q1007CA or Retain Analysis Q1006CA.

7.2. After the final product (Spectraclean Purge GXS66601RH, RS6660) is made on the west side, the lab will receive a sample from the tanker for a tank analysis.

7.2.1. If the tank analysis for RS6660 is in spec, the material will be transloaded to a multi-compartment tanker and the lab will receive a retain sample from each compartment of the tanker.

7.2.2. Each compartment retain sample will be a "same as" retain of the tank analysis.

7.3. Determination of Appearance

7.3.1. Appearance based on presence of fiber, debris, and sparkle in a 4oz. clear glass French square.

7.3.1.1. Sparkle is metal particulate that reflects light.

7.3.1.2. Sparkle will give an appearance of a snow globe at higher concentrations.

7.3.2. Appearance must be determined using a high intensity LED flashlight.

7.3.2.1. Shine flashlight through bottom of sample.

7.3.2.2. Gently mix sample avoiding introduction of bubbles to sample.

7.3.2.3. Read sample vs. Standard against a black background.

7.3.3. Compare retain sample to appearance standards and determine Pass/Fail based on the following table.

Visual Standard	Appearance	Pass/Fail
A	Zero Particulate	Pass
B	Very few Particulate	Pass
C	Most allowed amount of Particulate and sparkle.	Minimum Pass
D	Minor snow globe effect, visible concentration of debris	Fail
F	Visible snow globe effect, settled layer of particulate	Fail

7.3.3.1. Any degree of appearance worse than standard C is a fail.

7.3.3.2. Appearance Standards located in small flammable standards cabinet.

7.3.3.2.1. Appearance standards have no expiration.

7.3.3.2.2. Appearance standards are made from previous Decostar samples.

7.3.3.2.3. Standards will be prepared by Day Shift Group Leader.

8. Outgoing Analytical Distribution

8.1. Follow Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database QC040CA for instructions on entering the outgoing analysis into the database.

8.2. CL-144 (RE0096)

8.2.1. **Do not** email a copy of the retain lab analysis for CL-144 (RE0096) unless instructed by the building manager or the toll coordinator. Only CL-144 that will be shipped offsite requires that the retain lab analysis be emailed.

8.2.1.1. When requested, email a copy of the retain lab analysis for CL-144 (RE0096) to:

8.2.1.1.1. Jonathan Warren: jwarren@ppg.com

8.2.1.1.2. Bob Fox: bfox@ppg.com

8.3. Spectraclean Purge GXS66601RH (RS6660)

8.3.1. Email a copy of the retain lab analysis for Spectraclean Purge GXS66601RH (RS6660) to:

8.3.1.1. Jonathan Warren: jwarren@ppg.com

8.3.1.2. Bob Fox: bfox@ppg.com

8.4. Nonconforming Outgoing Material

8.4.1. Confirm with the North Process Room Building Manager that the analysis should be emailed to PPG. For example, if the material is going to be reworked or is destined for spec up, PPG does not need to receive a copy of the analysis.

8.4.2. Refer to section Nonconforming Analyses in SOP QC040CA, Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database.

8.4.2.1. If the material is nonconforming, note any nonconforming parameters in the comments section per customer requirement.

8.4.3. Written customer approval is required to release the material for shipment offsite.

8.4.3.1. Customer approval is not required for CL-144 (RE0096) that will be spec'd up at Cottage Grove West to make the final product Spectraclean Purge GXS66601RH (RS6660).

9. Quality Control

9.1. Follow quality control requirements as specified in Cottage Grove East Laboratory Quality Control Policy QC033CA.

CHANGE HISTORY LOG

Change Identified				
Rev #	**Date**	**Initials**	**Level of Change** *Note: Each change should have a Level associated with it.*	**Description of Change**
0	07/03/10	SN	4	1. New SOP. 2. Outgoing specification (PPG name:CL-144)- received from PPG per the email from Jonathan Warren on 09/23/2010.
1	11/03/10	AOS/KB	3 2 3 2	1. Added Spectraclean Purge GXS66601R (RS6660) throughout the SOP. Specifications received from Jonathan Warren/PPG via email 11/03/10. 2. Referred to Decostar RC Solvent (RE0096) as 'pre-spec up' throughout the SOP. 3. Added Process Overview section. 4. Added incoming and retain analysis distribution requirements.
2	12/13/10	SN	3 3 3	1. Removed Hydrite incoming Specification. 2. Added PPG incoming specification. Specification received from Jonathon Warren of PPG via email 11/30/10 3. Section#5 – Added to do Karl Fisher first before performing the full analytical. Also, to ask for resample if the KF is greater than or equal to 5%.
3	05/13/11	RH	3	1. Added Determination of Appearance Section for Spectraclean Purge
4	09/14/11	SN	3 3	1. Removed the KF Water Hydrite incoming processing specification from the incoming analysis instructions section to the incoming Acceptance Range Table for better visibility. 2. Also, added "If the resample is still >5%, complete the full analytical which has the lowest KF Water" for clarity.
5	02/22/12	AS	3 3 3 3 2 2 2 2 2 2	1. Per 02/15/12 email from Bob Fox of PPG, RS6660 material name was updated from Spectraclean Purge GXS66601R to Spectraclean Purge GXS66601RH. 2. Per 02/15/12 email from Bob Fox of PPG, RE0096 material name was updated from Decostar RC Solvent Bulk to CL-144. 3. Per 02/15/12 email from Bob Fox of PPG, RI0096 material name was updated from Decostar Waste Solvent to Decostar Waste Purge Solvent. 4. Removed incoming customer specifications and merged with Hydrite processing specifications per email from J. Warren of PPG dated 03/01/12. 5. Added further instructions on handling incoming loads that are high for water by Karl Fisher. 6. Revised the process overview. 7. Added more detailed instructions to the Outgoing Analytical Distribution section including how to handle nonconforming outgoing material. 8. Added EHS Limits to incoming specifications table. 9. Added reference to Entering Incoming and Outgoing Recycle Analyses into the Lab Analysis Database QC040CA 10. Added instructions for final product retains.

Original SOP Effective Date: 11/01/98	Supersedes SOP Dated: 07/14/08	Effective Date: 06/16/11	Procedure No.: Q1018CA
Facility: CA	Approval Name: Gaye Lehman		Revision No.: 7
Review Frequency: 5 years	Approval Title: Manager of QC/QA		Page 1 of 5
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Revised Section(s): See change history log			

I. TITLE: ANALYSIS OF SECONDARY FUEL

I. KEYWORDS: Secondary Fuel, Sludge, Waste

II. PURPOSE: To provide uniform procedures for the analysis of secondary fuel samples.

III. APPLICATION: These procedures apply to all laboratory staff analyzing secondary fuel samples.

IV. DEFINITIONS:

Secondary Fuel: Material sent to facilities (typically cement kilns) to be burned as fuel. Also an acceptable means of disposing of hazardous waste.

British Thermal Unit (BTU): A measure of the energy content of a material. A BTU is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

High BTU Secondary Fuel: BTU/lb value is typically greater than or equal to 10,000 BTU/lb and <25% water.

Low BTU Secondary Fuel: BTU/lb value is typically less than or equal to 5,000 BTU/lb. Low BTU Secondary Fuels can be burned or fuel blended and can also be treated as a means of disposal. It is also usually greater than 70% water.

II. ASSOCIATED MATERIAL(S):

GC #4 method SOLVEXT4.M
GC #4 method SOLVHSP4.M
GC #5 method EXP1.M
Monthly Fuel Log on CGELAB4
Required Procedures for Cottage Grove East Laboratory Staff QC019CA
Paperwork Distribution Guidelines for Cottage Grove East Lab QC022CA
Bulk Waste Dispo Advice (available on local server as specified in text)

III. PROCEDURE:

1. Safety
   - 1.1. Secondary fuel samples can contain virtually any chemical and must be handled in a chemical fume hood or with auxiliary ventilation.
   - 1.2. Wear nitrile or neoprene gloves when handling secondary fuel samples.
   - 1.3. Wear neoprene gloves when doing any clean-up with acetone.
2. Analysis of Secondary Fuel Samples
   - 2.1. Samples must be logged into the current month Fuel Log on CGELAB4 and assigned a fuel number.
   - 2.2. Go to Determination of Specifications
   - 2.3. Go to GC Analysis

2.4. Go to Determination of pH

2.5. Go to Determination of Density

2.6. Go to Determination of Solids

2.7. Go to Determination of Water Content

2.8. Go to Determination of BTU Value and Halogen Content

2.9. Go to Completion and Distribution of Paperwork

3. Determination of Specifications

3.1. Each destination facility has individual specifications for each secondary fuel stream that they receive.

3.2. Specifications for each stream are detailed in the Bulk Waste Dispo Advice table.

3.2.1. The Bulk Waste Dispo Advice table is available on the Cottage Grove East Server.

3.2.1.1. A shortcut to the Bulk Waste Dispo Advice table can be found on the desktop of CGELAB4.

3.2.1.1.1. If the shortcut doesn't work, the file is located at S:\EHS & Security\Waste - RCRA\Waste Dispositions\Bulk Waste Dispo Advice.

3.2.1.2. If there are questions as to what stream it is, ask the loader to clarify.

4. Analysis of Split Loads

4.1. If a fuel tank is put onto two tankers for two separate fuel loads, log both tankers/loads into the fuel log, with each getting its own sample number.

4.2. Write each up on a separate analysis form.

4.3. Use the same analysis for both samples.

4.4. Distribute the paperwork accordingly.

5. GC Analysis

5.1. Follow Waste Analysis on the Headspace Analyzer (HSA), SOP Q1012CA.

5.1.1. If the Headspace Analyzer is not available follow Ambient Temperature and Pressure Distillation of Liquids, SOP Q3190CA and analyze the solvent layer of the distillate.

5.2. Report compounds from the GC chromatogram to the nearest 1%.

6. Determination of pH

6.1. Follow pH Determination Using Wide Range pH Paper, SOP Q3013CA.

6.1.1. If the pH is close to either end of the specification range of 2 to 12.5, use a calibrated pH electrode to determine the pH of the material.

6.1.2. Follow Determination of pH Using a Calibrated Combination Glass pH Electrode, SOP Q4303CA.

7. Determination of Density

7.1. Follow Determination of Density, SOP Q3002CA.

8. Determination of Water Content

8.1. Follow Determination of Water Content by Karl Fischer Titration, SOP Q3182CA.

9. Determination of BTU Value and Halogen Content

9.1. Follow Operation and Maintenance of the Parr 1271 Automatic Oxygen Bomb Calorimeter, SOP Q3897CA.

9.2. Follow Titrimetric Total Halogen Analysis for Bomb Rinse, SOP Q3091CA for the % halogens determination.

10. Determination of Solids

10.1. Follow Determination of %Non-Volatile Residue (NVR), SOP Q3895CA.

11. Non-Conforming Materials

11.1. After completion of analytical testing required per the waste grid, determine if the material meets the specifications as outlined in the waste grid.

11.2. If the material does not meet the applicable specifications, notify the Utility Operator or Shift Supervisor immediately.

12. Completion and Distribution of Paperwork

12.1. Record the following information in the Fuel Log

12.1.1. Analyst's Initials

12.1.2. Customer Name

12.1.3. Manifest Number

12.1.4. Tanker Number

12.1.5. Tank number(s) from which the load originated

12.1.6. Waste Master Number

12.1.7. Authorization Number

12.1.8. Record all analytical results

12.1.9. Any applicable comments

12.2. Complete the CGE Lab Analysis Form

12.2.1. Write the name of the destination facility on the "Customer" line of the CGE Lab Analysis form.

12.2.2. Record the assigned authorization number (as indicated on the manifest).

12.2.3. Write the assigned fuel number from the Fuels Log (e.g. F205-000).

12.2.4. Date of sample.

12.2.5. Record the results for all required analytical tests.

12.2.6. Calculate and record lb/gal.

12.2.6.1. lb/gal = Density x 8.33

12.2.7. Calculate and record BTU/gal.

12.2.7.1. BTU/gal = lb/gal x BTU/lb

12.2.8. In the "Comments" section of the form write the following information:

12.2.8.1. The trailer number on which the load is being shipped, and

12.2.8.2. The destination facility's manifest document number and the destination facility's US EPA ID number (as indicated on the manifest).

12.2.9. Record the analyst's initial.

12.3. Ensure that the analytical paperwork is checked promptly by another lab staff member and proceed to distribute the paperwork immediately.

12.4. Place the white copy of the CGE Lab Analysis Form, GC Chromatogram, any other analytical paperwork in the "Enter Into Database" basket.

12.4.1. Once entered into the Lab Analysis Database, white copy to the Compliance Coordinator's mail slot.

12.5. Place the Yellow and Pink Copies with the work order, applicable copies of manifest, one copy of land ban (if available), the loading and unloading checklist, and a copy of the weight ticket to the Waste Disposals slot outside the half door.

13. Quality Control

13.1. Follow all requirements outlined in Cottage Grove East Laboratory Quality Control Policy QC033CA.

HYDRITE CHEMICAL CO. STANDARD OPERATING PROCEDURE

Original SOP Effective Date: 2/1/96	Supersedes SOP Dated: 03/28/05	Effective Date: 03/01/08	Procedure No.: Q3893CA
Facility: CA	Approval Signature: Gaye Lehman		Revision No.: 6
Review Frequency: 5 years	Approval Title: Manager of QC/QA		Page 1 of 3
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Revised Section(s): See Change History Log			

I. TITLE: TESTING FOR FUEL COMPATIBILITY

II. KEY WORDS: Compatibility, disposal tank, fuel load

III. PURPOSE: To provide guidelines for determining the fuel compatibility of a sample.

IV. APPLICATION: This procedure applies to all laboratory staff analyzing samples for fuel compatibility.

V. DEFINITIONS: Compatible: A sample is considered to be compatible if it does not react violently with or negatively affect another material.

Disposal Tank: An intermediate holding tank where drum materials, LUWA bottoms and cleanout materials are held pending transfer to bulk tankers.

Fuel Load: Material sent out in bulk for use as secondary fuel.

VI. ASSOCIATED MATERIAL(S): Required Procedures for Cottage Grove East Laboratory Staff QC019CA

VII. PROCEDURE:

1. Safety
   - 1.1. Read all MSDSs associated with materials being handled.
   - 1.2. Wear neoprene and/or nitrile gloves when handling materials.
   - 1.3. Fuel compatibility tests should never be performed outside of a functioning chemical fume hood.
   - 1.4. Fuel compatibility tests must be monitored at all times.
2. Materials Needed
   - 2.1. 50 ml sample of material to be transferred
   - 2.2. 50 ml sample of material from the waste tank into which the material is to be transferred
   - 2.3. Clean, dry beaker
   - 2.4. Thermometer
   - 2.5. Spatula or glass stir rod
   - 2.6. Operating chemical fume hood
3. Determining fuel compatibility
   - 3.1. It is possible for two samples to react violently when mixed together, therefore use appropriate care and PPE.
   - 3.2. In the chemical fume hood carefully add the sample material to the waste tank material in a clean, dry beaker.

3.2.1. Unless a specific ratio for blending is requested by operations, mix the materials 1:1 by volume.

3.2.2. Samples must be at the same temperature before mixing.

3.3. Insert a thermometer into the mixture and stir well using a spatula or glass stir rod. Do not stir with the thermometer.

3.4. Watch the sample closely for fifteen minutes.

3.5. The sample is considered to be NOT fuel compatible if any one or more of the events listed below are observed:

3.5.1. Excessive temperature rise (more than 10° F),

3.5.2. Formation of gases, usually indicated by bubbling,

3.5.3. Precipitation of solids, or the formation of aggregates of solids, or

3.5.4. Sample does not mix with fuel sample and/or layers out.

3.6. The sample is considered to be fuel compatible if none of the events listed above are observed.

3.7. Indicate in the tank log the results of the fuel compatibility test.

3.7.1. Also indicate the ratio used to mix the materials.

State of Wisconsin
Department of Natural Resources

recognizes

Wisconsin Registration under NR 149

of

Hydrite Chemical - Cottage Grove East

Laboratory Id: **113063390**

as a laboratory licensed to perform environmental sample analysis in support of covered environmental programs (ch. NR149.02 Note) for the parameter(s) specified in the attached Scope of Accreditation.

August 31, 2012

Expiration Date

August 17, 2011

Issued on

Camille Turcotte, Chief
Environmental Science Services

Cathy Stepp, Secretary
Department of Natural Resources

This certificate does not guarantee validity of data generated, but indicates the methodology, equipment, quality control practices, records, and proficiency of the laboratory have been reviewed and found to satisfy the requirements of ch. NR 149, Wis. Adm. Code.

Scope of Accreditation

vdrite Chemical - Cottage Grove East
.4 N. Main St.
Cottage Grove, WI 53527

Laboratory Id: **113063390**
Expiration Date: **08/31/12**
Issued Date: **08/17/11**

Wisconsin Registration under NR 149
Matrix: Solid (Waste, Soil & Tissue)

Class: Waste Characterization Assays
Waste Analysis, Other *by Waste Assays*

The laboratory named above is hereby licensed under ch. NR 149, Wis. Adm. Code for the parameters listed in this attachment.
* Analyte groups are defined and listed on the WI DNR Lab Certification website. See http://dnr.wi.gov/org/es/science/lc/ for details.

Appendix E

Original SOP Effective Date: 2/1/96	Supersedes SOP Dated: 9/1/09	Effective Date: 11/1/10	Procedure No.: SF029CG
Facility: CG	Approval Name & Signature: Angela Watry		Revision No.: 18.1
Review Frequency: 1 Year	Approval Title: EHS Manager		Page 1 of 3
Without a green control label to the right of this statement, this procedure is a draft. A draft or an uncontrolled copy cannot be used to manage a process or task.			If this block is black, this is NOT a controlled document

I. TITLE: INTERNAL FACILITY COMPLIANCE INSPECTION AND CORRECTIVE ACTION PROCEDURE

II. KEY WORDS: Compliance, Corrective Action, Inspection

III. PURPOSE: Defines procedures for conducting planned compliance inspections and corrective actions. Provide forms, checklists, and instructions to be used for conducting internal facility inspections at Cottage Grove facilities. Properly conducted inspections will improve employee health and safety, and tend to improve compliance.

IV. APPLICATION: Applies to routinely scheduled, internal facility compliance inspections at Cottage Grove facilities, as conducted by facility employees.

V. DEFINITIONS: Inspection – Monitoring function conducted to locate and report practices and conditions that may/do result in noncompliance with established operating standards.

Established Operating Standard – A standard of performance set forth in applicable regulations, an internal policy, or a Standard Operating Procedure document.

VI. ASSOCIATED MATERIAL(S):
Compliance Maintenance Plan – Air Permits AC007CG
Compliance Maintenance Plan – DEA List 1 Chemicals RH038SF
Compliance Maintenance Plan – Pesticide Bulk Storage Tanks AD009CW
Compliance Maintenance Plan – Wastewater Discharge Permits RH019CE
Contingency Plan: Emergency Equipment and Personnel Responsibilities ER006CE, CW
Elementary Neutralization Unit (ENU) SOPs PR003SF
Inspection Forms (available on CGE's local network)
New and Reassigned Employee Training Requirements TX043CG
Storage Tank Inspection Program MN007AF
Stormwater Pollution Prevention Plan RH014CE

VII. PROCEDURE:

1. Facility Compliance Inspection Forms:
   1.1. The Technical Document Control Administrator maintains a list of controlled inspection forms called the CG Compliance Calendar.
      1.1.1. The CG Compliance Calendar describes inspection frequency and personnel responsible for conducting inspections and is maintained on the local network at S:\CGServer1\Forms.
   1.2. Inspection forms, instructions, and checklists are controlled by the branch document control system and are available on the local network at S:\CGServer1\Forms\SF029 Forms.
   1.3. This SOP, SF029CG provides general instructions regarding the development and conduct of inspections.

DAILY INSPECTION: Cottage Grove East

Date:	Time:
Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
Breezeway (BW): Between North and South Process Rooms				
All containers **closed** and **labeled**				
No solvents or products on floor or in sump				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	Wheeled unit at East fire door			
	Cart (6) by East fire door			
	By Northwest man door			
Safety Shower:	By North Process Room fire door			
Fire Hose:	East wall by South Process Room fire door			
Fire Blanket:	East wall by South Process Room fire door			
Wednesday Sample the scrubber. (pH, organics; winter sample for % Glycol – must be >50%) _____ (Reading)				
Hot Box "Contents Board" up-to-date				
Scrubber Spray Flow > 20 gpm				
Scrubber Filter Pressure < 70 psig				
Scrubber Tank Level < 6" in South Sight Glass				
LEL Meter Hydrogen Fuel Cylinder Pressure > 300 psig				
Full "5.0 Ultra High Purity Hydrogen" Fuel Cylinders available				
Area clean and no debris				
South Dock (SD) Pump Out Dock				
All containers **closed** and **labeled**				
No solvents or products on floor, in containment, or in trench				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	By fire door			
Spill clean-up equipment locker stocked & absorbent nearby				
Grounding/Bonding being used for transfer of flammable liquids				
Aisle space maintained for staged containers				
All Hazardous Waste containers dated				
Area clean and no debris				
Drumming Room (DR)				
All containers **closed** and **labeled**				
No solvents or products on floor or in trench				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	By West fire door			
	On North wall			
	By East man door			
Eye Wash:	On North wall			
Area clean and no debris				

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
South Process Room (SPR): R1, R2, R5, & QM516 (R3)				
All containers **closed** and **labeled**				
No solvents or products on floor or in sump				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	On South wall by sliding door (2)			
	On North wall by man door			
	At First 516 mezzanine			
	At Second 516 mezzanine			
Safety Showers:	At South wall by stairs			
	By North fire door			
Eye Wash:	R1 Deck			
Alarm Push Button:	In South wall by sliding door			
Spill clean-up equipment locker stocked & absorbent nearby				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				
South Tank Room (STR): DT1 & DT2				
All containers **closed** and **labeled**				
No solvents or products on floor				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Safety Shower:	On North Wall			
Area clean and no debris				
South Process Area Pit				
All containers **closed** and **labeled**				
No solvents or products on floor or in containments				
No leaks				
Lines **capped** or plugged				
Emergency Equipment in good order and not blocked:				
Fire Extinguisher:	On South wall of building			
Safety Shower:	South of Pit			
Area clean and no debris				

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
South Process Loading Area				
All containers **closed** and **labeled**				
No solvents or products on pavement				
No leaks				
Lines **capped** or plugged				
Emergency Equipment in good order and not blocked:				
Fire Extinguisher:	Wheeled unit at South side of bldg			
Safety Shower:	On South side of building			
If tanker connected:				
	Wheels chocked, brakes set			
	Grounding cable attached			
	Properly vented			
Spill clean-up equipment locker stocked				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				
Rail Car Loading Area				
All containers **closed**, **labeled**, and **inside fence** when not in use				
No leaks				
Lines **capped** or plugged				
If rail car connected:				
	Brake on			
	Wheels chocked in both directions			
	"STOP-Tank Car Connected" sign in place			
	Derailer in place			
	Grounding cable attached			
Area clean and no debris				
100 Tank Farm (100TF): Southwest				
All containers **closed** and **labeled**				
No solvents or products on concrete or in containments				
No leaks				
No corrosion/deterioration that threatens integrity of tanks or pipes				
Lines **capped** or plugged				
Dikes secure & water-tight				
Rain water, if present, managed per SOP PR034CG & RH014CE				
Emergency Equipment in good order and not blocked:				
Fire Extinguisher:	At Southeast corner by old pump pit			
Safety Shower:	At East end of tank farm			
Eye wash bottles:	By Northwest transfer pump			
Spill clean-up equipment locker stocked at East end of tank farm				
Area clean and no debris				

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM	OK	NOT OK: Corrective Action	Date Complete
400 Tank Farm (400TF): Southeast			
All containers **closed** and **labeled**			
No solvents or products on concrete or in containments			
No leaks			
No corrosion/deterioration that threatens integrity of tanks or pipes			
Lines **capped** or plugged			
Dikes secure & water-tight			
Rain water, if present, managed per SOP PR034CG & RH014CE			
Emergency Equipment in good order and not blocked:			
Fire Extinguisher: At North side of tank farm			
Area clean and no debris			
Southeast Loading Area at 400 Tank Farm			
All containers **closed** and **labeled**			
No solvents or products on concrete			
No leaks			
Lines **capped** or plugged			
Rain water, if present, managed per SOP PR034CG & RH014CE			
Emergency equipment in good order and not blocked:			
Eye Wash Bottle: On Platform			
If tanker connected:			
Wheels chocked, brakes set			
Grounding cable attached			
Properly vented			
Grounding/Bonding being used for transfer of flammable liquids			
Full Hazardous Waste containers dated and stored within 72 hrs			
Area clean and no debris			
Annex 1			
Peroxide Refrigerator Temperature < 50 °F			
Peroxide Refrigerator "Contents Board" up-to-date			

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM	OK	NOT OK: Corrective Action	Date Complete
300 Tank Farm (300TF): Northeast			
All containers **closed** and **labeled**			
No solvents or products on concrete or in containment			
No leaks			
No corrosion/deterioration that threatens integrity of tanks or pipes			
Lines **capped** or plugged			
Dikes secure & water-tight			
Rain water, if present, managed per SOP PR034CG & RH014CE			
Spill clean-up equipment locker stocked at NW corner			
Spill clean-up equipment locker stocked at SE corner			
Area clean and no debris			
200 Tank Farm (200TF): Northwest			
All containers **closed** and **labeled**			
No solvents or products on concrete or in containments			
No leaks			
No corrosion/deterioration that threatens integrity of tanks or pipes			
Lines **capped** or plugged			
Dikes secure & water-tight			
Rain water, if present, managed per SOP PR034CG & RH014CE			
Emergency equipment in good order and not blocked:			
Fire Extinguisher: Wheel Unit at East end of tank farm			
Area clean and no debris			
CONTROL ROOM (CR)			
High level alarms test:			
Lights light up			
Audible Alarm sounds			
Emergency equipment in good order and not blocked:			
Fire Extinguishers: North entry way			
First Aid Kit: North entry way			
SCBAs: North entry way (2)			
Extra SCBA Tanks: North entry way (2)			

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
North Loading Area				
All containers **closed** and **labeled**				
No solvents or products on concrete				
No leaks				
Lines **capped** or plugged				
Rain water, if present, managed per SOP PR034CG & RH014CE				
Emergency Equipment in good order and not blocked:				
Fire extinguisher:	West of pump containment on T211			
	Wheeled unit by gas meter			
Eye wash bottles:	North side of pump containment wall (2)			
	South side of pump containment wall (2)			
If tanker connected:				
	Wheels chocked, brakes set			
	Grounding cable attached			
	Properly vented			
Spill clean-up equipment locker stocked				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				
North Process Room (NPR): C1, C2, C3, L1, L3, & L4				
All containers **closed** and **labeled**				
No solvents or products on floor				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	On North wall by man door			
	On South wall by fire door (3)			
	On West wall by man door			
	On Mezzanine (2) at top of stairs			
	On Mezzanine by roof stairs			
Safety Showers:	On North wall by rest room door			
Eye Wash:	On Mezzanine by L4 deck			
Eye wash bottles:	By L1 panel			
Alarm Push Button:	On North wall by rest room			
	On South wall by fire door			
Spill clean-up equipment locker stocked & absorbent nearby				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
North Central Process Room (NCPR): B4, B5, ST100, B8, R15, & Zirconate Charging Area				
All containers **closed** and **labeled**				
No solvents or products on floor				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
No drums stacked within 3 ft of sprinkler heads				
No drums of flammables located within 3 ft of roof columns				
Emergency Equipment in good order and not blocked:				
Fire Extinguisher:	By East fire door			
	By NE man door			
	On B8 mezzanine by stairs			
	On B4 mezzanine at top of stairs			
	By West man door			
	By Southwest fire door			
Safety Shower:	By Zirconate Room man door			
	On R15 mezzanine			
Eye wash bottles:	On B8 mezzanine by stairs			
Alarm Push Button:	By NW Dock door			
Spill clean-up equipment locker stocked, absorbent nearby				
Hot Room "Contents Board" up-to-date				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				
South Warehouse (SWH)				
All containers **closed** and **labeled**				
All third tier drums secured with film, banding or rubber band				
No solvents or products on floor				
No leaks, corrosion, or deterioration of containers				
Exits and Fire doors not blocked				
No drums stacked within 3 ft of sprinkler heads				
No drums of flammables located within 3 ft of roof columns				
36" Aisle space maintained for Hazardous Waste Storage				
Emergency Equipment in good order and not blocked:				
Fire Extinguishers:	Wheeled unit by NW Fire Door			
	On West wall			
	By South Dock fire door			
	Wheeled unit by South Dock fire door			
	By Drumming Room fire door			
Safety Shower:	By South Dock fire door			
Eye Wash:	By NW fire door			
Fire Blanket:	On West wall			
	By South Dock fire door			
Alarm Push Button:	By Warehouse Office			
	By Drumming Room fire door			
Spill clean-up equipment locker stocked & absorbent nearby				
Area clean and no debris				

DAILY INSPECTION: Cottage Grove East

Date:	Time:
Inspector:	Signature:

ITEM		OK	NOT OK: Corrective Action	Date Complete
Northwest Process Room (NWPR): C4, R6, R10, R11 & Centrifuge (CF1)				
All containers **closed** and **labeled**				
No solvents or products on floor or in containments				
No leaks				
Lines **capped** or plugged				
Exits and Fire doors not blocked				
Emergency equipment in good order and not blocked:				
Fire Extinguishers:	By N202 Mixing Station			
	By Vapower Room fire door			
	On Centrifuge mezzanine			
	By North man door			
	By West man door			
	On mezzanine by CR4 (top of stairs)			
	On mezzanine by R10 (top of stairs)			
	On mezzanine by R11 (top of stairs)			
Safety Shower:	By Column 3 by South fire door			
	By West man door			
	On mezzanine by CR4 (top of stairs)			
Eye Wash:	On R11 deck			
Eye wash bottles:	By NW overhead door			
Alarm Push Buttons:	By North man door			
	By West man door			
Spill clean-up equipment locker stocked, absorbent nearby				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				
Thermal Oxidizer YOKOGAWA chart recorder operating				
Thermal Oxidizer APACS+™ data trends updating				
Northwest Loading Area:				
All containers **closed** and **labeled**				
No solvents or products on concrete				
No leaks				
Lines **capped** or plugged				
Rain water, if present, managed per SOP PR034CG				
Roof-drain valve to sanitary sewer normally Closed				
Emergency Equipment in good order and not blocked:				
Safety Shower:	On West side of building			
If tanker connected:				
	Wheels chocked, brakes set			
	Grounding cable attached			
	Properly vented			
Spill clean-up equipment locker stocked, absorbent nearby				
Grounding/Bonding being used for transfer of flammable liquids				
Full Hazardous Waste containers dated and stored within 72 hrs				
Area clean and no debris				

Other Notes:

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

CE100 Process Area: R12, R13, R14 & R18			
All containers **closed** and **labeled**			
No solvents or products on floor or in containments			
No leaks			
Lines **capped** or plugged			
Exits and Fire doors not blocked			
Emergency equipment in good order and not blocked:			
Fire Extinguishers: By East man door			
On top mezzanine by R13 (top of stairs)			
On top mezzaniene by R18 (top of stairs)			
On top mezzanine by roof ladder			
On vacuum pump mezzanine			
On North pipe rack column			
On concrete center columns (2)			
By North man door stairs			
Safety Shower: On top mezzanine by R13			
On top mezzanine by R18			
At column between R12 & R13			
At concrete center column			
Alarm Push Buttons: By North man door stairs			
Spill clean-up equipment locker stocked, absorbent nearby			
Grounding/Bonding being used for transfer of flammable liquids			
Full Hazardous Waste containers dated and stored within 72 hrs			
Area clean and no debris			
CE100 Warehouse Area:			
All containers **closed** and **labeled**			
All third tier drums secured with film, banding or rubber band			
No solvents or products on floor or in containments			
No leaks, corrosion, or deterioration of containers			
Exits and Fire doors not blocked			
No drums stacked within 3 ft of sprinkler heads			
No drums of flammables located within 3 ft of roof columns			
36" Aisle space maintained for Hazardous Waste Storage			
Emergency equipment in good order and not blocked:			
Fire Extinguishers: Wheeled unit East of Dock Door 7			
By West man door stairs			
On Concrete Center Columns (3)			
By South man door stairs			
By East man door			
East of Dock Door 3			
East of Dock Door 6			
Safety Shower: By Center Column			
Alarm Push Buttons: By West man door stairs			
By South man door stairs			
East man door			
Spill clean-up equipment locker stocked & absorbent nearby			
Area clean and no debris			

	DAILY INSPECTION: Cottage Grove East	
	Date:	Time:
	Inspector:	Signature:

CE100 Loading Area:			
All containers **closed** and **labeled**			
No solvents or products on concrete			
No leaks			
Lines **capped** or plugged			
Rain water, if present, managed per SOP PR034CG & RH014CE1			
Emergency Equipment in good order and not blocked:			
Safety Shower: By Dock Door 6			
If tanker connected:			
Wheels chocked, brakes set			
Grounding cable attached			
Properly vented			
Area clean and no debris			

Other Notes:

Cottage Grove East Daily Inspection Instructions

The inspection must be completed each day for the items listed.

The person conducting the inspection must:

For each item listed, enter a check mark in the "**OK**" box **OR** the "**NOT OK**" space. Note the Corrective Action taken or list the Work Order number (if a work order is required). Note the date the Corrective Action was completed in the "**Date Complete**" column. If an item does not apply to the area inspected, mark it **"N/A."**

Your signature on the form certifies that you have properly conducted the inspection and noted/reported all deficiencies.

Inspect each area, focusing on the following, as applicable:

Visible **leakage** from tanks, valves, pumps, pipes, filters, or containers of any kind.

Gates are closed and locked when appropriate.

Pipes are capped when not in use. Any deterioration in piping systems must be repaired immediately.

Rag Containers must be emptied daily. Inspect the area for rubbish and loose trash, and dispose of it.

Hoses must be in good condition, drained and hung when not in use.

Open containers. Note the presence of open containers, such as are used to store line flush, on the checklist, and notify the area supervisor immediately. Any open container must be closed. Hazardous waste must be transferred to Satellite Accumulation Drums. Any sumps, trenches, or pits must be pumped clean at least once per shift.

Solvent on floor or ground surfaces (including water) must be cleaned up and disposed of appropriately (as Hazardous or non-hazardous waste).

Signs must be clearly visible, with no deterioration.

Grounding cables must be intact and in place. If you suspect that a cable is damaged, fill out a maintenance work order to have it checked.

Spills of any kind must be reported and completely cleaned up, including spill residues.

Exits must be kept completely clear, and an egress path at least as wide as the exit door must be maintained.

Walkways and floors must be free from trip or fall hazards such as caused by: "vertical storage" of piping, rubbish, damaged dunnage material, out-of-service hoses, barrels, or improperly stored ladders. Note any deficiencies on the checklist.

Fire doors must be kept clear of anything that would prevent them from closing. Inspect the closing pathway of the door, noting any blockage. If a weight is in place to close the door, make sure the weight can move freely to pull the door closed in a fire.

Fire equipment, such as extinguishers, must be charged, labeled with a sign, and have a minimum of one-foot clearance on three sides. Sprinklers must have a minimum clearance of 18" below the fitting.

Safety equipment must be accessible, clean, and in good operating condition. Note any deficiencies on the Checklist. Safety equipment includes any spill control or clean-up equipment, and first aid equipment such as safety showers and eyewash units.

Unused PPE must be stored or disposed of. Make note of any unused PPE, including gloves, not properly stored.

Strong Vapor odor in the area must be noted on the checklist. If possible, identify the source and note it on the checklist.

Ventilation Systems must be in usable condition.

File any **Maintenance Work Orders** with the Maintenance Supervisor. If you're experiencing difficulty getting things repaired, notify the Branch Manager or Regional SQRA Coordinator.

Hydrite Chemical Co.
WEEKLY EYEWASH & SAFETY SHOWER INSPECTION LOG
COTTAGE GROVE EAST

TODAY'S DATE: ___/___/___ **DATE OF LAST INSPECTION: ___/___/___**

ID	Location	Status (Mark as 'OK' or 'Not OK')			Comments or MWO
		Eyewash	Shower	Bottles	
CE-ES-01	South Warehouse, North wall				
CE-ES-02	South Warehouse, South wall				
CE-ES-03	North Warehouse near ZrCl room				
CE-ES-21	B8 Mezzanine				
CE-ES-04	Drumming Room				
CE-ES-05	Outside Drumming Room				Outdoor
CE-ES-06	DT Room				
CE-ES-07	South Process Room, Southeast				
CE-ES-08	South Process Room, Mezzanine				
CE-ES-09	South Process Room, Northeast				
CE-ES-10	South Pump Pit				Outdoor
CE-ES-11	Breezeway				
CE-ES-12	North Process Room				
CE-ES-22	North Process - Mezzanine				
CE-ES-13	Battery Room				
CE-ES-14	400 Tank Farm Load/Unload Area				Outdoor
CE-ES-15	100 Tank Farm, SE Wall				Outdoor
CE-ES-23	100 Tank Farm (near T-160)				Outdoor
CE-ES-16	NW Process Room near breezeway				
CE-ES-17	NW Process Room near CR4				
CE-ES-18	NW Process Room, Mezzanine				
CE-ES-19	NW Loading Dock				Outdoor
CE-ES-24	R10 (NE Man Door)				
CE-ES-20	T-211 North Pump Pit				Outdoor
CE-ES-25	CE-100 Load Dock				Outdoor
CE-ES-26	PT-810				
CE-ES-27	R13				
CE-ES-28	R12 Mezzanine				
CE-ES-29	R11 Mezzanine				
CE-ES-30	R15 Mezzanine				
CE-ES-31	CE-100 Warehouse				
CE-ES-32	R18 Mezzanine				

Repairs needed/Cause for noncompliance: _____

_____

_____

I certify that all shower and eyewash units have been inspected and that any deficiencies are noted above.

Signed: _____

Hydrite Chemical Co.
WEEKLY EYEWASH & SAFETY SHOWER INSPECTION LOG
COTTAGE GROVE EAST

Checklist must be completed at least once each week. The person conducting the inspection must enter either an 'OK' in the "Status" box or a descriptive comment and/or MWO # regarding deficiency in the "Comments" Box. Additional comments regarding any needed repairs can be entered in the "Repairs Needed" space.

INSPECTIONS ARE TO BE CONDUCTED AS FOLLOWS:

1. Deficiencies must be documented and corrected as soon as possible. If the problem can be corrected immediately record this on the form. Otherwise issue a Maintenance Work Order (MWO) and note the MWO number noted on the form. Closed out MWO's must be filed with the applicable inspection form.
2. Identify the eyewash/shower unit.
3. Ensure that there is free and clear access to the unit, and that a clearly visible sign is in place indicating the presence of an eyewash station, and that there is adequate lighting in the area. If obstructions block the path to the unit or objects in place that would interfere with its operations, remove them. If there are any deficiencies, note them in "Comments".
4. Inspect the unit to ensure that the eyewash outlets are capped and the eyewash bowl is clean. If caps are missing, note same on "Comments" line. Clean the eyewash bowl if needed. Replace the caps after flushing.
5. For indoor units: actuate the shower valve and eyewash valve in sequence and flush about 3 gallons of water from each. Use a clean, labeled 5-gallon bucket to catch the water. Dispose of the water and take care to avoid leaving water on the floor.
6. **For outdoor units**: Actuate the solenoid, and actuate the shower valve and eyewash valve in sequence and flush about 3 gallons of water from each. Use a clean, labeled 5 gallon bucket to catch the water. Dispose of the water and take care to avoid leaving water on the floor. **To prevent freeze-up of the system, close the solenoid valve, and allow water to drain from the eyewash and shower piping until the piping has drained. Leave the shower and eyewash valves open.**
7. Replace caps over the eyewash outlets or hand held spray nozzles, where applicable.
8. "Bottle" eyewash stations should be inspected per Items (1) and (2). In addition, inspect the date code on the bottle. If the expiration date is approaching, note on the inspection form. Order replacement solution and install it.
9. If all is OK, mark "OK" in the status box for the unit tested.
10. If repairs are needed, fill out a Maintenance Work Order (MWO) and indicate work order number on the "Repairs Needed" line. Attach a copy of the MWO to the inspection log. Submit the MWO and a copy of the inspection log to the Maintenance Supervisor.
11. Sign the Inspection Report at the bottom.
12. Submit the completed form to the EHS Administrative Assistant who will file it in the facility legal file.

MAINTENANCE SUPERVISOR:

Needed repairs must be made as soon as possible. Note action taken and completion date on the Maintenance Work Order and submit it to the EHS Administrative Assistant who will add it to the legal file.

EXPLANATION OF INSPECTIONS: ANSI 358.1-2004

Access/Signs: Access to the unit must be free of obstructions that may inhibit the immediate use of the equipment.
Caps: Nozzles shall be protected from airborne contaminants with caps. The caps should come off automatically when the eye wash is activated and not require a second motion from the operator when activating the unit.
Drench Hoses: Drench hoses shall be designed to provide a controlled flow of flushing fluid to a portion of the body at a velocity low enough to be non-injurious to the user. A drench hose may be considered an eyewash or eye/face wash if it meets the performance requirements for eyewash or eye/face wash units.
Eyewash Units: Valve must be simple to operate and go from "off" to "on" in 1 second or less. Valve shall remain open until intentionally closed. The flow rate should be 0.4 gpm. Fluid must be able to flush both eyes simultaneously at a velocity low enough to be non-injurious to the user. Temperature should be tepid.
Flush: A three gallon flush should be sufficient to ensure that all old water is flushed from the line. If you note that the water appears cloudy, rusty, etc., continue flushing until the water runs clear. Note that inspections are done weekly to ensure that fresh water is always available for eye flushing and the system is operational. If the water consistently appears dirty, issue a MWO and increase flushing frequency until the problem is resolved. Take care to clean up any spillage of water.
Showers: Valve must be simple to operate and go from "off" to "on" in 1 second or less. Valve shall remain open until intentionally closed. The flow rate should be 20 gpm. At sixty inches above the standing surface the diameter of the flushing fluid pattern must be at least 20". Water must be substantially dispersed throughout the pattern. Temperature should be tepid.
Reports: Must be routed to Maintenance if repairs are needed, and to the EHS Administrative Assistant to ensure inclusion into the proper file. If you observe that repairs aren't being made, send a copy of your report to the EHS Manager.

HYDRITE CHEMICAL CO.

WEEKLY EYEWASH/SHOWER INSPECTION LOG
COTTAGE GROVE EAST LABORATORY

TODAY'S DATE: _____

DATE OF LAST INSPECTION: _____

Instructions for conducting the inspection are on Page 2.

LOCATION	STATUS			COMMENTS
	EYEWASH	SHOWER	BOTTLES	
Graphic Arts Laboratory Shower / Eyewash				
Wet Laboratory Shower / Eyewash				
Sample Prep Lab Shower / Eyewash				
Process Development Lab Shower / Eyewash				
Building #1 Warehouse Bottles Battery Charger, SE Exit				

REPAIRS NEEDED (Cause for Non-Compliance): If MWO#, attach hard copy to this form:

_____

_____

_____

I CERTIFY THAT ALL SHOWER AND EYEWASH UNITS HAVE BEEN INSPECTED AND THAT ANY DEFICIENCIES ARE NOTED ABOVE.

SIGNED: _____

WEEKLY EYEWASH/SHOWER INSPECTION LOG
COTTAGE GROVE EAST LABORATORY
CHECKLIST INSTRUCTIONS

Checklist must be completed at least once each week. The person conducting the inspection must enter either an 'OK' in the "Status" box or a descriptive comment and/or MWO # regarding deficiency in the "Comments" Box. Additional comments regarding any needed repairs can be entered in the "Repairs Needed" space.

INSPECTIONS ARE TO BE CONDUCTED AS FOLLOWS:

1. Deficiencies must be documented and corrected as soon as possible. If the problem can be corrected immediately record this on the form. Otherwise issue a Maintenance Work Order (MWO) and note the MWO number noted on the form. Closed out MWO's must be filed with the applicable inspection form.
2. Identify the eyewash/shower unit.
3. Ensure that there is free and clear access to the unit, and that a clearly visible sign is in place indicating the presence of an eyewash station, and that there is adequate lighting in the area. If obstructions block the path to the unit or objects in place that would interfere with its operations, remove them. If there are any deficiencies, note them in "Comments".
4. Inspect the unit to ensure that the eyewash outlets are capped and the eyewash bowl is clean. If caps are missing, note same on "Comments" line. Clean the eyewash bowl if needed. Replace the caps after flushing.
5. For indoor units: actuate the shower valve and eyewash valve in sequence and flush about 3 gallons of water from each. Use a clean, labeled 5-gallon bucket to catch the water. Dispose of the water and take care to avoid leaving water on the floor.
6. **For outdoor units: Actuate the solenoid, and actuate the shower valve and eyewash valve in sequence and flush about 3 gallons of water from each. Use a clean, labeled 5 gallon bucket to catch the water. Dispose of the water and take care to avoid leaving water on the floor. To prevent freeze-up of the system, close the solenoid valve, and allow water to drain from the eyewash and shower piping until the piping has drained. Leave the shower and eyewash valves open.**
7. Replace caps over the eyewash outlets or hand held spray nozzles, where applicable.
8. "Bottle" eyewash stations should be inspected per Items (1) and (2). In addition, inspect the date code on the bottle. If the expiration date is approaching, note on the inspection form. Order replacement solution and install it.
9. If all is OK, mark "OK" in the status box for the unit tested.
10. If repairs are needed, fill out a Maintenance Work Order (MWO) and indicate work order number on the "Repairs Needed" line. Attach a copy of the MWO to the inspection log. Submit the MWO and a copy of the inspection log to the Maintenance Supervisor.
11. Sign the Inspection Report at the bottom.
12. Submit the completed form to the EHS Administrative Assistant who will file it in the facility legal file.

MAINTENANCE SUPERVISOR:

Needed repairs must be made as soon as possible. Note action taken and completion date on the Maintenance Work Order and submit it to the EHS Administrative Assistant who will add it to the legal file.

EXPLANATION OF INSPECTIONS: ANSI 358.1-2004

Access/Signs: Access to the unit must be free of obstructions that may inhibit the immediate use of the equipment.

Caps: Nozzles shall be protected from airborne contaminants with caps. The caps should come off automatically when the eye wash is activated and not require a second motion from the operator when activating the unit.

Drench Hoses: Drench hoses shall be designed to provide a controlled flow of flushing fluid to a portion of the body at a velocity low enough to be non-injurious to the user. A drench hose may be considered an eyewash or eye/face wash if it meets the performance requirements for eyewash or eye/face wash units.

Eyewash Units: Valve must be simple to operate and go from "off" to "on" in 1 second or less. Valve shall remain open until intentionally closed. The flow rate should be 0.4 gpm. Fluid must be able to flush both eyes simultaneously at a velocity low enough to be non-injurious to the user. Temperature should be tepid.

Flush: A three gallon flush should be sufficient to ensure that all old water is flushed from the line. If you note that the water appears cloudy, rusty, etc., continue flushing until the water runs clear. Note that inspections are done weekly to ensure that fresh water is always available for eye flushing and the system is operational. If the water consistently appears dirty, issue a MWO and increase flushing frequency until the problem is resolved. Take care to clean up any spillage of water.

Showers: Valve must be simple to operate and go from "off" to "on" in 1 second or less. Valve shall remain open until intentionally closed. The flow rate should be 20 gpm. Diameter of the flushing fluid pattern must be at least 20" sixty inches above the standing surface. Water must be substantially dispersed throughout the pattern. Temperature should be tepid.

Reports: Must be routed to Maintenance if repairs are needed, and to the EHS Administrative Assistant to ensure inclusion into the proper file. If you observe that repairs aren't being made, send a copy of your report to the EHS Manager.

HYDRITE CHEMICAL CO. - Cottage Grove East
Weekly Carbon Drum Inspection

DO NOT DELETE THE FOLLOWING LINES REQUIRED FOR COMPLIANCE
This inspection is intended to satisfy requirements of NR 664 and Title V Air Permit Requirements.
DO NOT DELETE THE FOLLOWING LINES REQUIRED FOR COMPLIANCE

Note: Carbon Drums with high failure rate are monitored 2x / week.

Weekly Carbon Drum Inspection #1:

Date Test Performed:	
Test Performed by:	
PID ID #:	
Ambient Air Reading (ppm):	

Tank Location #	PID Inspection Result (ppm)	Comment (OK or NOT OK)	Comments / Work Order Number (if needed)
T229			
T230			
T179			
West Side Loading Dock "Vapor Balance" #1			
West Side Loading Dock "Vapor Balance" #2			
West Side Loading Dock "Vapor Balance" #3			
West Side Loading Dock "Vapor Balance" #4			

I certify that I have performed the inspection or test described above and noted all deficiencies as "Not OK".

Inspector Signature: _____

HYDRITE CHEMICAL CO. - Cottage Grove East
Weekly Carbon Drum Inspection

Weekly Carbon Drum Inspection #2:

Date Test Performed:	
Test Performed by:	
PID ID #:	
Ambient Air Reading (ppm):	

Tank Location #	PID Inspection Result (ppm)	Comment (OK or NOT OK)	Comments / Work Order Number (if needed)
T229			
T230			
T179			
West Side Loading Dock "Vapor Balance" #1			
West Side Loading Dock "Vapor Balance" #2			
West Side Loading Dock "Vapor Balance" #3			
West Side Loading Dock "Vapor Balance" #4			

I certify that I have performed the inspection or test described above and noted all deficiencies as "Not OK".

Inspector Signature: _____

HYDRITE CHEMICAL CO. - Cottage Grove East
Weekly Carbon Drum Inspection

East Side Tank Farm Weekly Carbon Drum Inspection:

Date Test Performed:	
Test Performed by:	
PID ID #:	
Ambient Air Reading (ppm):	

Tank Location #	PID Inspection Result (ppm)	Comment (OK or NOT OK)	Comments / Work Order Number (if needed)
DT-7	N/A	N/a	Thermal Oxidizer
DT-6	N/A	N/a	Thermal Oxidizer
204	N/A	N/a	Thermal Oxidizer
205	N/A	N/a	Thermal Oxidizer
212	N/A	N/a	Thermal Oxidizer
213	N/A	N/a	Thermal Oxidizer
214	N/A	N/a	Thermal Oxidizer
215	N/A	N/a	Thermal Oxidizer
218	N/A	N/a	Thermal Oxidizer
221	N/A	N/a	Thermal Oxidizer
222			
228			
233			
235			
241	N/A	N/a	Thermal Oxidizer
242	N/A	N/a	Thermal Oxidizer
352			
159			
164			
178			
401	N/A	N/a	Thermal Oxidizer
402	N/A	N/a	Thermal Oxidizer
405	N/A	N/a	Thermal Oxidizer
406	N/A	N/a	Thermal Oxidizer
N. Loading Dock #3			
N. Loading Dock #5			
NW Load Dock (C4) #4			
S. Loading Dock #3			

I certify that I have performed the inspection or test described above and noted all deficiencies as "Not OK".

Signature of Inspector: _____

HYDRITE CHEMICAL CO. - Cottage Grove East
Weekly Carbon Drum Inspection

INSTRUCTIONS FOR COMPLETION

GENERAL INSTRUCTIONS FOR COMPLETION:

1. The inspections described below are intended to ensure that carbon drums connected to tanks for the purpose of odor control and to reduce volatile organic compound emissions are functioning as designed.
2. Each tank listed on the checklist must have a carbon drum connected by pipe to the vapor vent on the tank top, or tank emissions must be routed to the thermal oxidizer for destruction.
3. If tank emissions are routed to the thermal oxidizer and carbon drums are not in use, "Thermal Oxidizer" will be recorded in the comment box.
4. If tank emissions previously routed to the thermal oxidizer are now controlled by a carbon drum, cross-out the word "Thermal Oxidizer" in the comment box. Test the carbon drum with the PID and record the results on the form.
5. If a carbon drum is being used for emission control and is not connected, you must immediately notify the supervisor and take steps to install a carbon drum.
6. Please fill out the inspection form with an ink pen. Initialize and date any cross-outs and changes.

PID SNIFF TEST:

1. Must be conducted using a Portable Photo Ionization Detector at the drum vent to determine if emissions of hydrocarbons are escaping from the drum.
2. The PID must be calibrated with satisfactory results before each use. If you can't achieve a satisfactory calibration, consult your supervisor for instructions. The PID may need repair. If the calibration gas cylinder is low on pressure, take steps to order a new cylinder using instructions provided in the manual. Keep a calibration log for the PID. Complete the log each time you perform a calibration.
3. Proceed to the carbon drums in the tank farm and record the PPM reading from the PID in the box provided for each tank listed on the checklist. Tank numbers refer to the master tank farm position number.
4. To obtain a PPM reading, unscrew the drum exhaust vent on the drum lid and place the PID probe at the opening of the drum exhaust port on the top of the drum. Make note of the reading as soon as the needle on the display stabilizes. Refer to the PID meter manual if needed.
5. Replace the exhaust valve with internals after completion.
6. Readings over 500 PPM indicate the need for carbon drum replacement. If necessary, a Maintenance Work Order must be issued to change out the carbon drum **immediately, per NR 664.1033(8)(a).** Record the Maintenance Work Order number on the inspection log in the box for that tank.
7. As you are conducting the drum inspections, make note of any other observations (ie. leaks) on your checklist. After completing all the required inspections, sign your name on each page at the bottom and forward the inspection form to the EHS Administrative Assistant to be filed in the branch legal file.

I certify that all deficiencies noted as "Not OK" have been corrected immediately.

_____ _____

Signature of Facility Compliance Coordinator **Date**

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

USE THIS FORM TO RECORD RESULTS OF INSPECTIONS PERFORMED ON CARBON DRUMS USED FOR ODOR CONTROL. INSTRUCTIONS ARE ON LAST PAGE.

NAME OF INSPECTOR: _____ **(PRINT)** **DATE:**_____

Date(s) Test Performed:		
Leak Test Performed by:		
Leak Test Monitor (PID) ID#:		
Ambient Air Reading (ppm):		

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
201					
DT-7	Covered by Weekly Carbon Drum Inspection				
DT-6	Covered by Weekly Carbon Drum Inspection				
204	Covered by Weekly Carbon Drum Inspection				
205	Covered by Weekly Carbon Drum Inspection				
206					
207					
208					
209					
210					
211					Drum preferred but not required.
212	Covered by Weekly Carbon Drum Inspection				
213	Covered by Weekly Carbon Drum Inspection				
214	Covered by Weekly Carbon Drum Inspection				
215	Covered by Weekly Carbon Drum Inspection				
218	Covered by Weekly Carbon Drum Inspection				
219	N/A	N/A	N/A	N/A	Thermal Oxidizer
220	N/A	N/A	N/A	N/A	Thermal Oxidizer

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
221	Covered by Weekly Carbon Drum Inspection				
222	Covered by Weekly Carbon Drum Inspection				
223					
224					
225					
226					
227					
228	Covered by Weekly Carbon Drum Inspection				
229	Covered by Weekly Carbon Drum Inspection				
230	Covered by Weekly Carbon Drum Inspection				
231					
232					
233	Covered by Weekly Carbon Drum Inspection				
234					
235	Covered by Weekly Carbon Drum Inspection				
236					
237					
238					
239					
240					
241	Covered by Weekly Carbon Drum Inspection				
242	Covered by Weekly Carbon Drum Inspection				
200 Tank Farm Backup					

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
343					
345					
346	N/A	N/A	N/A	N/A	Thermal Oxidizer
347	N/A	N/A	N/A	N/A	Thermal Oxidizer
348					
349					
351					
352	Covered by Weekly Carbon Drum Inspection				
353	N/A	N/A	N/A	N/A	Thermal Oxidizer
354	N/A	N/A	N/A	N/A	Thermal Oxidizer
156					Not required.
157					
158					
159					
160					
161					(Release Catch Tank – South Process Room)
162					
163					
164	Covered by Weekly Carbon Drum Inspection				
165					
166					
167					
168					

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
169					
170					
171					
172					
173					
174					
175					
176					
178	Covered by Weekly Carbon Drum Inspection				
179	Covered by Weekly Carbon Drum Inspection				
180					
ST-100 Backup					
DT-1					
DT-2					
401	Covered by Weekly Carbon Drum Inspection				
402	Covered by Weekly Carbon Drum Inspection				
405	Covered by Weekly Carbon Drum Inspection				
406	Covered by Weekly Carbon Drum Inspection				
408					
412					
416					
417					
418					
420					
400 Tank Farm Backup					

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
CT-C4-480					
DT-C4-481					
N Loading Dock #1					Must have at least one drum in loading dock, extra drums are preferable, but not required.
N Loading Dock #2					
N Loading Dock #3	Covered by Weekly Carbon Drum Inspection				
N Loading Dock #4					
N Loading Dock #5	Covered by Weekly Carbon Drum Inspection				
NW Loading Dock (C4) #1					Must have at least one drum in loading dock, extra drums are preferable, but not required.
NW Loading Dock (C4) #2					
NW Loading Dock (C4) #3					
NW Loading Dock (C4) #4	Covered by Weekly Carbon Drum Inspection				
NW Loading Dock (C4) #5					Backup for R6
NW Loading Dock #6					
Acetic Acid Drum					
S Loading Dock #1					Must have at least one drum in loading dock, extra drums are preferable, but not required.
S Loading Dock #2					
S Loading Dock #3	Covered by Weekly Carbon Drum Inspection				
S Loading Dock #4					
S Loading Dock #5					
T-442					

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

Tank Location #	PID Inspection Result (PPM)	Hose Present?	Fittings Present?	Inspection Results (OK or NOT OK)	Comments -- If "Not OK", note corrective action taken and/or the Maintenance Work Order Number (MWO#).
West Side Loading Dock "Vapor Balance" #1	Covered by Weekly Carbon Drum Inspection				
West Side Loading Dock "Vapor Balance" #2	Covered by Weekly Carbon Drum Inspection				
West Side Loading Dock "Vapor Balance" #3	Covered by Weekly Carbon Drum Inspection				
West Side Loading Dock "Vapor Balance" #4	Covered by Weekly Carbon Drum Inspection				
West Side Spot 16					
West Side Spot 37					

I certify that I have performed the inspection or test described above and have noted all deficiencies as "Not OK".

_____ _____

Signature of Inspector **Date**

HYDRITE CHEMICAL CO.
Cottage Grove East
Monthly Carbon Drum and Oil Product Tank Inspection

GENERAL:
Inspection requirements are established in Air Pollution Control Permits (as Special Conditions and as part of the Malfunction Prevention and Abatement Plan), the National Oil Pollution Control Act (SPCC) and in various Hazardous Waste rules and permits (NR-600 series regulations covering TSD Facilities). Inspections described below apply to all carbon drums connected to tanks at locations listed on the checklist. The inspections are intended to ensure that carbon drums connected to tanks for purpose of odor control function as intended.

Each tank listed on the checklist must have a carbon drum connected by pipe to the vapor vent on the tank top. If the drum is not connected, you must notify the supervisor immediately and take steps to install a carbon drum. Note this on the inspection checklist in the Comments box for the tank.

REQUIRED:
If any tank listed on this inspection form does not have a carbon drum attached, ensure it is routed to an alternative control device and document the finding in the "comments" section. For tank emissions routed to the thermal oxidizer, "Thermal Oxidizer" is recorded in the Comments box for the tank. If tank emissions previously routed to the thermal oxidizer are now being controlled by a carbon drum, cross-out the word "Thermal Oxidizer" in the comment box. Test the carbon drum with a PID and record the results on this form.

PID SNIFF TEST:
- The test must be conducted using a Portable Photo Ionization Detector at the drum vent to determine if emissions of hydrocarbons are escaping from the drum.
- The PID must be calibrated with satisfactory results before each use. If you can't achieve a satisfactory calibration, consult your supervisor for instructions. The PID may need repair. If the calibration gas cylinder is low on pressure, take steps to order a new cylinder using instructions provided in the manual. Keep a calibration log for the PID. Complete the log each time you perform a calibration. **Refer to the PID SOP# MN014CG.**
- Proceed to the carbon drums in the tank farm and record the PPM reading from the PID in the box provided for each tank listed on the checklist. Tank numbers refer to the master tank farm position number.
- To obtain a PPM reading, unscrew the drum exhaust vent on the drum lid and place the PID probe into the drum exhaust port on the top of the drum. Make note of the reading as soon as the value on the display stabilizes. Refer to the PID manual if needed.
- Replace the exhaust valve with internals after completion.
- **Readings over 500 PPM indicate control device failure and need for carbon drum replacement.** A Maintenance Work Order must be issued immediately to change out the carbon drum. Record the MWO# and the corrective action taken on this form.
- If a drum is changed out, tell the supervisor in charge of the tank farms to make a note of the change-out date on the daily and monthly tank farm inspection form for that time period. Mark the "Install" date on the new drum with an indelible marker.
- **Handle the spent carbon from any hazardous waste tank as hazardous waste, see inspection SF029CG8.**

VISUAL INSPECTION:
- Note all tank conditions of concern including corrosion, deterioration, and discharges within or out of containment.
- Check piping, flanges, joints, valve bodies and pipeline supports for signs of deterioration or failure.

Please fill out the inspection form with an ink pen. Initialize and date any cross-outs and changes.

As you are conducting the drum inspections, make note of any other observations, such as leaks, on your checklist. Discuss your observations, if any, with the tank farm supervisor. After completing all the required inspections, sign your name on the last page of the form and give it to the Quality Systems Coordinator.

INSTRUCTIONS FOR SUPERVISOR: Initiate MWO's where required and enter MWO # in the appropriate box(es) on the form. File the pink copy of the completed MWO in the Branch Legal File along with the appropriate Control Device Malfunction Log.

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

THIS MONTHLY INSPECTION SERVES AS THE MONTHLY INSPECTION
FOR THE MONTH IN WHICH IT IS PERFORMED

DO NOT DELETE THE FOLLOWING LINES REQUIRED FOR COMPLIANCE
This inspection is intended to satisfy requirements in NR 664, 670, 40 CFR Part 63 (Off-site Material MACT), and Title V Permit requirements. Equipment listed in BOLD are considered "difficult-to-monitor", per NR664.1035(3)(i) and NR 664.1057(h), this equipment can not be monitored without elevating the monitoring personnel more than 2 meters above a support surface, and are monitored MONTHLYly. It is assumed that all equipment listed is in light liquid / gas-vapor service. All hazardous waste contains > 10% VOC.
DO NOT DELETE THE ABOVE LINES, REQUIRED FOR COMPLIANCE

Perform Sniff Testing only when the system is operational. If the system is not operational for an entire month, sniff testing is not required for that month, but you MUST write this on the inspection form AND perform and document a sniff test immediately upon startup.
Note: Complete instructions are on the last page of this form.

Date(s) Test Performed:				
Leak Test Performed by:				
Leak Test Monitor (PID) ID #:				
Ambient Air Reading (ppm):				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 1 Recirculation Pump				
RP-C1-101				
BV-C1-101	OPW			
BV-C1-110	From RP-C1-101 into reboiler. 4" main.			
GV-C1-111	To vaporizer / HX-C1-101.			
BV-C1-111A	SP			
BV-C1-111B	PT			
BV-C1-142	Into reboiler			
BV-C1-143	Into reboiler			
BV-C1-144	OPW			
BV-C1-145	OPW			
BV-C1-112	Column Drain (#1)			
BV-C1-102	Column Drain (#2)			
BV-C1-141	Column reflux. Primary column drain valve to reboiler.			2m above reboiler
Column 1 Charge System				
BV-C1-107	OPW / Reboiler Charge port (East Wall)			
BV-C1-107A	OPW / Column charge line			C1 Reboiler
BV-C1-103				
BV-C1-104	OPW			
BV-C1-105	Into reboiler / Main			
BV-C1-108	OPW			
All Purpose column Transfer Line				
BV-C1A	OPW/By North Process Trough			
BV-C1B	OPW/By C1 Reboiler			
Column 1 Receiver System				
DP-C1-101				
BV-C1-122	Under receiver / Main			
BV-C1-122A	OPW			
BV-C1-123	SP			
BV-C1-130	OPW / Back of receiver			
BV-C1-133	PI / Back of receiver			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C1-133A	Receiver pressure (APACS)			
BV-C1-134				
BV-C1-131	OPW / Drum-out Pt.			
BV-C1-121	Receiver – Heat Exchanger (HX-C1-102)			Top of Receiver
Column 1 Condenser Recirculation				
BV-C1-137	Condenser Recirculation			
BV-C1-137A				
BV-C1-137B	OPW			
Column 1 Reflux System				
MFM-C1-101	Product line			
BV-C1-130A	MFM Intake			
BV-C1-130B	MFM Outtake			
BV-C1-130C	MFM By-pass			
BV-C1-126	Main / Flux indicators			
GV-C1-124	Column reflux / FI-102			
GV-C1-125	Product line / FI-101			
BV-C1-127	From FI-101. Product line			
BV-C1-128	From FI-102. Column reflux behind receiver			
BV-C1-129	N2 inlet			
FI-101	Flux Indicator/Product Line			
FI-102	Flux Indicator/Column reflux			
BV-C1-132	Product to Tankers (East Wall – Trough)			
BV-C1-135	Product to Tankers (East Wall – Trough)			
BV-C1-135A	Product to Storage (OPW) (Trough)			
Column 2 Recirculation Pump				**East Side/Reboiler 2**
RP-C2-201				
BV-C2-221	OPW			
BV-C2-222	Reboiler (Main)			
BV-C2-227	SP			
GV-C2-223	To vaporizer (HX-C2-201)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C2-227A	PI			
BV-C2-224	Column drain/west side reb 2			Jacket Insulated
BV-C2-225	Column reflux/west side reb2			Jacket Insulated
Column 2 Charge System				
BV-C2-226	OPW/Charge port/ East Wall			
BV-C2-228				C2 reboiler
BV-C2-220	Into reboiler / Main			
BV-C2-235	OPW			
Column 2 Receiver System				
DP-C2-201				Deanline Pump
BV-C2-204	Under receiver / Main			
BV-C2-206				
Column 2 Condenser Recirculation				
BV-C2-214	SP			
Column 2 Reflux System				
MFM-C2-201	Product line			
BV-C2-215	MFM Bypass			
BV-C2-216	MFM Intake			
BV-C2-217	MFM Outtake			
BV-C2-208	Main / Flux indicators			
GV-C2-207	Product line / FI 201			
GV-C2-209	Column reflux / FI-202			
BV-C2-218	From FI-201/product line			
BV-C2-211	From FI-202/column reflux			
BV-C2-212				
BV-C2-219	N2 Inlet			
BV-C2-213	OPW			
FI-201	Flux indicator/product line			
FI-202	Flux indicator/column reflux			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C2-230	Product to storage (East wall – Trough)			
BV-C2-231	Product to storage (OPW – Trough)			
BV-C2-233	Product to tankers (East wall – Trough)			
Column 3 Recirculation Pumps	**In NW Process Area**			
RP-C3-301				
RP-C3-302	Secondary Pump (Back-up)			
BV-C3-300B	To RP-C3-301			
BV-C3-300C	To RP-C3-302			
BV-C3-300D	After RP-302			
GV-C3-314	To vaporizer/HX-C3-301			
GV-C3-315	SP			
GV-C3-316	After RP-301			
BV-C3-300E	PI			
BV-C3-304B	End mid-column feed			
BV-C3-304	Column charge line			
BV-C3-305A	OPW			
BV-C3-310A	OPW/PT Phase Separator			
BV-C3-300A	Line tie-in			
BV-C3-310	Reboiler (Main)			
BV-C3-305B	Reboiler (Drain)			
Column 3 Sample line	**In NW Process Area Leads to GV-C3-314**			**IDLH Line**
BV-C3-395	Primary valve			
BV-C3-396				
BV-C3-397	OPW			
BV-C3-398				
BV-C3-399	Shut-off valve			
Column 3 Charge System				
BV-C3-307A	OPW/ Charge Point/(East Wall)			
BV-C3-306	Near receiver (Column 2) (East)			
BV-C3-302				
BV-C3-303	North Process / NW Process Wall (East side)			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 3 Charge System (Continued)				
BV-C3-301	OPW			Near C3 receiver
MFM-C3-370	(East)			Near BV-C3-302
Column 3 Receiver System				
DP-C3-301				
BV-C3-321	N2 Outlet			
BV-C3-322	OPW			
BV-C3-323				
BV-C3-324	Under receiver/Main (East)			
Column 3 Reflux System				
MFM-C3-330	Column reflux			
BV-C3-329	From FI 301/column reflux			
BV-C3-329A	MFM Bypass			
BV-C3-329B	MFM Intake			
CV-C3-329C	MFM Outtake (Pneumatic control valve)			
BV-C3-329D				
GV-C3-327	To FI 301 column reflux			
FI-301	Flux indicator/column reflux			
MFM-C3-301	Product line			
BV-C3-334	MFM Bypass			
CV-C3-335	MFM Intake (Pneumatic control valve)			
BV-C3-336	MFM Outtake			
BV-C3-337	To storage or sewer water tanks			
BV-C3-338	OPW / Sewer Water Tanks			
GV-C3-328	To FI 302product line			
BV-C3-331	From FI 302/product line			
BV-C3-332	N2 Inlet (East)			
BV-C3-330	Main / Flux indicators			
FI-302	Flux indicator/product line			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 3 Reflux System (Continued)				
BV-C3-336A	Product to storage (East wall – Trough)			
BV-C3-337A	Product to tankers (East wall – Trough)			
BV-C3-338A	Product to storage (East wall – Trough)			
BV-C3-342B	From receiver/Main			
BV-C3-328A	OPW/ Steam and Vacuum Port			
BV-C3-342A	To SP			
BV-C3-342	SP			
BV-C3-342C	Recirculation Line (#1)			
BV-C3-342D	Recirculation Line (#2)			
BV-C3-342E	Recirculation Line (#3)			
Luwa 1 Feed Pump				
LFP-101				
LBV-101	OPW			
LBV-102				
LBV-107	SP			
LBV-105	L1 Feed			
Luwa 1 Bottoms Pump	**Removable System #1**			**Primary System "Standard Recycles"**
LBP-103				
LBV-122	N2 Inlet			
LBV-123	SP			
LBV-120	Main			
LBV-120A	OPW			
LBV-120B	N2 inlet			
LBV-124	T-205 waste line valve			Stationary line

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Luwa 1 Bottoms Pump (Removable System #2)	**Removable System #2**			**Dow Corning 3-3018 Process**
LBP-103A				
LBV-160	Main/Sight glass			
LBV-161	OPW/From LBP-103			
LBV-162	Main/ To filter system			
LBV-163	To SP			
LBV-164	SP			
LBV-165	Main/ Product out			
LBV-166	From DT-6			
LBV-166A	PI			
LBV-167	Main/ L1 Resin Line/Tankers			
LBV-124	T-205 Waste Line Valve			Stationary line
Luwa 1 Product Pump				
LPP-102	Product Pump			
LBV-111	Receiver to pump			
LBV-112	N2 Inlet			
LBV-113	To PCV-115			
LGV-114	L1 Distillate to storage			
LBV-114A	L1 Distillate to storage (OPW)			
LBV-115	L1 Receiver Recirc Line			
PCV-115	Pneumatic control valve			
LBV-116	SP			
Luwa 1				
LBV-131	NMP Feed (#1)			
LBV-131A	NMP Feed (#2)			
LBV-131B	NMP Feed (#3)			
LBV-132	NMP Return (#1)			
LBV-132A	NMP Return (#2)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Luwa 3 Bottoms System	**Removable System #1**			**Standard ASM**
LPT-303	Receiver			
BV-L3-205	To T-204/T-208			Two way control valve
BV-L3-200	Under sight glass			Two way control valve
BV-L3-290	To Jurop vacuum			Two way control valve
BV-L3-291				
BV-L3-292	N2 feed line			Two way control valve
BV-L3-294	N2 feed line			
BV-L3-296	N2 feed line			
Luwa 3 Bottoms Pump	**Removable System #2**			**Luwa 1/Luwa 3 System**
LBP 303				Stationary pump
LBV-160				
LBV-161				
LBV-162				
LBV-163				
LBV-164				
LBV-165				
LBV-166				
LBV-166A				
LBV-167				
LBV-124				Stationary
Luwa 3 Bottoms Systems				
LPT-303	**Storage Lines**			
CV-L3-220	To T-204			
BV-L3-225	To T-204			
BV-L3-202	Main valve to/from T-208			
BV-L3-235	To/from T-208 (#2)			
BV-L3-240	To T-208			
CV-L3-245	To T-208			
CV-L3-250	From T-208			
BV-L3-255	From T-208			
BV-L3-215	Cut-off valve T-204/ T-208			
BV-L3-210	1" OPW (SP)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
LBV-340D	T-208 (outside)			
LBV-340E	T-208 (outside)			
LBV-340C	T-208 (outside)			
TP-L3-200	**Bottoms Pump**			**Gear Pump**
BV-L3-260	Main valve			
BV-L3-265	Main valve to T204/T208			
BV-L3-270	To L3 Feed			Feed recirculation
BV-L3-275	To T-204			Separate line
CV-L3-280	To T-204			Separate line
BV-L3-285	2" OPW			
LPT-302	**Receiver System**			
Receiver Recirculation				
BV-L3-438	¼" line			
BV-L3-436				
Cartridge Filter System	**Secondary Reflux**			
BV-L3-418	Main valve			
BV-L3-420	Before PI			
BV-L3-422	Filter drain			
BV-L3-424	After filter			
BV-L3-426	Before 2nd PI			
BV-L3-428	2nd filter drain			
BV-L3-430	After 2nd filter			
Cleanout Bypass				
BV-L3-434	Main valve			
BV-L3-440	To L3 overhead line			
BV-L3-432	SP (SC)			
Column Reflux	**L3 Reflux**			
BV-L3-416	After PI (main valve)			
BV-L3-444	Before MFM-L3-401			
MFM-L3-401				
BV-L3-448	Pneumatic			Pressure regulator
FI-L3-400	Flow indicator			
Receiver Reflux				
BV-L3-406	Before pump			
DP-L3-405				Centrifugal pump
BV-L3-408	After pump			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-L3-402	Before pump			
DP-L3-400				Centrifugal pump
BV-L3-404	After pump			
L3 Overhead				
BV-L3-412	Main valve			
MFM-L3-400				
BV-L3-413	Pneumatic			Pressure regulator
BV-L3-442	Storage (trough)			
BV-L3-410	OPW			
Luwa 4 Feed				
BV-L4-160	Feed pump inlet block valve			
BV-L4-170	Feed pump inlet drain valve			
BV-L4-180	Feed pump bypass valve			
BV-L4-185	Sample point valve			
BV-L4-190	Feed pump discharge valve			
BV-L4-195	L4 inlet nozzle			
Luwa 4 Bottoms – For Hazardous Waste Processing				
SG-L4-202	Sight glass			
BV-L4-202	Block valve below sight glass			
BV-L4-207	Nitrogen Inlet valve with fitting			
BV-L4-212	Pump inlet drain valve			
LP-L4-202	Pump			
BV-L4-203	Isolation valve for pressure indicator at pump discharge			
BV-L4-217	Sample point valve			
BV-L4-225	Nitrogen inlet valve with fitting			
BV-L4-222	Pump discharge block valve			
BV-L4-227	Nitrogen inlet valve with fitting			
BV-L4-224	Block valve in transfer line to T205 or NMP tank			
BV-L4-223	Block valve in transfer line to T205			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-L4-232	Block valve in return line to NMP tank			
Luwa 4 Overheads				
BV-L4-460	Isolation valve for pressure transmitter PT-L4-400			
DM-L4-400	Mist eliminator			
RCR-L4-400	Product receiver			
BV-L4-414	Product receiver drain valve			
BV-L4-405	Inlet valve for distillate pump DP-L4-400			
DP-L4-400	Distillate pump			
BV-L4-404	Outlet valve for distillate pump DP-L4-400			
BV-L4-406	Inlet valve for distillate pump DP-L4-405			
DP-L4-405	Distillate pump			
BV-L4-408	Outlet valve for distillate pump DP-L4-405			
BV-L4-410	Sample point valve			
BV-L4-416	Nitrogen inlet valve with fitting			
BV-L4-412	Inlet valve to flow transmitter FT-L4-400			
FT-L4-400	Mass flow meter			
CV-L4-400	Control valve			
BV-L4-442	L4 distillate pumping-system outlet valve			
BV-L4-418	Inlet valve for recirculation line			
BV-L4-438	Outlet valve for recirculation line			
BV-L4-422	Isolation valve for pressure indicator for receiver			
BV-L4-424	Isolation valve for pressure and level transmitters for receiver			
BV-L4-426	Isolation valve for pressure transmitter for receiver			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
CV-L4-464	Check valve for N2O2 sparge			
BV-L4-465	Valve for N2O2 sparge			
BV-L4-428	Nitrogen inlet to receiver block valve			
GV-L4-429	Gate or globe valve for "ballast air" intake to vacuum line			
BV-L4-430	Ball valve for "ballast nitrogen" flow into vacuum line			
BV-L4-435	Ballast air intake block valve			
PCV-L4-402	Pressure-control valve			
BV-L4-420	Receiver vent outlet valve			
Vacuum Pot	**North Process Area**			
BV-VAC-100	Main			
CV-VAC-100				
BV-VAC-102				
BV-VAC-104	OPW			
BV-VAC-106				
BV-VAC-107	OPW			
BV-VAC-108	OPW/Near cut tank 2			
CV-VAC-102	Near cut tank 2			
BV-VAC-110	Trough line			
BV-VAC-116	OPW/Trough			
BV-VAC-120	Pot still air intake			
BV-VAC-120A	Pot still air intake (#2)			
BV-VAC-114	Outside (Near T-202)			
Mezzanine	**North Process Area**			
BV-VAC-112	OPW/To Luwa Knockout Pot			
BV-VAC-122	Main/To VP-940			
BV-VAC-122A	#2/ To VP-940			
BV-VAC-124	From Luwa Vacuum line			
VP-940	Vacuum Pump			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
DT-3 & Centrifuge (NE Mezzanine)				
CV-BT1-150	Flange/DT-3 to SC-C29-100			
BV-CFI-355	Centrifuge to SC-C29-100	N/A	N/A	Out of Service – New line
BV-R6-368	OPW/Filtrate to SC-C29-100 (1st floor)			
R6 Vent Lines (NW Mezzanine)				
BV-R6-376	OPW/R6 Vent (#2)			
BV-R6-372	OPW/R6 Vent (#1)			
BV-R6-318	OPW/Carbon Drum			
BV-R6-366	OPW/To Sc-C29-100			
BV-R6-336	From Ammonia Scrubber (Sc-R6-300)			
BV-R6-326	To Ammonia Scrubber (Sc-R6-300)			
BV-R6-304	To Acid Scrubber (Sc-R6-305)			
BV-R6-314	From Acid Scrubber (Sc-R6-305)			
BV-R6-370	OPW/NE Corner to SC-C29-100			
R6 Vent Lines (NE Mezzanine)				
BV-R6-374				
BV-R6-378	OPW/R6 Vent (#1)			
BV-R6-380	OPW/Knock-out pot			
BV-R6-384	OPW/VP-R6-300 (Drain)			
BV-R6-386	Main			
BV-R6-388	OPW/VP-R6-300 to R6 Vents			
BV-R6-382	To northeast scrubber (SC-001)			
Carbon Drum				
BV-R6-320	OPW/Vent line (outside)			
PRV-R6-324	Carbon drum vent			
SC-R6-305 (Acid Scrubber)	---	---	---	---
BV -R6-316	OPW/Scrubber Inlet			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV -R6-306	SC-R6-305 to recirculation pump			
RP-SC-305				
BV-R6-310	OPW/ From RP-SC-305			
BV-R6-308	Recirculation pump to rotometer			
ROT-R6-305				
BV-R6-312	ROT-R6-305 to HX-R6-730 (cooling H_2O heat exchanger)			
BV-R6-313	N2 Inlet			
BV-R6-309	N2 Inlet (#1)			
BV-R6-311	N2 Inlet (#2)			
SC-R6-300 (Ammonia Scrubber)				
BV-R6-340	SP			
BV-R6-338	OPW/Scrubber Inlet			
BV-R6-328	To recirculation pump (RP-SC-300)			
SC-R6-300 (Ammonia Scrubber)				
BV-R6-328A	N2 Inlet			
RP-SC-300				
BV-R6-329	Main/Recirculation			
BV-R6-337	N2 Inlet (OPW)			
BV-R6-331	N2 Inlet (#1)			
BV-R6-333	N2 Inlet (#2)			
Ammonia Nurse Tank				
AP-R6-800				
BV-R6-802	Ammonia feed			
BV-R6-804	N2 Inlet			
PCV-R6-800	Pneumatic valve			
BV-R6-806	PI			
BV-R6-807	PT (PT-R6-200)			
PCV-R6-801	Pneumatic valve (ammonia feed)			
BV-R6-808	From PCV-R6-801			
BV-R6-809	PI			
PRT-R6-805	Relief/NH3 return			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-	Vapor recovery (Nurse tank)			
Ammonia Feed				
BV-R6-811				Closed off
PRV-R6-810	Return to nurse tank			
GV-R6-815	Main feed valve to R6			
GV-R6-816	Into R6/Mezzanine			
GV-R6-817	Pneumatic Control valve			
BV-R6-252	Pneumatic (To reactor pot)			
BV-R6-813	NH3 Feed			Currently out of service
BV-R6-814	NH3 Feed			Currently out of service
ZrCl4 System (Located in N Warehouse)				
BV-R6-850	Chicago fitting			
BV-R6-851	PI			
BV-R6-853	Bottom of receiver			
PRV-R6-852				
BV-R6-854	OPW/Wall/To R6			
BV-R6-855	From ZrCl4 room into reactor/mezzanine			
BV-R6-170	Pneumatic valve			
Transfer Pump (West Wall/NW Process)				
TP-R6-900				
MFM-R6-235	SW Wall			
BV-R6-290	SW Wall			
BV-R6-291	SW Wall			
R6 Recirculation	**Reactor Pot**			
RP-R6-200	Recirculation pump			
GV-R6-200	Main/from reactor			
BV-R6-210	From GV-R6-200			
BV-R6-212	To RP-R6-200			
BV-R6-208	OPW/RP-RP-200/North			
BV-R6-204	Charge point			
BV-R6-206	SP			
BV-R6-214	OPW/RP-R6-200			
BV-R6-222	SP			
BV-R6-216	OPW			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-218	Main/Recirculation Loop			
BV-R6-220	PI			
Recirculation Loop				
BV-R6-242	Main/to HX-R6-740 /Reactor pot cooler	N/A	N/A	Closed off
BV-R6-244	From HX-R6-740	N/A	N/A	Closed off
BV-R6-250	Pneumatic/to DT-3			
BV-R6-254	Pneumatic/into reactor pot			
Pressure Line (Top of Reactor Lot)				
GV-R6-900				
BV-R6-870	Plug valve			
BV-R6-875	To pressure units			
BV-R6-880	PI			
BV-R6-885	PT			
BV-R6-302	N2 Inlet (For NW Truck dock) (Cryogenic)	N/A	N/A	Not in Service
Metered Feed	---	---	---	---
BV-R6-100	OPW/Bottom			
MFM-R6-100	West wall			
BV-R6-105	MFM Intake			
BV-R6-110	MFM Outtake			
BV-R6-115	MFM Bypass			
BV-R6-120	OPW			
BV-R6-125	To R6/Mezzanine			
GV-R6-130	Into R6/Mezzanine			
Transfer lines (West wall)	---	---	---	---
BV-R6-	Virgin NPA/RC NPA-Heptane			
BV-R6-	Virgin Heptane/OPW			
BV-R6-900	Line B/R6 Transfer/OPW			
BV-R6-905	Line A/R6 Transfer/OPW			
BV-R6-920	DI H_20			
BV-R6-910	Line B (North process /trough)/OPW			
BV-R6-915	Wastewater (North process/trough)/OPW			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Primary condenser (HX-R6-710)				
GV-R6-400	R6 to HX-R6-710/ Mezzanine)			
BV-R6-403	HX-R6-710 to separator (R6-405)			Closed off
BV-R6-409	R6-405 to receiver (R6-400)			Closed off
Knock-out pot (HX-720 Receiver K.O. Pot)				
BV-R6-302	OPW/NW Mezzanine/To scrubbers			
CV-R6-300	Pneumatic /Receiver to K.O. Pot			
PV-R6-412	Receiver relief (To NW Truck dock)			
Receiver purge (½" line)				
BV-R6-418	Bottom of receiver			
BV-R6-424	Main			
BV-R6-427	Top of receiver			
Receiver (RCR-R6-400)				
PI-RCR-400	PI/Top of receiver			
BV-R6-430	OPW/Top of receiver			
BV-R6-415	Main/Under receiver			
BV-R6-442	OPW/East/N2			
BV-R6-445	To distillate pump			
BV-R6-448	OPW/West			
Receiver reflux (RCR-R6-400)				
BV-R6-454	OPW			
BV-R6-457	Main			
BV-R6-461	Bypass			
BV-R6-464	To flux indicator FI-R6-400			
FI-R6-400				
BV-R6-465	From FI-R6-400			
BV-R6-436	Into receiver			
Receiver/reactor				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-466	Main			
BV-R6-469	Into reactor pot/mezzanine			
Receiver /Primary Condenser (HX-R6-710)				
BV-R6-1	Main/mezzanine			
ST-TOX-1 (Top of tank)	**Located in 200 Tank Farm (Spot 216)**			
CV-TOX-1	Pneumatic/Inlet surge tank			
BV-TOX-1A	Main/From scrubbers/butterfly valve			
Flange 1A	From scrubbers			
BV-TOX-1A	Butterfly/From DTA Line			
BV-TOX-1B	Butterfly/To DTA Line			
BV-TOX-12A	Butterfly/West Scrubber (#1)			
BV-TOX-12B	Butterfly/West Scrubber (#2)			
BV-TOX-8A	Butterfly/East Scrubber (#1)			
BV-TOX-8B	Butterfly/East Scrubber (#2)			
CV-TOX-13	Thermox line			
Flange 1	Top of surge tank/After LEL sensors			
CV-TOX-4	Vent to surge tank			
CV-TOX-2	Relief vent			
BV	Butterfly			C29 Scrubber line system
CV-TOX	Pneumatic			
DTA				
BV	PI			
LEL-TOX-1				
LEL-TOX-2				
Miscellaneous	Fittings, caps, etc. around LEL Sensors			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
LSH-TOX-1	High level switch			
LT-TOX-6	Level transmitter			
DTA-TOX-1	Detonator arrestor			
DTA Series (from Scrubber)	**Detonator Arrestor**			**DTA-Tox1**
BV-	PI, PT (PDS-Tox1)			
BV-	Bypass			
DTA Series (to Scrubber)				**DTA-Tox2**
BV-	PI, PT (PDS-Tox2)			
BV-	Feed valve			
DTA Series (Bottom of Tank)				
BV-TOX-2	Inside north process/Next to line 205B			
BV-TOX-3	Main			
BV-TOX-3A	N2 Inlet/Line purge			
BV-TOX-3B	N2 Inlet/Line purge			
BV-TOX-3C	OPW			
Thermox room (Located next to NW Process Area)	---	---	---	---
CV-TOX-3				
CV-BL-A1	Blower 1			
CV-BL-A2				
CV-BL-B1	Blower 2			
CV-BL-B2				
PDS-TOX-5				
PDS-TOX-3				
FA-TOX-3				
TE-TOX-1A & 1B				
PT-TOX-6				
PT-TOX-4	Pressure element			
Flange Series (Leading from surge tank)		---	---	---
Flange-2	Access via breezeway roof			
Flange-3	Access via breezeway roof			
Flange-4	Access via wastetank rooftops (202-204)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Flange-5	Access via wastetank rooftops (T202-204)			
Flange-6	Access via wastetank rooftops (T202-204)			
Flange-7	Next to T-201			
Flange-8	Cleanout, north (2" flange & small BV)			
Flange-9	Thermox roof			
Flange-10	Thermox roof			
Flange-11	Thermox roof			
Flange-12	Inside thermox room/ceiling			
Flange-13	Inside thermox room/ceiling			
Flange-14	Inside thermox room/ceiling			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-202 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-202A				
TFV-202A				
TBV-202A				
T-203 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-203A				
TFV-203A				
TBV-203A				
T-204 (Bottom of Tank)	**Organic Concentration >10% by weight**			x
TGV-204A				
TFV-204A				
TBV-204A	OPW			
TBV-204B	OPW			
T-205 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-205A				
TFV-205A				
TBV-205A	OPW			
TBV-205B	OPW			
TBV-205C	To transfer pump (TP-810)			
T-212 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-212A				
TFV-212A				
TBV-212A				
T-213 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-213A				
TFV-213A				
TBV-213A				
T-214 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-214A				
TFV-214A				
TBV-214A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-215 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-215A				
TFV-215A				
TBV-215A				
T-218 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-218A				
TFV-218A				
TBV-218A				
TFV-218B				
TBV-218B				
T-221 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-221A				
TFV-221A				
TBV-221A				
TBV-221B	Capped off			
T-222 (Bottom of Tank)				**Carbon Drum**
TGV-222A				
TFV-222A				
TBV-222A	Capped off			
TBV-222B	Main valve			
TBV-222C				
TBV-222D				
TCV-222A				
TCV-222B				
T-228 (Bottom of Tank)				**Carbon Drum**
TGV-228A				
TFV-228A				
TBV-228A				
TBV-228C				
TBV-228D				
TBV-228E				
TBV-228F	Capped off			
TCV-228A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-235 (Bottom of Tank)				**Carbon Drum**
TGV-235A				
TFV-235A				
TBV-235A	OPW			
TBV-235B	Located by T-228			
TBV-235C				
TCV-235A				
T-241 (Bottom of Tank)				**Thermox**
TFV-241A				
TBV-241A				
TBV-241C				
TBV-241D				
TCV-241A				
T-242 (Bottom of Tank)				**Thermox**
TFV-242A				
TBV-242A	OPW			
TBV-242C				
TBV-242D				
TCV-242A				
TP-810 (Transfer Pump 810)	**Located near T-205**			
TBV-810A	OPW			
TBV-810B				
TBV-810C				
TBV-810D	To 400 Tank Farm			
TBV-810E	To T-205 (Line 205B)			
TBV-205G	Locate behind T-222			
TBV-205H	Locate behind T-222 / Capped off			
TBV-205I	Locate behind T-222			
TP-811	**Located near T-211**			
TBV-811B				
TBV-811C	OPW			
TBV-811D	N2 Inlet			
TBV-811E				
TBV-811F				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
TBV-811G	OPW			
	Located near T-229			
TBV-810G	From TP-811			
TCV-205G	From TP-811			
Transfer Pump 811	**Locate near T-211**			
TBV-212D	OPW /Feed Valve/ TP-212			
TBV-213D	OPW /Feed Valve/ TP-213			
TBV-214D	OPW /Feed Valve/ TP-8214			
TBV-215D	OPW /Feed Valve/ TP-215			
TBV-218D	OPW /Feed Valve/ TP-218			
TBV-221D	OPW /Feed Valve/ TP-221			
T-202 (Side of Tank)				
TCV-202A				
TFV-202B				
TBV-202C				
TBV-202D	OPW/North Process/ Behind T-343 Header			
TBV-202E	Located near T-203			
T-203 (Side of Tank)				
TFV-203B				
TBV-203B				
TBV-203C	Located near fan along east wall			
T-204 (Side of Tank)				
TFV-204B	Main			
TBV-204M				
TBV-204D	Capped off			
TFV-204C	Secondary			
TBV-204E				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-205 (Side of Tank)				
TFV-205B	Main			
TBV-205J				
Line 205A	**From B5/R10/Columns**			
TCV-205R				
TBV-205R				
Line 205B	**North Process / Luwas / Pumpout**			
TBV-205F	OPW			
TCV-205E				
TBV-205E				
Line 205C	**North Process / Columns to T-205**			
TBV-205D				
TCV-205D				
Line 205D				**Currently not in service**
TCV-205C		N/A	N/A	
TBV-205L		N/A	N/A	
Line 205E	**South Process Pump Pit Waste Line**			
TCV-205B				
TBV-205K				
Line 205F	**North Process / Trough**			
TCV-205S				
TBV-205S				
Line 205G	**North Process / Columns/205/400 Tanks**			
TBV-205T				
TCV-205T				
TBV-205U	OPW			
T-212 (Side of Tank)				
TFV-212B				
TBV-212B				
TBV-212C				
TCV-212A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-213 (Side of Tank)				
TFV-213B				
TBV-213B				
TBV-213C				
TCV-213A				
T-214 (Side of Tank)				
TFV-214B				
TBV-214B				
TBV-214C				
TCV-214A				
T-215 (Side of Tank)				
TFV-215B				
TBV-215B				
TBV-215C				
TCV-215A				
T-218 (Side of Tank)				
TFV-218C				
TBV-218C				
TCV-218A				
T-221 (Side of Tank)				
TFV-221B				
TBV-221C				
TBV-221E	Capped off			
TCV-221A				
T-222 (Side of Tank)				
TFV-222B				
TBV-222E	OPW			
T-228 (Side of Tank)				
TFV-228B				
TBV-228B	OPW			
T-235 (Side of Tank)				
TBV-235D				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-241 (Side of Tank)				
TFV-241B				
TBV-241B	Capped off			
T-242 (Side of Tank)				
TFV-242B				
TBV-242B	OPW			
T-202 (Top of Tank)				**Emissions to Thermox**
PVRV-202	Conservation vent			
FA-202	Flame arrestor			
TCV-202J	Check valve			
T-203 (Top of Tank)				**Emissions to Thermox**
PVRV-203				
FA-203				
TCV-203F				
T-204 (Top of Tank)				**Emissions to Thermox**
PVRV-204				
FA-204				
TCV-204Z				
T-205 (Top of Tank)				**Emissions to Thermox**
PVRV-205				
FA-205				
TCV-205W				
T-212 (Top of Tank)				**Emissions to Thermox**
PVRV-212				
FA-212				
TCV-212B				
T-213 (Top of Tank)				**Emissions to Thermox**
PVRV-213				
FA-213				
TCV-213B				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-214 (Top of Tank)				**Emissions to Thermox**
PVRV-214				
FA-214				
TCV-214B				
T-215 (Top of Tank)				**Emissions to Thermox**
PVRV-215				
FA-215				
TCV-215B				
T-218 (Top of Tank)				**Emissions to Thermox**
PVRV-218				
FA-218				
TCV-218C				
T-221 (Top of Tank)				**Emissions to Thermox**
PVRV-221				
FA-221				
TCV-221B				
T-401 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-401				
TFV-401A				
TBV-401A				
T-402 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-402				
TFV-402A				
TBV-402A				
T-405 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-405				
TFV-405A				
TBV-405A				
T-406 (Bottom of Tank)	**Organic Conc.>10% by weight**	---	---	---
TGV-406				
TFY-406A				
TBV-406A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-401 (Side of Tank)				
TFV-401B				
TCV-401B				
TBV-401B				
T-402 (Side of Tank)				
TFV-402B				
TFV-402B				
TCV-402B				
TBV-402B				
T-405 (Side of Tank)				
TFV-405B				
TCV-405				
TBV-405B				
T-406 (Side of Tank)				
TFV-406B				
TCV-406				
TBV-406B				
TP-820 Recirculation Pump	**Locate near T-405**			
BV-405C	Main			
BV-405D	To loading ramp			
BV-405E	OPW/North wall/Tankers			
BV-405F	Main transfer line bypass			
BV-405G	Located on loading ramp			
BV-405H	To/From T-405			
BV-491	From TP-820/North Wall/"Chicago"			
BV-492	From TP-820 to N2 Inlet			
BV-493	N2 Inlet / SP			
BV-93G	OPW/Main Transfer Line			
BV-SP1	SP / West Wall			
BV-406C	OPW/North Wall/T-406			
BV-406D	N2 Inlet			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

MONTHLY LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-901	To/From T-401 / T-402/T-406			
BV-902	To/From T-406			
BV-903	Closed off			
TP-821 Recirculation Pump (Near loading ramp)	---	---	---	---
F-821	Filter			
BV-490A	Bypass/ West wall			
BV-490B	Main/pump			
BV-490C	From filter			
BV-490D	N2 Inlet			
BV-490E	"Chicago"			
BV-490F	OPW			
BV-490G	From TP-820 line			
BV-490H	N2 Inlet			
T-401 (Top of Tank)	---	---	---	---
PVRV-401	Conservation vent			
FA-401	Flame arrestor			
CV-401G	Check valve			
PVRV-402				
T-402 (Top of Tank)	---	---	---	---
FA 402				
CV-402G				
T-405 (Top of Tank)	---	---	---	---
PVRV 405				
FA 405				
CV-405H				
T-406 (Top of Tank)	---	---	---	---
PVRV 406				
FA 406				
CV-406H				

Date:_____

INSTRUCTIONS FOR COMPLETION

(1) Inspection requirements are established in the Title V Air Pollution Control Permits, NR 631, 632, 633 and 40 CFR Part 63 (Off-site Material MACT). Inspections described below apply to tanks at all positions listed on the checklist. The inspections are intended to ensure that all valves function as intended and don't leak.

(2) Each tank listed on the checklist must have valves in place for inspection. If the valves are not connected, you must notify the supervisor immediately and take steps to install them. Note this on the inspection checklist in the box provided for the tank.

(3) Open-ended lines must be are capped or plugged.

(4) "Sniff Test" all valves, flanges, connectors, and pressure-relief conservation vents. The "Sniff Test" is performed using a Portable Photo Ionization Detector on the equipment to determine whether there is vapor leakage. The PID battery must be charged up and the meter must be calibrated with satisfactory results before each use according to instructions provided in the PID SOP. If you can't achieve a satisfactory calibration, consult your supervisor for instructions. The meter may need repair. If the cal gas cylinder is low on pressure, take steps to order a new cylinder using instructions provided in the manual.

(5) Make sure that Operators will not be transferring material in or out of the tanks you will be inspecting. Discuss your inspection plans with the operators or tank farm supervisor before proceeding.

(6) Locate the Pressure Relief (PVRV)/Flame Arrestor (FA) assembly on the tank. SAFETY NOTE: Before you climb on a tank, put on a full body harness and lanyard. Use a properly extended portable ladder or fixed ladder to climb onto the tank top. For some tanks, it may be necessary to use a crane to gain access to the tank top. Examine the tank top for evidence of corrosion before climbing on it. You need to make sure that you won't fall through the tank top. Secure the lanyard to the tank top when you are working on the tank. Have a co-worker stand by at ground level to summon rescuers in case you fall.

(7) Using only non-sparking tools, remove the FA cover and inspect the screen material. Replace the material if it is corroded or appears to have deteriorated in service. Replace the cover. Note the condition of the FA (Passed or Corrective action) on the checklist box for the tank. If you replace the screen, note same in the comments box.

(8) Visually inspect the PVRV assembly, looking for evidence of corrosion or dirt which may hinder operation of the valve. Disassemble, clean, and reinstall the valve as needed. Replace valves as needed. Note the condition of the PVRV (Passed or Corrective action) on the checklist box for the tank. If you replace the valve, note same in the comments box.

(10) Calibrate PID and document in PID calibration log.

Date:_____

(9) Perform a "Sniff Test" using a Portable Photo Ionization Detector (PID) at the PVRV Vent and around the FA and PVRV joints to determine whether there is vapor leakage.

(10) Record the PPM reading from the PID meter in the box provided for each valve on each tank listed on the checklist. Tank numbers refer to the master tank farm position number.

(11) For the PVRV's, readings over 500 PPM indicate leakage. For other valves, readings over 10,000 PPM indicate leaks. If leakage is noted at a joint or gasket surface, tighten as needed. If the PVRV is leaking, disassemble, repair, and/or replace as needed to eliminate the leak. Record this information on the inspection log in the box for that tank.

(12) An attempt to repair the defective part must be made within 5 days. The defective part(s) must be repaired within 15 days. Any delay greater than 15 days, reason for delay, and final repair date must be documented and kept in the operations file (see legal file.) A report must be filed with the DNR on a semiannual basis, in the event equipment repair takes longer than 15 days.

(13) Equipment with an asterisk (*) indicates that equipment contains or contacts hazardous wastes with organic concentrations greater than 10% by weight. If leak is found on this equipment, afix a tag which includes the date, time, inspector, part ID and MWO#. The tag may be removed from a repaired valve after 2 successive months of zero leak detection. The tag may be removed from other parts after repair. This does not include PVRV, FA or AG.

(14) Upon repair, use the PID to sniff test the repaired item and record the results on the completed Maintenance Work Order. The repaired item should be sniffed upon start up of the equipment.

(15) If a valve is changed out, tell the supervisor in charge of the tank farms to make a note of the change- on the daily and MONTHLY tank farm inspection form for that time period.

(16) As you are conducting the inspections, make note of any other observations- such as leaks- on your checklist. Discuss your observations, if any, with the tank farm supervisor. After completing all the required inspections, sign your name and give the form to the tank farm supervisor.

INSTRUCTIONS FOR SUPERVISOR: Initiate MWO's where required and enter MWO# in the appropriate box(es) on the form. Route the completed form to the Operations Manager who will insert it into the Branch Legal File for "MONTHLY Leak Test".

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

THIS SEMI-ANNUAL INSPECTION SERVES AS THE MONTHLY INSPECTION
FOR THE MONTH IN WHICH IT IS PERFORMED

DO NOT DELETE THE FOLLOWING LINES REQUIRED FOR COMPLIANCE

This inspection is intended to satisfy requirements in NR 664, 670, 40 CFR Part 63 (Off-site Material MACT), and Title V Permit requirements. Equipment listed in BOLD are considered "difficult-to-monitor", per NR664.1035(3)(i) and NR 664.1057(h), this equipment can not be monitored without elevating the monitoring personnel more than 2 meters above a support surface, and are monitored semi-annually. It is assumed that all equipment listed is in light liquid / gas-vapor service. All hazardous waste contains > 10% VOC.

DO NOT DELETE THE ABOVE LINES, REQUIRED FOR COMPLIANCE

Perform Sniff Testing only when the system is operational. If the system is not operational for an entire month, sniff testing is not required for that month, but you MUST write this on the inspection form AND perform and document a sniff test immediately upon startup.
Note: Complete instructions are on the last page of this form.

Date(s) Test Performed:				
Leak Test Performed by:				
Leak Test Monitor (PID) ID #:				
Ambient Air Reading (ppm):				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 1 Recirculation Pump				
RP-C1-101				
BV-C1-101	OPW			
BV-C1-110	From RP-C1-101 into reboiler. 4" main.			
GV-C1-111	To vaporizer / HX-C1-101.			
BV-C1-111A	SP			
BV-C1-111B	PT			
BV-C1-142	Into reboiler			
BV-C1-143	Into reboiler			
BV-C1-144	OPW			
BV-C1-145	OPW			
BV-C1-112	Column Drain (#1)			
BV-C1-102	Column Drain (#2)			
BV-C1-141	Column reflux. Primary column drain valve to reboiler.			2m above reboiler
Column 1 Charge System				
BV-C1-107	OPW / Reboiler Charge port (East Wall)			
BV-C1-107A	OPW / Column charge line			C1 Reboiler
BV-C1-103				
BV-C1-104	OPW			
BV-C1-105	Into reboiler / Main			
BV-C1-108	OPW			
All Purpose column Transfer Line				
BV-C1A	OPW/By North Process Trough			
BV-C1B	OPW/By C1 Reboiler			
Column 1 Receiver System				
DP-C1-101				
BV-C1-122	Under receiver / Main			
BV-C1-122A	OPW			
BV-C1-123	SP			
BV-C1-130	OPW / Back of receiver			
BV-C1-133	PI / Back of receiver			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C1-133A	Receiver pressure (APACS)			
BV-C1-134				
BV-C1-131	OPW / Drum-out Pt.			
BV-C1-121	Receiver – Heat Exchanger (HX-C1-102)			Top of Receiver
Column 1 Condenser Recirculation				
BV-C1-137	Condenser Recirculation			
BV-C1-137A				
BV-C1-137B	OPW			
Column 1 Reflux System				
MFM-C1-101	Product line			
BV-C1-130A	MFM Intake			
BV-C1-130B	MFM Outtake			
BV-C1-130C	MFM By-pass			
BV-C1-126	Main / Flux indicators			
GV-C1-124	Column reflux / FI-102			
GV-C1-125	Product line / FI-101			
BV-C1-127	From FI-101. Product line			
BV-C1-128	From FI-102. Column reflux behind receiver			
BV-C1-129	N2 inlet			
FI-101	Flux Indicator/Product Line			
FI-102	Flux Indicator/Column reflux			
BV-C1-132	Product to Tankers (East Wall – Trough)			
BV-C1-135	Product to Tankers (East Wall – Trough)			
BV-C1-135A	Product to Storage (OPW) (Trough)			
Column 2 Recirculation Pump				**East Side/Reboiler 2**
RP-C2-201				
BV-C2-221	OPW			
BV-C2-222	Reboiler (Main)			
BV-C2-227	SP			
GV-C2-223	To vaporizer (HX-C2-201)			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C2-227A	PI			
BV-C2-224	Column drain/west side reb 2			Jacket Insulated
BV-C2-225	Column reflux/west side reb2			Jacket Insulated
Column 2 Charge System				
BV-C2-226	OPW/Charge port/ East Wall			
BV-C2-228				C2 reboiler
BV-C2-220	Into reboiler / Main			
BV-C2-235	OPW			
Column 2 Receiver System				
DP-C2-201				Deanline Pump
BV-C2-204	Under receiver / Main			
BV-C2-206				
Column 2 Condenser Recirculation				
BV-C2-214	SP			
Column 2 Reflux System				
MFM-C2-201	Product line			
BV-C2-215	MFM Bypass			
BV-C2-216	MFM Intake			
BV-C2-217	MFM Outtake			
BV-C2-208	Main / Flux indicators			
GV-C2-207	Product line / FI 201			
GV-C2-209	Column reflux / FI-202			
BV-C2-218	From FI-201/product line			
BV-C2-211	From FI-202/column reflux			
BV-C2-212				
BV-C2-219	N2 Inlet			
BV-C2-213	OPW			
FI-201	Flux indicator/product line			
FI-202	Flux indicator/column reflux			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-C2-230	Product to storage (East wall – Trough)			
BV-C2-231	Product to storage (OPW – Trough)			
BV-C2-233	Product to tankers (East wall – Trough)			
Column 3 Recirculation Pumps	**In NW Process Area**			
RP-C3-301				
RP-C3-302	Secondary Pump (Back-up)			
BV-C3-300B	To RP-C3-301			
BV-C3-300C	To RP-C3-302			
BV-C3-300D	After RP-302			
GV-C3-314	To vaporizer/HX-C3-301			
GV-C3-315	SP			
GV-C3-316	After RP-301			
BV-C3-300E	PI			
BV-C3-304B	End mid-column feed			
BV-C3-304	Column charge line			
BV-C3-305A	OPW			
BV-C3-310A	OPW/PT Phase Separator			
BV-C3-300A	Line tie-in			
BV-C3-310	Reboiler (Main)			
BV-C3-305B	Reboiler (Drain)			
Column 3 Sample line	**In NW Process Area Leads to GV-C3-314**			**IDLH Line**
BV-C3-395	Primary valve			
BV-C3-396				
BV-C3-397	OPW			
BV-C3-398				
BV-C3-399	Shut-off valve			
Column 3 Charge System				
BV-C3-307A	OPW/ Charge Point/(East Wall)			
BV-C3-306	Near receiver (Column 2) (East)			
BV-C3-302				
BV-C3-303	North Process / NW Process Wall (East side)			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 3 Charge System (Continued)				
BV-C3-301	OPW			Near C3 receiver
MFM-C3-370	(East)			Near BV-C3-302
Column 3 Receiver System				
DP-C3-301				
BV-C3-321	N2 Outlet			
BV-C3-322	OPW			
BV-C3-323				
BV-C3-324	Under receiver/Main (East)			
Column 3 Reflux System				
MFM-C3-330	Column reflux			
BV-C3-329	From FI 301/column reflux			
BV-C3-329A	MFM Bypass			
BV-C3-329B	MFM Intake			
CV-C3-329C	MFM Outtake (Pneumatic control valve)			
BV-C3-329D				
GV-C3-327	To FI 301 column reflux			
FI-301	Flux indicator/column reflux			
MFM-C3-301	Product line			
BV-C3-334	MFM Bypass			
CV-C3-335	MFM Intake (Pneumatic control valve)			
BV-C3-336	MFM Outtake			
BV-C3-337	To storage or sewer water tanks			
BV-C3-338	OPW / Sewer Water Tanks			
GV-C3-328	To FI 302product line			
BV-C3-331	From FI 302/product line			
BV-C3-332	N2 Inlet (East)			
BV-C3-330	Main / Flux indicators			
FI-302	Flux indicator/product line			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Column 3 Reflux System (Continued)				
BV-C3-336A	Product to storage (East wall – Trough)			
BV-C3-337A	Product to tankers (East wall – Trough)			
BV-C3-338A	Product to storage (East wall – Trough)			
BV-C3-342B	From receiver/Main			
BV-C3-328A	OPW/ Steam and Vacuum Port			
BV-C3-342A	To SP			
BV-C3-342	SP			
BV-C3-342C	Recirculation Line (#1)			
BV-C3-342D	Recirculation Line (#2)			
BV-C3-342E	Recirculation Line (#3)			
Luwa 1 Feed Pump				
LFP-101				
LBV-101	OPW			
LBV-102				
LBV-107	SP			
LBV-105	L1 Feed			
Luwa 1 Bottoms Pump	**Removable System #1**			**Primary System "Standard Recycles"**
LBP-103				
LBV-122	N2 Inlet			
LBV-123	SP			
LBV-120	Main			
LBV-120A	OPW			
LBV-120B	N2 inlet			
LBV-124	T-205 waste line valve			Stationary line

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Luwa 1 Bottoms Pump (Removable System #2)	**Removable System #2**			**Dow Corning 3-3018 Process**
LBP-103A				
LBV-160	Main/Sight glass			
LBV-161	OPW/From LBP-103			
LBV-162	Main/ To filter system			
LBV-163	To SP			
LBV-164	SP			
LBV-165	Main/ Product out			
LBV-166	From DT-6			
LBV-166A	PI			
LBV-167	Main/ L1 Resin Line/Tankers			
LBV-124	T-205 Waste Line Valve			Stationary line
Luwa 1 Product Pump				
LPP-102	Product Pump			
LBV-111	Receiver to pump			
LBV-112	N2 Inlet			
LBV-113	To PCV-115			
LGV-114	L1 Distillate to storage			
LBV-114A	L1 Distillate to storage (OPW)			
LBV-115	L1 Receiver Recirc Line			
PCV-115	Pneumatic control valve			
LBV-116	SP			
Luwa 1				
LBV-131	NMP Feed (#1)			
LBV-131A	NMP Feed (#2)			
LBV-131B	NMP Feed (#3)			
LBV-132	NMP Return (#1)			
LBV-132A	NMP Return (#2)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Luwa 3 Bottoms System	**Removable System #1**			**Standard ASM**
LPT-303	Receiver			
BV-L3-205	To T-204/T-208			Two way control valve
BV-L3-200	Under sight glass			Two way control valve
BV-L3-290	To Jurop vacuum			Two way control valve
BV-L3-291				
BV-L3-292	N2 feed line			Two way control valve
BV-L3-294	N2 feed line			
BV-L3-296	N2 feed line			
Luwa 3 Bottoms Pump	**Removable System #2**			**Luwa 1/Luwa 3 System**
LBP 303				Stationary pump
LBV-160				
LBV-161				
LBV-162				
LBV-163				
LBV-164				
LBV-165				
LBV-166				
LBV-166A				
LBV-167				
LBV-124				Stationary
Luwa 3 Bottoms Systems				
LPT-303	**Storage Lines**			
CV-L3-220	To T-204			
BV-L3-225	To T-204			
BV-L3-202	Main valve to/from T-208			
BV-L3-235	To/from T-208 (#2)			
BV-L3-240	To T-208			
CV-L3-245	To T-208			
CV-L3-250	From T-208			
BV-L3-255	From T-208			
BV-L3-215	Cut-off valve T-204/ T-208			
BV-L3-210	1" OPW (SP)			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
LBV-340D	T-208 (outside)			
LBV-340E	T-208 (outside)			
LBV-340C	T-208 (outside)			
TP-L3-200	**Bottoms Pump**			**Gear Pump**
BV-L3-260	Main valve			
BV-L3-265	Main valve to T204/T208			
BV-L3-270	To L3 Feed			Feed recirculation
BV-L3-275	To T-204			Separate line
CV-L3-280	To T-204			Separate line
BV-L3-285	2" OPW			
LPT-302	**Receiver System**			
Receiver Recirculation				
BV-L3-438	¼" line			
BV-L3-436				
Cartridge Filter System	**Secondary Reflux**			
BV-L3-418	Main valve			
BV-L3-420	Before PI			
BV-L3-422	Filter drain			
BV-L3-424	After filter			
BV-L3-426	Before 2nd PI			
BV-L3-428	2nd filter drain			
BV-L3-430	After 2nd filter			
Cleanout Bypass				
BV-L3-434	Main valve			
BV-L3-440	To L3 overhead line			
BV-L3-432	SP (SC)			
Column Reflux	**L3 Reflux**			
BV-L3-416	After PI (main valve)			
BV-L3-444	Before MFM-L3-401			
MFM-L3-401				
BV-L3-448	Pneumatic			Pressure regulator
FI-L3-400	Flow indicator			
Receiver Reflux				
BV-L3-406	Before pump			
DP-L3-405				Centrifugal pump
BV-L3-408	After pump			

Date: _____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-L3-402	Before pump			
DP-L3-400				Centrifugal pump
BV-L3-404	After pump			
L3 Overhead				
BV-L3-412	Main valve			
MFM-L3-400				
BV-L3-413	Pneumatic			Pressure regulator
BV-L3-442	Storage (trough)			
BV-L3-410	OPW			
Luwa 4 Feed				
BV-L4-160	Feed pump inlet block valve			
BV-L4-170	Feed pump inlet drain valve			
BV-L4-180	Feed pump bypass valve			
BV-L4-185	Sample point valve			
BV-L4-190	Feed pump discharge valve			
BV-L4-195	L4 inlet nozzle			
Luwa 4 Bottoms – For Hazardous Waste Processing				
SG-L4-202	Sight glass			
BV-L4-202	Block valve below sight glass			
BV-L4-207	Nitrogen Inlet valve with fitting			
BV-L4-212	Pump inlet drain valve			
LP-L4-202	Pump			
BV-L4-203	Isolation valve for pressure indicator at pump discharge			
BV-L4-217	Sample point valve			
BV-L4-225	Nitrogen inlet valve with fitting			
BV-L4-222	Pump discharge block valve			
BV-L4-227	Nitrogen inlet valve with fitting			
BV-L4-224	Block valve in transfer line to T205 or NMP tank			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-L4-223	Block valve in transfer line to T205			
BV-L4-232	Block valve in return line to NMP tank			
Luwa 4 Overheads				
BV-L4-460	Isolation valve for pressure transmitter PT-L4-400			
DM-L4-400	Mist eliminator			
RCR-L4-400	Product receiver			
BV-L4-414	Product receiver drain valve			
BV-L4-405	Inlet valve for distillate pump DP-L4-400			
DP-L4-400	Distillate pump			
BV-L4-404	Outlet valve for distillate pump DP-L4-400			
BV-L4-406	Inlet valve for distillate pump DP-L4-405			
DP-L4-405	Distillate pump			
BV-L4-408	Outlet valve for distillate pump DP-L4-405			
BV-L4-410	Sample point valve			
BV-L4-416	Nitrogen inlet valve with fitting			
BV-L4-412	Inlet valve to flow transmitter FT-L4-400			
FT-L4-400	Mass flow meter			
CV-L4-400	Control valve			
BV-L4-442	L4 distillate pumping-system outlet valve			
BV-L4-418	Inlet valve for recirculation line			
BV-L4-438	Outlet valve for recirculation line			
BV-L4-422	Isolation valve for pressure indicator for receiver			
BV-L4-424	Isolation valve for pressure and level transmitters for receiver			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
CV-L4-464	Check valve for N2O2 sparge			
BV-L4-465	Valve for N2O2 sparge			
BV-L4-426	Isolation valve for pressure transmitter for receiver			
BV-L4-428	Nitrogen inlet to receiver block valve			
GV-L4-429	Gate or globe valve for "ballast air" intake to vacuum line			
BV-L4-430	Ball valve for "ballast nitrogen" flow into vacuum line			
BV-L4-435	Ballast air intake block valve			
PCV-L4-402	Pressure-control valve			
BV-L4-420	Receiver vent outlet valve			
Vacuum Pot	**North Process Area**			
BV-VAC-100	Main			
CV-VAC-100				
BV-VAC-102				
BV-VAC-104	OPW			
BV-VAC-106				
BV-VAC-107	OPW			
BV-VAC-108	OPW/Near cut tank 2			
CV-VAC-102	Near cut tank 2			
BV-VAC-110	Trough line			
BV-VAC-116	OPW/Trough			
BV-VAC-120	Pot still air intake			
BV-VAC-120A	Pot still air intake (#2)			
BV-VAC-114	Outside (Near T-202)			
Mezzanine	**North Process Area**			
BV-VAC-112	OPW/To Luwa Knockout Pot			
BV-VAC-122	Main/To VP-940			
BV-VAC-122A	#2/ To VP-940			
BV-VAC-124	From Luwa Vacuum line			
VP-940	Vacuum Pump			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date: _____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
DT-3 & Centrifuge (NE Mezzanine)				
CV-BT1-150	Flange/DT-3 to SC-C29-100			
BV-CFI-355	Centrifuge to SC-C29-100	N/A	N/A	Out of Service – New line
BV-R6-368	OPW/Filtrate to SC-C29-100 (1st floor)			
R6 Vent Lines (NW Mezzanine)				
BV-R6-376	OPW/R6 Vent (#2)			
BV-R6-372	OPW/R6 Vent (#1)			
BV-R6-318	OPW/Carbon Drum			
BV-R6-366	OPW/To Sc-C29-100			
BV-R6-336	From Ammonia Scrubber (Sc-R6-300)			
BV-R6-326	To Ammonia Scrubber (Sc-R6-300)			
BV-R6-304	To Acid Scrubber (Sc-R6-305)			
BV-R6-314	From Acid Scrubber (Sc-R6-305)			
BV-R6-370	OPW/NE Corner to SC-C29-100			
R6 Vent Lines (NE Mezzanine)				
BV-R6-374				
BV-R6-378	OPW/R6 Vent (#1)			
BV-R6-380	OPW/Knock-out pot			
BV-R6-384	OPW/VP-R6-300 (Drain)			
BV-R6-386	Main			
BV-R6-388	OPW/VP-R6-300 to R6 Vents			
BV-R6-382	To northeast scrubber (SC-001)			
Carbon Drum				
BV-R6-320	OPW/Vent line (outside)			
PRV-R6-324	Carbon drum vent			
SC-R6-305 (Acid Scrubber)	---	---	---	---
BV -R6-316	OPW/Scrubber Inlet			
BV -R6-306	SC-R6-305 to recirculation pump			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
RP-SC-305				
BV-R6-310	OPW/ From RP-SC-305			
BV-R6-308	Recirculation pump to rotometer			
ROT-R6-305				
BV-R6-312	ROT-R6-305 to HX-R6-730 (cooling H_2O heat exchanger)			
BV-R6-313	N2 Inlet			
BV-R6-309	N2 Inlet (#1)			
BV-R6-311	N2 Inlet (#2)			
SC-R6-300 (Ammonia Scrubber)				
BV-R6-340	SP			
BV-R6-338	OPW/Scrubber Inlet			
BV-R6-328	To recirculation pump (RP-SC-300)			
SC-R6-300 (Ammonia Scrubber)				
BV-R6-328A	N2 Inlet			
RP-SC-300				
BV-R6-329	Main/Recirculation			
BV-R6-337	N2 Inlet (OPW)			
BV-R6-331	N2 Inlet (#1)			
BV-R6-333	N2 Inlet (#2)			
Ammonia Nurse Tank				
AP-R6-800				
BV-R6-802	Ammonia feed			
BV-R6-804	N2 Inlet			
PCV-R6-800	Pneumatic valve			
BV-R6-806	PI			
BV-R6-807	PT (PT-R6-200)			
PCV-R6-801	Pneumatic valve (ammonia feed)			
BV-R6-808	From PCV-R6-801			
BV-R6-809	PI			
PRT-R6-805	Relief/NH3 return			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-	Vapor recovery (Nurse tank)			
Ammonia Feed				
BV-R6-811				Closed off
PRV-R6-810	Return to nurse tank			
GV-R6-815	Main feed valve to R6			
GV-R6-816	Into R6/Mezzanine			
GV-R6-817	Pneumatic Control valve			
BV-R6-252	Pneumatic (To reactor pot)			
BV-R6-813	NH3 Feed			Currently out of service
BV-R6-814	NH3 Feed			Currently out of service
ZrCl4 System (Located in N Warehouse)				
BV-R6-850	Chicago fitting			
BV-R6-851	PI			
BV-R6-853	Bottom of receiver			
PRV-R6-852				
BV-R6-854	OPW/Wall/To R6			
BV-R6-855	From ZrCl4 room into reactor/mezzanine			
BV-R6-170	Pneumatic valve			
Transfer Pump (West Wall/NW Process)				
TP-R6-900				
MFM-R6-235	SW Wall			
BV-R6-290	SW Wall			
BV-R6-291	SW Wall			
R6 Recirculation	**Reactor Pot**			
RP-R6-200	Recirculation pump			
GV-R6-200	Main/from reactor			
BV-R6-210	From GV-R6-200			
BV-R6-212	To RP-R6-200			
BV-R6-208	OPW/RP-RP-200/North			
BV-R6-204	Charge point			
BV-R6-206	SP			
BV-R6-214	OPW/RP-R6-200			
BV-R6-222	SP			
BV-R6-216	OPW			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-218	Main/Recirculation Loop			
BV-R6-220	PI			
Recirculation Loop				
BV-R6-242	Main/to HX-R6-740 /Reactor pot cooler	N/A	N/A	Closed off
BV-R6-244	From HX-R6-740	N/A	N/A	Closed off
BV-R6-250	Pneumatic/to DT-3			
BV-R6-254	Pneumatic/into reactor pot			
Pressure Line (Top of Reactor Lot)				
GV-R6-900				
BV-R6-870	Plug valve			
BV-R6-875	To pressure units			
BV-R6-880	PI			
BV-R6-885	PT			
BV-R6-302	N2 Inlet (For NW Truck dock) (Cryogenic)	N/A	N/A	Not in Service
Metered Feed	---	---	---	---
BV-R6-100	OPW/Bottom			
MFM-R6-100	West wall			
BV-R6-105	MFM Intake			
BV-R6-110	MFM Outtake			
BV-R6-115	MFM Bypass			
BV-R6-120	OPW			
BV-R6-125	To R6/Mezzanine			
GV-R6-130	Into R6/Mezzanine			
Transfer lines (West wall)	---	---	---	---
BV-R6-	Virgin NPA/RC NPA-Heptane			
BV-R6-	Virgin Heptane/OPW			
BV-R6-900	Line B/R6 Transfer/OPW			
BV-R6-905	Line A/R6 Transfer/OPW			
BV-R6-920	DI H_20			
BV-R6-910	Line B (North process /trough)/OPW			
BV-R6-915	Wastewater (North process/trough)/OPW			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Primary condenser (HX-R6-710)				
GV-R6-400	R6 to HX-R6-710/ Mezzanine)			
BV-R6-403	HX-R6-710 to separator (R6-405)			Closed off
BV-R6-409	R6-405 to receiver (R6-400)			Closed off
Knock-out pot (HX-720 Receiver K.O. Pot)				
BV-R6-302	OPW/NW Mezzanine/To scrubbers			
CV-R6-300	Pneumatic /Receiver to K.O. Pot			
PV-R6-412	Receiver relief (To NW Truck dock)			
Receiver purge (½" line)				
BV-R6-418	Bottom of receiver			
BV-R6-424	Main			
BV-R6-427	Top of receiver			
Receiver (RCR-R6-400)				
PI-RCR-400	PI/Top of receiver			
BV-R6-430	OPW/Top of receiver			
BV-R6-415	Main/Under receiver			
BV-R6-442	OPW/East/N2			
BV-R6-445	To distillate pump			
BV-R6-448	OPW/West			
Receiver reflux (RCR-R6-400)				
BV-R6-454	OPW			
BV-R6-457	Main			
BV-R6-461	Bypass			
BV-R6-464	To flux indicator FI-R6-400			
FI-R6-400				
BV-R6-465	From FI-R6-400			
BV-R6-436	Into receiver			
Receiver/reactor				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-R6-466	Main			
BV-R6-469	Into reactor pot/mezzanine			
Receiver /Primary Condenser (HX-R6-710)				
BV-R6-1	Main/mezzanine			
ST-TOX-1 (Top of tank)	**Located in 200 Tank Farm (Spot 216)**			
CV-TOX-1	Pneumatic/Inlet surge tank			
BV-TOX-1A	Main/From scrubbers/butterfly valve			
Flange 1A	From scrubbers			
BV-TOX-1A	Butterfly/From DTA Line			
BV-TOX-1B	Butterfly/To DTA Line			
BV-TOX-12A	Butterfly/West Scrubber (#1)			
BV-TOX-12B	Butterfly/West Scrubber (#2)			
BV-TOX-8A	Butterfly/East Scrubber (#1)			
BV-TOX-8B	Butterfly/East Scrubber (#2)			
CV-TOX-13	Thermox line			
Flange 1	Top of surge tank/After LEL sensors			
CV-TOX-4	Vent to surge tank			
CV-TOX-2	Relief vent			
BV	Butterfly			C29 Scrubber line system
CV-TOX	Pneumatic			
DTA				
BV	PI			
LEL-TOX-1				
LEL-TOX-2				
Miscellaneous	Fittings, caps, etc. around LEL Sensors			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
LSH-TOX-1	High level switch			
LT-TOX-6	Level transmitter			
DTA-TOX-1	Detonator arrestor			
DTA Series (from Scrubber)	**Detonator Arrestor**			**DTA-Tox1**
BV-	PI, PT (PDS-Tox1)			
BV-	Bypass			
DTA Series (to Scrubber)				**DTA-Tox2**
BV-	PI, PT (PDS-Tox2)			
BV-	Feed valve			
DTA Series (Bottom of Tank)				
BV-TOX-2	Inside north process/Next to line 205B			
BV-TOX-3	Main			
BV-TOX-3A	N2 Inlet/Line purge			
BV-TOX-3B	N2 Inlet/Line purge			
BV-TOX-3C	OPW			
Thermox room (Located next to NW Process Area)	---	---	---	---
CV-TOX-3				
CV-BL-A1	Blower 1			
CV-BL-A2				
CV-BL-B1	Blower 2			
CV-BL-B2				
PDS-TOX-5				
PDS-TOX-3				
FA-TOX-3				
TE-TOX-1A & 1B				
PT-TOX-6				
PT-TOX-4	Pressure element			
Flange Series (Leading from surge tank)		---	---	---
Flange-2	Access via breezeway roof			
Flange-3	Access via breezeway roof			
Flange-4	Access via wastetank			

Date:_____

	rooftops (202-204)			
Equipment Item ID	**Description**	**Visual Inspection**	**PID reading (ppm)**	**Corrective Action / Comments**
Flange-5	Access via wastetank rooftops (T202-204)			
Flange-6	Access via wastetank rooftops (T202-204)			
Flange-7	Next to T-201			
Flange-8	Cleanout, north (2" flange & small BV)			
Flange-9	Thermox roof			
Flange-10	Thermox roof			
Flange-11	Thermox roof			
Flange-12	Inside thermox room/ceiling			
Flange-13	Inside thermox room/ceiling			
Flange-14	Inside thermox room/ceiling			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-202 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-202A				
TFV-202A				
TBV-202A				
T-203 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-203A				
TFV-203A				
TBV-203A				
T-204 (Bottom of Tank)	**Organic Concentration >10% by weight**			x
TGV-204A				
TFV-204A				
TBV-204A	OPW			
TBV-204B	OPW			
T-205 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-205A				
TFV-205A				
TBV-205A	OPW			
TBV-205B	OPW			
TBV-205C	To transfer pump (TP-810)			
T-212 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-212A				
TFV-212A				
TBV-212A				
T-213 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-213A				
TFV-213A				
TBV-213A				
T-214 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-214A				
TFV-214A				
TBV-214A				

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-215 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-215A				
TFV-215A				
TBV-215A				
T-218 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-218A				
TFV-218A				
TBV-218A				
TFV-218B				
TBV-218B				
T-221 (Bottom of Tank)	**Organic Concentration >10% by weight**			
TGV-221A				
TFV-221A				
TBV-221A				
TBV-221B	Capped off			
T-222 (Bottom of Tank)				**Carbon Drum**
TGV-222A				
TFV-222A				
TBV-222A	Capped off			
TBV-222B	Main valve			
TBV-222C				
TBV-222D				
TCV-222A				
TCV-222B				
T-228 (Bottom of Tank)				**Carbon Drum**
TGV-228A				
TFV-228A				
TBV-228A				
TBV-228C				
TBV-228D				
TBV-228E				
TBV-228F	Capped off			
TCV-228A				

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SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-235 (Bottom of Tank)				**Carbon Drum**
TGV-235A				
TFV-235A				
TBV-235A	OPW			
TBV-235B	Located by T-228			
TBV-235C				
TCV-235A				
T-241 (Bottom of Tank)				**Thermox**
TFV-241A				
TBV-241A				
TBV-241C				
TBV-241D				
TCV-241A				
T-242 (Bottom of Tank)				**Thermox**
TFV-242A				
TBV-242A	OPW			
TBV-242C				
TBV-242D				
TCV-242A				
TP-810 (Transfer Pump 810)	**Located near T-205**			
TBV-810A	OPW			
TBV-810B				
TBV-810C				
TBV-810D	To 400 Tank Farm			
TBV-810E	To T-205 (Line 205B)			
TBV-205G	Locate behind T-222			
TBV-205H	Locate behind T-222 / Capped off			
TBV-205I	Locate behind T-222			
TP-811	**Located near T-211**			
TBV-811B				
TBV-811C	OPW			
TBV-811D	N2 Inlet			
TBV-811E				
TBV-811F				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
TBV-811G	OPW			
	Located near T-229			
TBV-810G	From TP-811			
TCV-205G	From TP-811			
Transfer Pump 811	**Locate near T-211**			
TBV-212D	OPW /Feed Valve/ TP-212			
TBV-213D	OPW /Feed Valve/ TP-213			
TBV-214D	OPW /Feed Valve/ TP-8214			
TBV-215D	OPW /Feed Valve/ TP-215			
TBV-218D	OPW /Feed Valve/ TP-218			
TBV-221D	OPW /Feed Valve/ TP-221			
T-202 (Side of Tank)				
TCV-202A				
TFV-202B				
TBV-202C				
TBV-202D	OPW/North Process/ Behind T-343 Header			
TBV-202E	Located near T-203			
T-203 (Side of Tank)				
TFV-203B				
TBV-203B				
TBV-203C	Located near fan along east wall			
T-204 (Side of Tank)				
TFV-204B	Main			
TBV-204M				
TBV-204D	Capped off			
TFV-204C	Secondary			
TBV-204E				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-205 (Side of Tank)				
TFV-205B	Main			
TBV-205J				
Line 205A	**From B5/R10/Columns**			
TCV-205R				
TBV-205R				
Line 205B	**North Process / Luwas / Pumpout**			
TBV-205F	OPW			
TCV-205E				
TBV-205E				
Line 205C	**North Process / Columns to T-205**			
TBV-205D				
TCV-205D				
Line 205D				**Currently not in service**
TCV-205C		N/A	N/A	
TBV-205L		N/A	N/A	
Line 205E	**South Process Pump Pit Waste Line**			
TCV-205B				
TBV-205K				
Line 205F	**North Process / Trough**			
TCV-205S				
TBV-205S				
Line 205G	**North Process / Columns/205/400 Tanks**			
TBV-205T				
TCV-205T				
TBV-205U	OPW			
T-212 (Side of Tank)				
TFV-212B				
TBV-212B				
TBV-212C				
TCV-212A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-213 (Side of Tank)				
TFV-213B				
TBV-213B				
TBV-213C				
TCV-213A				
T-214 (Side of Tank)				
TFV-214B				
TBV-214B				
TBV-214C				
TCV-214A				
T-215 (Side of Tank)				
TFV-215B				
TBV-215B				
TBV-215C				
TCV-215A				
T-218 (Side of Tank)				
TFV-218C				
TBV-218C				
TCV-218A				
T-221 (Side of Tank)				
TFV-221B				
TBV-221C				
TBV-221E	Capped off			
TCV-221A				
T-222 (Side of Tank)				
TFV-222B				
TBV-222E	OPW			
T-228 (Side of Tank)				
TFV-228B				
TBV-228B	OPW			
T-235 (Side of Tank)				
TBV-235D				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-241 (Side of Tank)				
TFV-241B				
TBV-241B	Capped off			
T-242 (Side of Tank)				
TFV-242B				
TBV-242B	OPW			
T-202 (Top of Tank)				**Emissions to Thermox**
PVRV-202	Conservation vent			
FA-202	Flame arrestor			
TCV-202J	Check valve			
T-203 (Top of Tank)				**Emissions to Thermox**
PVRV-203				
FA-203				
TCV-203F				
T-204 (Top of Tank)				**Emissions to Thermox**
PVRV-204				
FA-204				
TCV-204Z				
T-205 (Top of Tank)				**Emissions to Thermox**
PVRV-205				
FA-205				
TCV-205W				
T-212 (Top of Tank)				**Emissions to Thermox**
PVRV-212				
FA-212				
TCV-212B				
T-213 (Top of Tank)				**Emissions to Thermox**
PVRV-213				
FA-213				
TCV-213B				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-214 (Top of Tank)				**Emissions to Thermox**
PVRV-214				
FA-214				
TCV-214B				
T-215 (Top of Tank)				**Emissions to Thermox**
PVRV-215				
FA-215				
TCV-215B				
T-218 (Top of Tank)				**Emissions to Thermox**
PVRV-218				
FA-218				
TCV-218C				
T-221 (Top of Tank)				**Emissions to Thermox**
PVRV-221				
FA-221				
TCV-221B				
T-401 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-401				
TFV-401A				
TBV-401A				
T-402 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-402				
TFV-402A				
TBV-402A				
T-405 (Bottom of Tank)	**Organic Conc.>10% by weight**			
TGV-405				
TFV-405A				
TBV-405A				
T-406 (Bottom of Tank)	**Organic Conc.>10% by weight**	---	---	---
TGV-406				
TFY-406A				
TBV-406A				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
T-401 (Side of Tank)				
TFV-401B				
TCV-401B				
TBV-401B				
T-402 (Side of Tank)				
TFV-402B				
TFV-402B				
TCV-402B				
TBV-402B				
T-405 (Side of Tank)				
TFV-405B				
TCV-405				
TBV-405B				
T-406 (Side of Tank)				
TFV-406B				
TCV-406				
TBV-406B				
TP-820 Recirculation Pump	**Locate near T-405**			
BV-405C	Main			
BV-405D	To loading ramp			
BV-405E	OPW/North wall/Tankers			
BV-405F	Main transfer line bypass			
BV-405G	Located on loading ramp			
BV-405H	To/From T-405			
BV-491	From TP-820/North Wall/"Chicago"			
BV-492	From TP-820 to N2 Inlet			
BV-493	N2 Inlet / SP			
BV-93G	OPW/Main Transfer Line			
BV-SP1	SP / West Wall			
BV-406C	OPW/North Wall/T-406			
BV-406D	N2 Inlet			

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SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-901	To/From T-401 / T-402/T-406			
BV-902	To/From T-406			
BV-903	Closed off			
TP-821 Recirculation Pump (Near loading ramp)	---	---	---	---
F-821	Filter			
BV-490A	Bypass/ West wall			
BV-490B	Main/pump			
BV-490C	From filter			
BV-490D	N2 Inlet			
BV-490E	"Chicago"			
BV-490F	OPW			
BV-490G	From TP-820 line			
BV-490H	N2 Inlet			
T-401 (Top of Tank)	---	---	---	---
PVRV-401	Conservation vent			
FA-401	Flame arrestor			
CV-401G	Check valve			
PVRV-402				
T-402 (Top of Tank)	---	---	---	---
FA 402				
CV-402G				
T-405 (Top of Tank)	---	---	---	---
PVRV 405				
FA 405				
CV-405H				
T-406 (Top of Tank)	---	---	---	---
PVRV 406				
FA 406				
CV-406H				

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID Reading (ppm)	Comments
Tank 156				
PVRV-156				
FA-156				
BV-156A				
BV-156B				
BV-156C				
BV-156D				
CV-156E				
CV-156F				
BV-156G				
BV-156H				
BV-156I				
BV-156J				
BV-156K				
BV-156L				
Tank 157				**Carbon Drum**
PVRV-157				
FA-157				
BV-157A				
FV-157B				
CV-157C				
BV-157D				
BV-157E				
FV-157F				
BV-157G				
BV-157H				
BV-157I				
Tank 158				**Carbon Drum**
PVRV-158				
FA-158				
BV-158A				
CV-158B				
BV-156C				
Tank 159	*** Note: No FA valve.**			**Carbon Drum**
PVRV-159				
BV-159A				
FV-159B				
FV-159C				
BV-159D				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-159E				
CV-159F				
BV-159G				
BV-159H				
BV-159I				
BV-159J				
Tank 160				**Carbon Drum**
PVRV-160				
FA-160				
BV-160A				
BV-160B				
CV-160C				
FV-160D				
BV-160E				
BV-160F				
BV-160G				
South Process Release Catch Tank				
Tank 162				**Carbon Drum**
PVRV-162				
FA-162				
BV-162A				
FV-162B				
BV-162C				
CV-162D				
BV-162E				
Tank 163				**Carbon Drum**
PVRV 163				
FA-163				
BV163A				
BV163B				
BV163C				
BV163D				
BV163E				
BV163F				
CV163G				

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 164	---	---	---	**Carbon Drum**
PVRV 164				
FA-164				
FV-164A				
BV-164B				
BV-164C				
CV-164D				
BV-164E				
BV-164F				
BV-164G				
BV-164H				
BV-164I				
BV-164J				
BV-164K				
CV-164L				
BV-164M				
Tank 165				**Carbon Drum**
PVRV 165				
FA-165				
BV-165A				
FV-165B				
BV-165C				
BV-165D				
CV-165E				
Tank 166				**Carbon Drum**
PVRV 166				
FA-166				
BV-166A				
BV-166B				
BV-166C				
FV-166D				
BV-166E				
BV-166F				
BV-166G				
Tank 167				**Carbon Drum**
PVRV 167				
FA-167				
BV-167A				
FV-167B				
BV-167C				

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-167D				
CV-167E				
BV-167F				
BV-167G	Located in pump pit			
Tank 168				**Carbon Drum**
PVRV 168				
FA 168				
BV-168A				
TBV-168B	Located in pump pit			
BV-168C				
BV-168D				
BV-168E				
CV-168F				
BV-168G				
BV-168H				
CV-168I				
Tank 169				**Carbon Drum**
PVRV 169				
FA-169				
FV 169				
BV 169A				
BV 169B				
BV 169C				
CV 169				
Tank 170				**Carbon Drum**
PVRV 170				
FA-170				
FV-170A				
BV-170B				
BV-170C				
BV-170D				
CV-170E				
Tank 171	**Out of Service**	N/A	N/A	
Tank 172				**Carbon Drum**
PVRV 172				
FA 172				
FV 172A				
BV 172B				
BV 172C				
BV 172D				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
CV 172E				
BV 172F				
Tank 173				**Carbon Drum**
PVRV 173				
FA 173				
BV 173A				
BV 173B				
FV 173C				
CV 173D				
BV 173E				
BV 173F				
BV 173G				
Tank 174				**Carbon Drum**
PVRV 174				
FA-174				
BV 174A				
BV 174B	OPW			
BV 174C				
BV 174D	OPW/ Pump Pit			
BV 174E	OPW			
BV 174F				
BV 174G	N2 Inlet			
BV 174H				
BV 174I	OPW/ Truck Fill			
BV 174J				
BV 174K				
BV 174L	PI			
CV 174M				
Tank 175				**Carbon Drum**
PVRV 175				
FA 175				
FV175A				
BV175B				
CV175C				
BV175D				
BV175E				
BV175F				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 176				**Carbon Drum**
PVRV 176				
FA 176				
FV 176				
BV 176A				
BV 176B				
BV 176C				
BV 176D				
CV 176				
Tank 177	**Out of Service**	**N/A**	**N/A**	
Tank 178				**Carbon Drum**
PVRV 178				
FA-178				
BV178A				
FV178B				
BV178C				
CV178D				
Tank 179				**Carbon Drum**
PVRV 179				
FA 179				
BV179A				
FV179B				
CV179C				
BV179D				
BV179E				
BV179F				
BV179G				
BV179H				
BV179I				
BV179J				
BV179K				
BV179L				
BV179M				
BV179N				
Tank 180				**Carbon Drum**
PVRV 180				
FA-180				
FV180A				
BV180B				
CV180C				
BV180D				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 201				**Carbon Drum**
PVRV 201				
FA 201				
BV 201A				
CV 201B				
BV 201C				
BV 201D				
BV 201E				
BV 201F				
CV 201G				
BV 201H				
FV 201I				
BV 201J				
BV 201K				
BV 201L				
Tank 202 *	**See above.**			
Tank 203 *	**See above.**			
Tank 206				**Carbon Drum**
PVRV-206				
FA-206				
BV 206A				
FV 206B				
BV206C				
BV206D				
BV206E				
BV206F				
BV206G				
BV206H				
BV206I				
BV206J				
BV206K				
CV206L				
BV206M				
Tank 207				**Carbon Drum**
PVRV 207				
FA 207				
FV 207A				
BV 207B				
CV 207C				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 208				**Carbon Drum**
PVRV 208				
FA 208				
BV 208A				
FV 208B				
BV 208C				
CV 208D				
Tank 209				**Carbon Drum**
PVRV 209				
FA 209				
FV 209A				
BV 209B				
BV 209C				
CV 209D				
Tank 210				**Carbon Drum**
PVRV 210				
FA 210				
FV 210A				
BV 210B				
BV 210C				
CV 210D				
Tank 211				**Carbon Drum**
PVRV 211				
FA 211				
BV 211A				
FV 211B				
BV 211C				
CV 211D				
Tank 212 *	**See above.**			
Tank 213 *	**See above.**			
Tank 214 *	**See above.**			
Tank 215 *	**See above.**			
Tank 216 (ST-TOX-1)	**See above.**			
Tank 218 *	**See above.**			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 219				**Emissions to Thermox**
PVRV-219				
FA-219				
AG-219				
FV 219A				
CV 219B				
BV 219C	Pump Pit			
GV 219D				
FV 219E				
BV 219F				
BV 219G				
CV 219H				
Tank 220				**Emissions to Thermox**
PVRV-220				
FA-220				
AG-220				
FV 220A				
CV 220B				
BV 220C				
GV 220D				
FV 220E				
BV 220F				
BV 220G				
CV 220H				
Tank #221 *	**See above.**			
Tank #222 *	**See above.**			
Tank #223				**Carbon Drum**
PVRV 223				
FA 223				
FV 223A				
BV 223B				
CV 223C				
BV 223D				
Tank #224				**Carbon Drum**
PVRV 224				
FA 224				
BV 224A				
BV224B				
CV224C				
BV224D				
BV224E				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV224F	(To North Process)			
BV224G				
BV224H				
BV224I				
BV224J	OPW			
BV224K				
CV224L				
BV224M	PR/ Recirc			
Tank 225				**Carbon Drum**
PVRV 225				
FA 225				
FV 225A				
CV 225B				
BV 225C				
Tank 226				**Carbon Drum**
PVRV 226				
FA 226				
FV 226A				
CV 226B				
BV 226C				
Tank 227				**Carbon Drum**
PVRV 227				
FA 227				
FV 227A				
CV 227B				
BV 227C				
Tank 228 *	**See above.**			
Tank 229				**Carbon Drum**
PVRV 229				
FV 229				
BV 229A				
BV 229B				
BV 229C				
BV 229D				
BV 229E				
FV 229F				
CV 229G				
BV 229H				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 230				**Carbon Drum**
PVRV 230				
FA 230				
BV230A	Pressure regulator			
CV230B				
CV230C				
BV230D	Pressure regulator			
BV230E				
BV230F	Pressure regulator			
BV230G				
BV230H				
BV230I				
BV230J	Loading dock			
Tank 231				**Carbon Drum**
PVRV 231				
FA 231				
FV 231A				
CV 231B				
BV 231C				
Tank 232				**Carbon Drum**
PVRV 232				
FA 232				
FV 232A				
BV 232B				
CV 232C				
BV 232D				
Tank 233				**Carbon Drum**
PVRV 233				
FA 233				
BV 233A				
BV 233B				
FV 233C				
CV 233D				
BV 233E				
Tank 234				**Carbon Drum**
PVRV 234				
FA 234				
FV 234A				
CV 234B				
BV 234C				
Tank 235 *	**See above.**			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 236				**Carbon Drum**
PVRV 236				
FA 236				
BV 236A				
FV 236B				
CV 236C				
BV 236D				
Tank 237				**Carbon Drum**
PVRV 237				
FV 237A				
BV 237B				
CV 237C				
BV 237D				
BV 237E				
BV 237F				
BV 237G				
Tank 238				**Carbon Drum**
PVRV 238				
FV 238				
CV 238A				
BV 238A				
BV 238B				
Tank 239				**Carbon Drum**
PVRV 239				
FA 239				
FV 239A				
BV 239B				
CV 239C				
BV 239D				
Tank 240				**Carbon Drum**
PVRV 240				
FA 240				
FV 240A				
CV 240B				
BV 240C				
Tank 241 *	**See above.**			
Tank 242 *	**See above.**			
Tank 343				**Carbon Drum**
PVRV 343				
FV 343				
CV 343				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV 343A				
BV 343B				
Tank 344	**Out of Service**			
Tank 345				**Carbon Drum**
PVRV 345				
FV 345				
CV 345				
BV 345	Before FV345 (under tank)			
BV 345				
BV 345	OPW (300 Tank Farm Pit)			
BV 345	Carbon drum			
BV 345	To 2nd FV			
BV 345	Into tank (side)			
FV 345	2nd FV			
BV 345	From pump			
CV 345				
BV 345	From CV345			
BV 345	OPW (N. Process Line)			
Tank 348				**Carbon Drum**
PVRV 348				
FA 348				
BV 348A	Two way control valve			
BV 348B				
CV 348C				
BV 348D	Carbon drum			
BV 348E	To 300 Tank Farm Pit			
CV-348F	To pump			
BV-348G				
BV-348H	From pump			
BV 348I	To northwest corner (300 tank farm)			
BV 348J	N2 Inlet			
BV 348K				
BV 348L	OPW (Transfer line)			
BV 348M	To/from filter			
BV 348N	To/from filter			
BV 348O	To Capsuhelic gauge			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 349				**Carbon Drum**
PVRV 349				
FA 349				
FV 349A				
BV 349B				
BV 349C				
CV 349D				
BV 349E	To carbon drum			
Tank 352				**Carbon Drum**
PVRV 352				
FA 352				
FV 352				
BV 352				
BV 352				
CV 352				
BV 352	OPW (300 Tank Farm Pit)			
BV 352	Carbon Drum			
BV 352				
BV 352	To line 300C (North Process)			
BV 352	N2 Inlet			
BV 352	From pump			
BV 352	Into pump			
CV 352	From pump			
Tank 353				**Carbon Drum**
PVRV 353				
FA 353				
FV 353				
BV 353A				
BV 353B				
CV 353A				
BV 353C	OPW (300 Tank Farm Pit)			
BV 353D	Carbon Drum			
BV 353E	To N. Process (Line 300A)			
BV 353F	To 300 Tank Farm Pit			
BV 353G	Into pump			
CV 353B	From pump			
BV 353H	From pump			

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Date:

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV 353I	N2 Inlet			
Tank 354				**Carbon Drum**
PVRV 354				
BV 354				
FV 354				
BV 354A				
BV 354B				
BV 354D	Carbon drum			
Tank #355				**Emissions to Thermox**
BV 355A				
BV 355B				OPW
BV 355C				Closed off
BV 355D				
BV 355E				
BV 355F				OPW
BV 355G				Vent to 300 Tank Farm
BV 355H				
BV 355I				
CV 355J				
BV 355K				
	Recirculation Line			
BV 355L				
BV 355M				PI
BV 355N				
Tank 401 *	**See above.**			
Tank 402 *	**See above.**			
Tank 404	**Out of Service**			
Tank 405 *	**See above.**			
Tank 406 *	**See above.**			
Tank 408				**Carbon Drum**
PVRV 408				
FA 408				
FV 408				
BV 408				
CV 408				
Tank 412				**Carbon Drum**
PVRV 412				
FA 412				
FV 412				
BV 412				
CV 412				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Tank 416				**Carbon Drum**
PVRV 416				
FA 417				
FV 416				
BV 416				
CV 416				
TANK 417				**Carbon Drum**
PVRV 417				
FV 417				
BV 417				
CV 417				
TANK 418				**Carbon Drum**
PVRV 418				
FA 418				
FV 418				
BV 418				
CV 418				
TANK 420				**Carbon Drum**
PVRV 420				
FA 420				
BV 420C				
FV 420				
CV 420				
BV 420A				
BV 420B				
TANK 411				**Carbon Drum**
PVRV 411				
FA 411				
FV 411				
TBV 411C				
TBV 411A				
TCV 411				
TBV 411B				
TANK DT-C4-481	**NW Process**			**Carbon Drum**
BV 452				
FV451				
BV454				
BV 453				
CV 451				
BV 455				
PVRV 481				
FA 481				

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV				
TANK DT-C4-480	**NW Process**			**Carbon Drum**
FA 480				
CV				
BV				
FV				
BV				
BV				
Tank DT-1	**South Process**			**Emissions to Thermox-Primary, Carbon Drum-Secondary**
FA DT1				
PVRV DT1				
BV DT1A				
FV DT1A				
BV DT1B				
BV DT1C				
BV DT1D				
BV DT1E				
BV DT1F				
BV DT1G				
BV DT1H				
TANK DT-2	**South Process**			**Emissions to Thermox-Primary, Carbon Drum-Secondary**
FA DT2				
PVRV DT2A				
BV DT21				
FV DT2A				
BV DT2A				
BV DT2B				
BV DT2C				
BV DT2D				
BV DT2E				
BV DT2F				
BV DT2G				
BV DT2H				
BV DT2I				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Luwa 3 Feed Lines: Mezzanine	**Before static mixer**			
BV-L3-160	L3 Drum Flush			
BV-L3-165	Phosphoric Acid Feed			
BV-L3-100	APMC Feed			
MFM-L3-100				
BV-L3-170	Acetic anhydride feed			
Luwa 3 Feed Lines	**Flow Damper Circulation**			
BV-L3-150	To flow damper			
BV-L3-155	From flow damper			
BV-L3-125	Back pressure line valve			
Luwa 3 Feed Lines	**After static mixer**			
BV-L3-105	Main			
BV-L3-110	Closed during normal process run			
BV-L3-115	PI (N2 Inlet)			
CV-L3-100	Strainer			
BV-L3-135	Old feed valve (Out of Service)			
BV-L3-175	Bottoms Feed Recirculation (#2) (Out of Service)			
BV-L3-140	To heat transfer unit			
BV-L3-145	Into heat transfer unit			
BV-L3-180	From DT-6			
BV-L3-185	To L1			
BV-L3-160A	L3 Drum Flush			
Acetic Anhydride Feed Line				
BV-L3-170A	To feed pump (BV304A)			
BV-L3-170B	Relief valve (PRV304A)			
LFP-301A				
BV-L3-170C	OPW (N2 Inlet) (BV304B)			
BV-L3-170D	To Mezzanine			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Phosphoric Acid Tank Catalyst				
BV-L3-191	Main			
BV-L3-192	N2 Inlet			
BV-L3-193	OPW			
BV-L3-194	N2 (Reg.) Inlet			
BV-L3-195	PI			
BV-L3-196				
BV-L3-187	OPW (Charge line)			
BV-L3-188	Before MFM			
MFM-L3-190				
CV-L3-190	Control valve			
Flow meter				
BV-L3-189				
BV-L3-190	N2 Inlet			
APMC Feed	**(DT-7)**			
BV-L3-100A				
LFP-301B				
BV-L3-100B	To flowmeter			
BV-L3-100C				
BV-L3-100D	OPW			
BV-L3-100E	To pump			
CV-L3-100F	To pump			
BV-L3-100G	OPW			
BV-L3-100H	To MFM (LBV-303D)			
BV-L3-100I	Gate valve (LBV-303F)			
BV-L3-100J	OPW (LBV-303G)			
BV-L3-100K	To Luwa Mezzanine (LBV-303H)			
DT-7	**North Process**			**Carbon Drum**
PRV-B2-001				
FA-B2-001				
DT-6	**North Process**			**Carbon Drum**
PRV-B1-001				
FA-B1-001				
CUT TANK 1	**North Process**			**Emissions to Thermox**
PRV-CT1-001				
FA-CT1-001				
BV-CT1-146				
BV-CT1-147				

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
CUT TANK 2	**North Process**			**Emissions to Thermox**
PRV-CT2-001				
FA-CT2-001				
BV-CT2-246				
BV-CT2-247				
CUT TANK 3				**Emissions to Thermox**
PRV-CT3-001				
FA-CT3-001				
BV-CT2-346				
BV-CT2-347				
VACUUM POT	**See above.**			
CLOSED VACUUM SYSTEM				
Luwa 1				
LVP 104	**Receiver to K.O. Pot (Mezz N Process)**			
BV-	Top of L1 receiver. Pressure regulator.			
BV124	To LVP 104. Mezzanine			
BV123	Into K.O. Pot. Mezzanine			
BV-104A	To claw vacuum			
BV-104B	Plug valve			
BV-104C	Into LVP 104			
BV-104D	PT			
Luwa 3				
LVP-304	**Mezzanine (N Process)**			
BV-L3-305	Main valve. Above 2m.			
BV-L3-310	1" OPW			
BV-L3-315	From knock-out pot.			
BV-L3-330	OPW			
BV-L3-	To/from LPT-303. ASM Receiver.			
BV-L3-325	Into LVP-304. Mezzanine, N. Process			
VP-L-301	**Mezzanine (Breezeway)**			
BV-L3-335	Main valve. Two way control valve. Above 2m.			
BV-L3-365	To VP-L-301. Mezzanine (Breezeway) (VP-L-301)			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-L3-705	From Luwa 3. Two way control valve.			
BV-L3-340	Knockout pot			
BV-L3-345	Knockout pot			
Equipment Item ID	**Description**	**Visual Inspection**	**PID reading (ppm)**	**Corrective Action / Comments**
BV-L3-351	Knockout pot			
CV-301A	From Vacuum Pump. Located mezzanine (breezeway).			
BV-301A	From Vacuum Pump			
VP-L-300				
LVP-107	**Busch Cobra Vacuum Pump**			**Column 1**
BV-UBV-140	Into K.O. Condenser (HX-C1-140). Two-way control valve behind C1 Receiver.			
BV-UBV-145	Main (Ballast Air/ K.O. Pot). Above 2m.			
BV-VP-107A	From KO Pot (UT-106)			
BV-VP-107B	Into VP-107			
BV-VP-107C	From VP-107			
BV-VP-107D	Into Lupe box (UT-107)			
BV-VP-107E	From Lupe box (UT-107)			
BV-VP-107F	OPW (KO Pot Suckout). Located near breezeway/shower.			
BV-VP-107G	OPW Lupe box			
BV-VP-107H	OPW (KO Pot Suckout). Mezzanine breezeway.			
BV-VP-107I	From VP 107 to VP201/VP-L-300			
Column 1	**Scrubber Vent – Direct Line**			**North Process**
BV-176	From primary condenser (HX-C1-102). Pressure regulator. Above 2m.			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-176A	Opens to scrubber, 2nd valve			
Column 2 (VP-201)				**North Process**
(UBV-201B)	From secondary condenser (HX-C2-203) into receiver.			
(UCV-C2-240)	From receiver to K.O. condenser. Two way.			
BV-201A	To VP-201/To K.O. Pot (UT-201). Mezzanine behind C2 receiver.			
UT-201	Knock out pot. Breezeway.			
BV-201B	OPW. Mezzanine/ Breezeway.			
BV-201C	Two way control valve. Mezzanine/ Breezeway			
BV-201D	OPW (UT-201 Drain)			
BV-201E	From (UT-201)			
BV-201F	Oil fill (VP-201)			
BV-201G	To NW Scrubber (VP201 Exhaust)			
CV-201A	To NW Scrubber (VP201 Exhaust). Above 2m			
BV-201H	From KO Pot to VP-L-300 to NW Scrubber			
Column 2	**Direct line**			**North Process**
BV-C2-240	After KO Condenser (HX-C2-240). To scrubber. Two way control valve. Mezzanine behind C2.			
Column 3				**North Process**
VP-301	Busch			
(UCV-C3-340)	Above 2m. Pressure regulator.			
BV-VP-301A	Main / From Col 3. Breezeway.			
BV-VP-301B	Into K.O. Pot (UT-302). Breezeway			
BV-VP-301C	To VP-201, VP-107, VP-L-300. Breezeway			

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
BV-VP-301D	Oil fill (UT-C-302) . Breezeway (OPW)			
North Process	**North Process**	**North Process**	**North Process**	**North Process**
BV-VP-301F	Main / Into VP-301 / From Col 3 / Huckepak			
BV-VP-301G	Into VP-301			
BV-VP-301H	Into VP-301			
BV-VP-301I	Into VP-301			
BV-VP-301J	From VP-301			
BV-VP-301K	OPW (Lupe Box)			
BV-VP-301L	OPW (Lupe Box)			
BV-VP-301M	To NW Scrubber (SC-002)			
Breezeway (Mezzanine)				
BV-VP-301N	From Col 3 / To Huchkepak/ R6 Exhaust Vent/ VP-304			
BV-VP-301O	OPW/ For R6 Exhaust . Tie in to Col 2 Scrubber Vent Line			
BV-VP-301P	**From VP-305/To VP-301. VP-305 Out of Service**	**N/A**	**N/A**	
BV-VP-301Q	**To north scrubber. Closed. Out of Service.**	**N/A**	**N/A**	

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
R6				
VP-R6-300				
BV-R6-300	From R6 Receiver to Knockout condenser.			
BV-R6-302	OPW (From Knockout Condenser).			
BV-R6-304	To acid scrubber			
BV-R6-334	From ammonia scrubber			
BV-R6-376	To R2 vent			
BV-R6-378	From R2 vent (Mezz; VP-R6-300)			
BV-R6-388	Into VP-R6-300			
VP-R6-300				
R6 Floor	OPW			
R6 Mezzanine	OPW. Vacuum Pot.			
BV-	OPW. NW Vapor 2. VP-R6-300, Mezzanine			
BV-	OPW. NW Vaport 2. NW Process/ Breezeway entrance.			
BV-	NW Vapor 2; Breezeway, Mezzanine.			
Scrubber Inlets	**NW Scrubber**			**Sc-002**
VP-940	**Inlet #1**			**Vacuum Pot**
CV-				
BV-				
VP-201	**Inlet #2**			**Column 2**
Column !	**Inlet #3**			**Direct Line**
CV-				
BV-				
BV-				
BV-				
Column 2	**Inlet #4**			**Direct Line**
CV-				
BV-				
BV-107F				
BV-107J				
CV-107A				

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Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
LVP-104	**Inlet #5**			**Luwa 1**
NW Scrubber				
LVP-104				
CV-				
BV-				
T-204	**Inlet #6**			**Direct Line**
BV-				
CV-				
LVP-104, LVP-304	**Inlet #7**			**Luwa 1, Luwa 3**
BV-104E				
BV-				
CV-				
300 Tank Farm	**Inlet #8**			**Direct Line**
BV-				
CV-				
VP-L-301	**Inlet #9**			**Luwa 3**
CV-310B				
BV-310B				
VP-301	**Inlet #10**			**Column 3**
CV-931A				
VP-301	**Inlet #11**			**South Process**
CV-300A				
BV-300B				
BV-L3-360				
BV-L3-				
BV-L3-350				
BV-L3-355				
BV-L3-				
CV-L3 300A				
Scrubber Inlets	**NE Scrubber**			**Sc-003**
L1 Claw Vacuum	**Mist eliminator : located in NW Process (Mezzanine), VP-R6-300**			
BV-	3" OPW (from KO Pot)			
BV-	3" OPW (Into mist eliminator)			

HYDRITE CHEMICAL CO. - Cottage Grove, Wisconsin

SEMI-ANNUAL LEAK TESTING - HAZARDOUS WASTE EQUIPMENT AND PIPING SYSTEM

Date:_____

Equipment Item ID	Description	Visual Inspection	PID reading (ppm)	Corrective Action / Comments
Additions:	---	---	---	---

Date:_____

INSTRUCTIONS FOR COMPLETION

(1) Inspection requirements are established in the Title V Air Pollution Control Permits, NR 631, 632, 633 and 40 CFR Part 63 (Off-site Material MACT). Inspections described below apply to tanks at all positions listed on the checklist. The inspections are intended to ensure that all valves function as intended and don't leak.

(2) Each tank listed on the checklist must have valves in place for inspection. If the valves are not connected, you must notify the supervisor immediately and take steps to install them. Note this on the inspection checklist in the box provided for the tank.

(3) Open-ended lines must be are capped or plugged.

(4) "Sniff Test" all valves, flanges, connectors, and pressure-relief conservation vents. The "Sniff Test" is performed using a Portable Photo Ionization Detector on the equipment to determine whether there is vapor leakage. The PID battery must be charged up and the meter must be calibrated with satisfactory results before each use according to instructions provided in the PID SOP. If you can't achieve a satisfactory calibration, consult your supervisor for instructions. The meter may need repair. If the cal gas cylinder is low on pressure, take steps to order a new cylinder using instructions provided in the manual.

(5) Make sure that Operators will not be transferring material in or out of the tanks you will be inspecting. Discuss your inspection plans with the operators or tank farm supervisor before proceeding.

(6) Locate the Pressure Relief (PVRV)/Flame Arrestor (FA) assembly on the tank. SAFETY NOTE: Before you climb on a tank, put on a full body harness and lanyard. Use a properly extended portable ladder or fixed ladder to climb onto the tank top. For some tanks, it may be necessary to use a crane to gain access to the tank top. Examine the tank top for evidence of corrosion before climbing on it. You need to make sure that you won't fall through the tank top. Secure the lanyard to the tank top when you are working on the tank. Have a co-worker stand by at ground level to summon rescuers in case you fall.

(7) Using only non-sparking tools, remove the FA cover and inspect the screen material. Replace the material if it is corroded or appears to have deteriorated in service. Replace the cover. Note the condition of the FA (Passed or Corrective action) on the checklist box for the tank. If you replace the screen, note same in the comments box.

(8) Visually inspect the PVRV assembly, looking for evidence of corrosion or dirt which may hinder operation of the valve. Disassemble, clean, and reinstall the valve as needed. Replace valves as needed. Note the condition of the PVRV (Passed or Corrective action) on the checklist box for the tank. If you replace the valve, note same in the comments box.

(10) Calibrate PID and document in PID calibration log.

Date:_____

(9) Perform a "Sniff Test" using a Portable Photo Ionization Detector (PID) at the PVRV Vent and around the FA and PVRV joints to determine whether there is vapor leakage.

(10) Record the PPM reading from the PID meter in the box provided for each valve on each tank listed on the checklist. Tank numbers refer to the master tank farm position number.

(11) For the PVRV's, readings over 500 PPM indicate leakage. For other valves, readings over 10,000 PPM indicate leaks. If leakage is noted at a joint or gasket surface, tighten as needed. If the PVRV is leaking, disassemble, repair, and/or replace as needed to eliminate the leak. Record this information on the inspection log in the box for that tank.

(12) An attempt to repair the defective part must be made within 5 days. The defective part(s) must be repaired within 15 days. Any delay greater than 15 days, reason for delay, and final repair date must be documented and kept in the operations file (see legal file.) A report must be filed with the DNR on a semiannual basis, in the event equipment repair takes longer than 15 days.

(13) Equipment with an asterisk (*) indicates that equipment contains or contacts hazardous wastes with organic concentrations greater than 10% by weight. If leak is found on this equipment, afix a tag which includes the date, time, inspector, part ID and MWO#. The tag may be removed from a repaired valve after 2 successive months of zero leak detection. The tag may be removed from other parts after repair. This does not include PVRV, FA or AG.

(14) Upon repair, use the PID to sniff test the repaired item and record the results on the completed Maintenance Work Order. The repaired item should be sniffed upon start up of the equipment.

(15) If a valve is changed out, tell the supervisor in charge of the tank farms to make a note of the change- on the daily and SEMI-ANNUAL tank farm inspection form for that time period.

(16) As you are conducting the inspections, make note of any other observations- such as leaks- on your checklist. Discuss your observations, if any, with the tank farm supervisor. After completing all the required inspections, sign your name and give the form to the tank farm supervisor.

INSTRUCTIONS FOR SUPERVISOR: Initiate MWO's where required and enter MWO# in the appropriate box(es) on the form. Route the completed form to the Operations Manager who will insert it into the Branch Legal File for "Semi-annual Leak Test".

	Hazardous Waste Weekly Inspection: Annex Bldg. #1	
HYDRITE	Date:	Time:
	Inspector:	Signature:

ITEMS TO BE CHECKED	OK	NOT OK: Corrective Action Needed/Taken MWO Number, if repair needed
Annex #1 Warehouse - Satellite Accumulation Areas (SAA): Prep Lab, Wet Lab, Graphic Arts Lab, Process Development Lab, Lab Warehouse		
All containers labeled as hazardous waste & has the name of waste (All 5-gallon pails, 30-gallon and 55-gallon drums)		
The 5-gallon pails of accumulating hazardous waste are in the flammable storage cabinet in prep lab (not sitting out in lab, unless waste is being added to it)		
All containers closed except when adding/removing waste		
All containers in good condition & not leaking		
Incompatible waste is not stored together		
Limit of 55-gallons TOTAL of hazardous waste per SAA (or limit of one quart acute hazardous waste per SAA)		
Grounding/Bonding being used on flammable cabinets and containers where flammable liquids are transferred		
The floor is free from cracks		
Good Housekeeping; Exits and Eyewash/Safety Showers are not blocked; no trip hazards		
No hazardous waste is accumulating in the Instrument Lab		
SAA in Lab Warehouse is in secondary containment		
Full containers marked with the "Accumulation Start Date" and moved to Hazardous Waste Storage (Plant) within 72 hours		
Spill control / cleanup equipment is readily available		

Additional Comments:

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

DATE: _____ INSPECTOR: _____

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
	FRONT OFFICE								
1.	Copy Room	Dry	10				2017	2023	
2.	East office area	Dry	10				2017	2023	
3.	Break room – Basement	Dry	10				2014	2020	
4.	Storage Room – Basement	Dry	10				2014	2014	
	WEST WAREHOUSE (CE-100)								
5.	West Wall – Entrance/Exit	Dry	20				2021	2021	
6.	Center aisle – West #1	Dry	20				2021	2021	
7.	Truck Door #1	Dry	20				2021	2021	
8.	Truck Door #2	Dry	20				2021	2021	
9.	Center aisle – Middle #2	Dry	20				2021	2021	
10.	NW Wall – Entrance/Exit	Dry	20				2013	2019	
11.	R18	Dry	20				2021	2021	
12.	PT-810	Dry	20				2021	2021	
13.	R18 - Mezzanine	Dry	20				2016	2015	
14.	FT-5 N Wall	Dry	20				2021	2021	
15.	R14 - Mezzanine	Dry	20				2021	2021	
16.	R13 - Mezzanine	Dry	20				2021	2021	
17.	R12 - Mezzanine	Dry	20				2021	2021	
18.	East Wall – Entrance/Exit	Dry	20				2021	2021	
19.	Center aisle – East #3	Dry	20				2021	2021	
20.	South Wall – Entrance/Exit	Dry	20				2015	2021	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
21.	SE Wall – Forklift Entrance	Dry	20				2015	2021	
22.	SW Electrical Room SE corner (exit)	Clean agent	9				2017	2023	
	SOUTH WAREHOUSE								
23.	S. Whse – West Wall	Dry	20				2015	2017	
24.	S. Whse – South Wall	Dry	20				2016	2019	
25.	South Dock	Dry	20				2015	2015	
26.	S. Whse – East Wall	Dry	20				2016	2016	
27.	Drumming Room – West Wall	Dry	20				2016	2015	
28.	Drumming Room – North Wall	Dry	20				2012	2018	
29.	Drumming Room – East Wall	Dry	20				2016	2020	
	SOUTH PROCESS ROOM								
30.	South – Entrance/Exit (outside)	Dry	20				2014	2020	
31.	South Wall #1	Dry	20				2012	2018	
32.	South Wall #2	Dry	20				2017	2017	
33.	Mezzanine #1	Dry	20				2011	2023	
34.	Mezzanine #2	Dry	20				2016	2022	
35.	North Wall – Entrance/Exit	Dry	20				2012	2018	
	CONTROL ROOM								
36.	North – Entrance/Exit	Dry	20				2012	2018	
37.	Conf Rm – Above control room #1	Dry	10				2017	2017	
38.	Conf Rm – Above control room #2	Dry	10				2012	2012	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
	NORTH CENTRAL PROCESS ROOM								
39.	SE – Forklift Entrance	Dry	20				2016	2022	
40.	NE – Entrance/Exit	Dry	20				2017	2015	
41.	B4 Mezzanine	Dry	30				2017	2013	
42.	SW – Forklift Entrance	Dry	20				2017	2023	
43.	West – Entrance/Exit	Dry	20				2012	2018	
44.	B8 Mezzanine	Dry	20				2012	2018	
45.	R15 Mezzanine	Dry	20				2016	2022	
	NORTHWEST PROCESS ROOM								
46.	East - C3 Reboiler	Dry	20				2016	2022	
47.	SW FT-2	Dry	20				2012	2018	
48.	Centrifuge - Mezzanine	Dry	20				2014	2014	
49.	West Entrance/Exit	Dry	20				2013	2019	
50.	CR4 Mezzanine	Dry	20				2017	2023	
51.	R10 Mezzanine	Dry	20				2016	2022	
52.	R11 Mezzanine	Dry	20				2012	2018	
53.	NE – Entrance/Exit	Dry	20				2014	2020	
	AUXILIARY ROOMS – NORTH SECTION								
54.	NW Electrical Room	Halon	9				2016	2022	
55.	North Electrical Room	Halon	9				2012	2012	
56.	Thermox Room	Dry	20				2017	2017	
57.	Vapower Room – Behind Thermox Room	Dry	20				2012	2018	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
58.	Water Softener Room	Halon	9				2015	2013	
59.	NE Electrical Room – Behind Water Softener Room	Halon	9				2011	2011	
	NORTH PROCESS ROOM								
60.	North Entrance/Exit	Dry	20				2017	2023	
61.	West Entrance/Exit	Dry	20				2011	2023	
62.	Mezzanine #1	Dry	20				2016	2015	
63.	Mezzanine #2	Dry	20				2016	2022	
64.	Mezzanine VP-940	Dry	20				2017	2023	
65.	South Wall #1	Dry	20				2012	2018	
66.	South Wall #2	Dry	20				2016	2016	
67.	South Wall #3	Dry	20				2017	2017	
	BREEZEWAY - PLANT								
68.	North Central Process Room – Forklift Entrance	Dry	20				2021	2015	
69.	Mezzanine – Vacuum Pumps	Dry	20				2014	2014	
	BREEZEWAY CART								
	Breezeway Cart #1	Dry	20				2017	2017	
	Breezeway Cart #2	Dry	20				2014	2014	
	Breezeway Cart #3	Dry	20				2015	2018	
	Breezeway Cart #4	Dry	20				2014	2018	
	Breezeway Cart #5	Dry	20				2017	2017	
	Breezeway Cart #6	Dry	20				2015	2015	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
	Breezeway Cart #7	Dry	20				2017	2017	
	Breezeway Cart #8	Dry	20				2012	2018	
	AUXILIARY ROOMS/EAST SECTION/TANK FARM								
70.	Steam Boiler Room	Dry	30				2017	2023	
71.	South Electrical Room	Halon	9				2014	2020	
72.	100 Tank Farm – North – T – 172	Dry	20				2016	2022	
73.	South Load Dock – SE – Containment Pit	Dry	20				2016	2016	
74.	300 Tank Farm – West – T-349	Dry	20				2015	2020	
75.	200 Tank Farm – North – T-211	Dry	20				2012	2018	
76.	400 Tank Farm – North – T-405	Dry	20				2015	2021	
	EMPLOYEE CENTER								
77.	Lunchroom – West wall #1	Dry	10				2017	2017	
78.	Hallway West wall #2	Dry	10				2017	2023	
79.	Lunchroom – East wall #1	Dry	10				2017	2023	
80.	Hallway East wall #2	Dry	10				2017	2023	
81.	Utility Room – East side	Dry	10				2017	2017	
	BUILDING #1 LAB/WAREHOUSE								
82.	Flammable Storage Shed – west side sub-unit	Dry	50				2012	2018	
83.	Building #1 SW Entrance/Exit – Warehouse	Dry	20				2016	2022	
84.	Warehouse – North Wall	Dry	20				2015	2017	
85.	Warehouse – South – Entrance/Exit	Dry	20				2016	2016	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
86.	Warehouse – NE Entrance/Exit	Dry	20				2015	2014	
87.	Air Compressor Shed – East Side Sub-unit	Dry	10				2016	2022	
88.	Process Development Lab – South Wall	Dry	10				2014	2020	
89.	Process Development Lab – West Wall	Dry	30				2014	2013	
90.	Graphic Arts Lab – North wall	Halon	13				2015	2021	
91.	Wet Lab – North Wall	Dry	30				2013	2013	
92.	Wet Lab – South Wall	Dry	5				2017	2023	
93.	Instrument Lab – East Wall	Halon	9				2014	2012	
94.	Sample Lab – South wall	Halon	9				2017	2023	
95.	Lab Office – West Wall	Dry	10				2014	2020	
96.	Mezzanine – 2nd floor – North of Office Room – West side	Dry	10				2014	2020	
96a.	Mezzanine – 2nd floor – North of Office Room – East side	Dry	10				2017	2013	
97.	West Entrance/Exit	Halon	17				2013	2019	
98.	NW Entrance/Exit – Engineering Entrance	Dry	10				2014	2020	
	BUILDING #2 MAINTENANCE/SHOP								
99.	Fuel Oil Tank – SE Corner Outside	Dry	20				2012	2018	
100.	Steam Boiler Room SE	Dry	20				2022	2022	
101	SW Entrance/Exit	Dry	20				2016	2022	
102	Electrical Room – West Wall	Halon	5				2017	2023	
103	Torch Cart – Portable	Dry	10				2012	2012	
104	Weld Cart – Portable	Dry	10				2013	2013	

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

#	Location	Type	Size (lbs.)	Pressure	Mechanical	Accessible	Internal	Hydrostat	Comments
105	East Entrance/Exit	Dry	20				2015	2019	
106	South Entrance/Exit – Shop	Dry	20				2016	2022	
107	NW Entrance/Exit	Dry	20				2012	2018	
108	Maintenance Cart Panzerspahwagon	Dry	2.5				2012	2018	
	BUILDING #2 – SPARES								
109	Spare #1	Dry	20				2017	2013	
110	Spare #2	Dry	20				2017	2023	
	PURPLE K EXTINGUISHERS – 7 UNITS								
	W Warehouse (CE100) Truck Dock	Purple K	125					2021	
	S Warehouse West Wall	Purple K	125					2019	
	S Warehouse South Wall	Purple K	125					2019	
	Drumming Room – Outside Unit	Purple K	125					2021	
	Breezeway	Purple K	125					2021	
	N Process – North – Entrance/Exit outside unit	Purple K	125					2020	
	200 Tank Farm – East T-238	Purple K	125					2021	
	FIRE BLANKETS & FIRE HOSE								
	Bldg 1 Sample Lab – South wall Blanket 1			N/A					
	S Warehouse – West wall Blanket 2			N/A					
	S Warehouse – South wall Blanket 3			N/A					
	Breezeway – East wall – Blanket 4			N/A					
	Breezeway – East wall – Fire Hose			N/A					

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

SPRINKLER SYSTEM – FIRE ALARM ZONE INFORMATION
ZONE 10 – WATER FLOW – FIRE HOSE
ZONE 11 – WATER FLOW – SOUTH WAREHOUSE
ZONE 12 – WATER FLOW – DRUMMING ROOM
ZONE 13 – WATER FLOW – SOUTH PROCESS ROOM
ZONE 14 – WATER FLOW – NORTH PROCESS ROOM
ZONE 15 – WATER FLOW – RISER TANK/FOAM TANK NORTH WAREHOUSE
ZONE 16 – WATER FLOW – NW PROCESS/BREEZEWAY
ZONE 17 – WATER FLOW – NORTH WAREHOUSE
ZONE 18 – WATER FLOW – WEST WAREHOUSE

SPRINKLER SYSTEM	LOCATION	YES/NO
MAIN VALVE OPEN AND LOCKED	CE-100 WEST WALL	
SIAMESE ACCESSIBLE	CE-100 WEST WALL - OUTSIDE	
ALARM IS ON – FIRE ALARM BELL	CONTROL ROOM	
WATER PRESSURE	N CENTRAL PROCESS ROOM – NW CORNER	

FIRE ALARM: PLANT – PNEUMATIC STATIONS	PASS		FAIL	COMMENTS
S. PROCESS – ZONE 13		JAN		
VAPOWER ROOM – ZONE 16		FEB		
W WAREHOUSE EAST EXIT – ZONE 18		MAR		
N WAREHOUSE NW EXIT – ZONE 17		APR		
N PROCESS NORTH – ZONE 14		MAY		
W WAREHOUSE WEST EXIT – ZONE 18		JUNE		
N PROCESS SOUTH ZONE 14		JULY		
W WAREHOUSE SOUTH EXIT – ZONE 18		AUG		
S WAREHOUSE WEST – ZONE 11		SEPT		
W WAREHOUSE WEST EXIT – ZONE 18		OCT		
S WAREHOUSE SOUTH – ZONE 11		NOV		
NW PROCESS EAST EXIT – ZONE 16		DEC		
NW PROCESS WEST EXIT – ZONE 16		DEC		
FIRE ALARM SHUT-OFF VALVE – VAPOWER ROOM – ALSO NEEDLE CONTROLS FOR ADJUSTMENT COMMENTS				

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

FIRE EXTINGUISHER INVENTORY

FACILITY	111
BREEZEWAY CART	8
PURPLE K	7
TOTAL – IN SERVICE	126

DRY FIRE EXTINGUISHERS

2.5 LBS	1
10 LBS	19
20 LBS	82
30 LBS	4
50 LBS	1
125 LBS – PURPLE K	7
TOTAL – DRY	114

CLEAN AGENT & HALONS

9 LBS CLEAN AGENT	1
5 LBS HALON	2
9 LBS HALON	7
13 LBS HALON	1
17 LBS HALON	1
TOTAL – CLEAN AGENTS – HALON	12
TOTAL – DRY – CLEAN AGENTS – HALONS	126

YEARLY INSPECTION RECORD – SCEPTER

6 YEAR INTERNAL TEST (1910.157(f)(2) – OSHA – (EMPTY & RECHARGE F.E. – MAINTENANCE)
12 YEAR HYDROSTATIC TEST (1910.157 (e)(4) – (REQUIREMENT)

Sprinkler System – plant	Quarterly Check
Sprinkler System – flammable storage shed	Semi-Annual Check
Fire Zones – Plant	Approximately 12 locations – Quarterly
Fire Alarms – Plant	Monthly check – every unit tested once per year

HYDRITE CHEMICAL CO. COTTAGE GROVE EAST
MONTHLY FIRE SAFETY INSPECTION

Additional Comments:

_____

_____

_____

_____

_____

INSTRUCTIONS: After an item is inspected, write OK in the appropriate box if the item meets the inspection criteria and Not OK if the item does not meet the inspection criteria. A repair or corrective action must be noted in the comment section for items not meeting the inspection criteria.

FIRE EXTINGUISHERS: **The following items will be checked when inspecting fire extinguishers:**
Pressure - Extinguishers with gauges should read in the acceptable range. If the extinguisher does not have a gauge, mark "NA" under pressure.
Mechanical - Check for bent safety pins or handles. Check the body for dents or gouges. Check bracket or hangers is secure. Ensure that no clothing, hoses, wire or rags are hanging on extinguishers.

FIRE BLANKET: **Mechanical** - Ensure that the blanket is in place and clean.
Accessible - The area in front of the fire blanket is clear and no items such as clothing, hoses, wire or rags are hanging on the cabinet.

FIRE HOSE: **Mechanical -** The hose will be checked for fraying kinks or other damaged. The hose is proper rolled on reel. The reel and nozzle will be checked for damage.
Accessible - The area in front of the fire hose is clear and no items such as clothing, hoses, wire or rags are hanging on the reel.

FIRE ALARM: Before the fire alarm is tested, the facility manager will be notified and an announcement will be made on the paging system that the test will be performed. The station used in testing the alarm will be rotated so a different station will be used each time the alarm is tested. An employee will be stationed by the reset panel. The alarm will be sounded only long enough to test the system. If the system passes, it will be so indicated on the inspection log. If the system does not pass, corrective action must be documented in the comments section.

FIRE SPRINKLER: The main fire line (CE100) will be inspected to ensure that it is locked in the open position. The fire connection (Siamese fitting – CE100) must be accessible to the fire department and not damaged. Check the fire alarm bell switch is in the on position (CONTROL ROOM). The water pressure must be entered on the form.

COMPLETED FORM TO BE SENT TO THE LEGAL FILE.

HYDRITE CHEMICAL COMPANY
COTTAGE GROVE EAST - ERT EMERGENCY TRAILER
ERT EMERGENCY TRAILER INVENTORY

DATE OF INSPECTION

QUANTITY	DESCRIPTION	LOCATION	COMMENTS
34	CONES	Left Rear & Front	
6	SQUEEGEES	Left Rear	
1	BACK STABLIZER	Left Rear	
4	Foam Tubes for Trailer Door Cables	Left Rear	
2	Brown Tarps	1A	
1	Water Cooler Jug	1A	
2	Boxes NRG	1A	
2	MEDICAL FIRST AID KITS	Medical box, Section 1A	
1 BOX	AIR SPLINT	Medical box, Section 1A	
1	EMERGENCY BLANKETS	Medical box, Section 1A	
1 BOX	SAFETY WIPES	Medical box, Section 1A	
1	MEDICAL PERSONNEL VEST	Medical box, Section 1A	
4	BLOOD PRESSURE MONITORS	Medical box, Section 1A	
1	TEMERATURE TESTER	Medical box, Section 1A	
3	Clip boards	IC KIT, 1B	
1	BULL HORN	IC KIT, 1B	
1	IC VEST	IC KIT, 1B	
1	Phone List	IC KIT, 1B	
1	BINOCULARS	IC KIT, 1B	
1	CAUTION TAPE	IC KIT, 1B	
1	FIRE FIGHTER HANDBOOK	IC KIT, 1B	
1	BINDERS Q-CARDS	IC KIT, 1B	
2	6PK ""C" cell batteries (bull horn)	IC KIT, 1B	
1	Compass	IC KIT, 1B	
1	Flashlight	IC KIT, 1B	
4	"D" cell batteries (flash light)	IC KIT, 1B	
1	Pad Paper	IC KIT, 1B	
1	Box of pens	IC KIT, 1B	
2	SCBA Face Bags	SCBA PARTS BOX, Section 1B	
2	SCBA NOSECUPS	SCBA PARTS BOX, Section 1B	
4	SCBA HOODS	SCBA PARTS BOX, Section 1B	
3	SPECTACLE KITS	SCBA PARTS BOX, Section 1B	
2	SPARE CLEAR COMMAND PARTS	SCBA PARTS BOX, Section 1B	
28 Rolls	Duct Tape	IN BOX AND TOTE 1B	
1	Medical First Aid Bag	1B	
1 each	Large & Medium SCBA Mask	1B	
2	Bracket and voicemitter kit	1B	
5	Drain Trays	ERT Decon, Center of trailer	
2	Water Wands	ERT Decon Box, Tote on cart	
1	Big Blue Tarp	ERT Decon Box, Tote on cart	
5	Chairs	ERT Decon Box, Tote on cart	

HYDRITE CHEMICAL COMPANY
COTTAGE GROVE EAST - ERT EMERGENCY TRAILER
ERT EMERGENCY TRAILER INVENTORY

QUANTITY	DESCRIPTION	LOCATION	COMMENTS
2	25' Garden hose	ERT Decon Box, Tote on cart	
2	50' Roll-a-hose	ERT Decon Box, Tote on cart	
2	50' Garden hose	ERT Decon Box, Tote on cart	
1	100' Garden Hose	ERT Decon Box, Tote on cart	
2	Water Brushes	ERT Decon Box, Tote on cart	
1	Water hose Splitter	ERT Decon Box, Tote on cart	
2	Spray Nozzles	ERT Decon Box, Tote on cart	
8	Fire Hoses	Fire Hose & Hydrant Tool Tote 1C	
2	Hydrant Tool	Fire Hose & Hydrant Tool Tote 1C	
2	Fire Hydrant Valves	Fire Hose & Hydrant Tool Tote 1C	
1	Hammer	Fire Hose & Hydrant Tool Tote 1C	
1	Fire Hoses	Fire Hose & Hydrant Tool Tote 1C	
4 pair	BUTYL RUBBER GLOVES	GLOVE BOX, Section 1C	
12	RAIN SUITS	GLOVE BOX, Section 1C	
2 BAGS	NITRILE PRO GLOVES	GLOVE BOX, Section 1C	
1 BOX	NITRILE EXAM GLOVES	GLOVE BOX, Section 1C	
1 BUNDLE	LIGHT WT. COTTON GLOVES	GLOVE BOX, Section 1C	
1	STRECHER	FLOOR 1D	
1	Fire Hydrant "Y" Valve	2A	
2	FIRE WATER MONITORS	2A	
2	Blitzer Sprayers	2A	
2	FIRE WATER NOZZLES	2A	
18	LEVEL "B" SUITS	2A, 4B, 4C	
1	Tote Misc Supplies	2B	
1	Misc Straps and Hardware	2B	
3 Pairs	RUBBER BOOTS SIZE 13-14	Boot Box 2B	
2	Clip boards	SECURITY VEST BOX, Section 2B	
8	SECURITY VESTS	SECURITY VEST BOX, Section 2B	
3	NOMEX SUITS	NOMEX SUIT BOX, Section 2C	
2	Nomex Hood	NOMEX SUIT BOX, Section 2C	
3	SCBA SETS	2C	
3	SCBA SETS	2D	
4	Grounding and Bonding Cables	TOOL BAG, Section 2D	
1	HAMMER	TOOL BAG, Section 2D	
2	BUNG WRENCH	TOOL BAG, Section 2D	
1	PIPE WRENCH	TOOL BAG, Section 2D	
3	PUTTY PACKS	TOOL BAG, Section 2D	
4	CAMLOCK STRAPS	TOOL BAG, Section 2D	
5 boxes	Tychem Suits	2E	
3	50' air hoses	Rear of Trailer	
8	YELLOW HARD HATS	HARD HAT BOX RIGHT REAR	
6 ROLLS	CAUTION TAPE	HARD HAT BOX RIGHT REAR	

HYDRITE CHEMICAL COMPANY
COTTAGE GROVE EAST - ERT EMERGENCY TRAILER
ERT EMERGENCY TRAILER INVENTORY

QUANTITY	DESCRIPTION	LOCATION	COMMENTS
2	CAUTION TAPE DISPENSERS	HARD HAT BOX RIGHT REAR	
6 PAIRS	RUBBER BOOTS SIZE 11-12	BOOTS BOX RIGHT REAR	
3	MSA Replacement Face Shields	3A	
2	ULTRA ELITE PDE VALVE	3A	
17	RADIOS AND BASES	3A & 3B	
1	BIOHAZARD KIT	3A	
3	EYE WASH BOTTLES	3A	
1	BAG SECURITY SEALS	3B	
1	PLANT ARIEL PHOTO	3C	
1	Fire Hoses	3C	
1	New Tool Bag	3C	
6	SPARE SCBA BOTTLES	3C	
8	CO Extinguishers	3D	
5	Level "A" Suits	4A	
2 BOXES	8" x 10' PIG DIKES	FRONT OF TRAILER	
Tote	5" x 10' PIG DIKES	FRONT OF TRAILER	
Tote	8" SQUARE PIG PILLOWS	FRONT OF TRAILER	
Tote	16" SQUARE PIG PILLOWS	FRONT OF TRAILER	
1 BOX	3" x 12' (GREEN) HAZWIK SOX	FRONT OF TRAILER	
5 ROLLS	PIG MATS 30" x 150' MRO (GREY)	FRONT OF TRAILER	
4 ROLLS	PIG MATS 30" x 150' HAZMAT (PINK)	FRONT OF TRAILER	
3 packs	Pig Pads	FRONT OF TRAILER & 4D	
1	OVERPACK DRUM W/ 3" PIG SOCKS	FRONT OF TRAILER	
9	KAPPLER ZYTRON SUITS	FRONT OF TRAILER	
6 BAGS	FLOOR DRY	FRONT OF TRAILER	
3 BOXES	PIG DRAIN COVERS	FRONT OF TRAILER	
1	Canopy Gazebo	FRONT OF TRAILER	
Tote & Box	Box Grey Pig socks	FRONT OF TRAILER	
2	Box 3" x 20' Grey socks	FRONT OF TRAILER	
3	Cooler (White & Blue)	FRONT OF TRAILER	
1	Red Dolly	FRONT OF TRAILER	
3	Cases Bottled Water	FRONT OF TRAILER	
6	5gallon pails	FRONT OF TRAILER	
1	SPILL KIT	BY FRONT DOOR	
1	ROLL CART	BACK OF TRAILER	
1	Box Sani Wipes	Front of trailer	

INSPECTOR

HYDRITE CHEMICAL CO.
MONTHLY RCRA SUMMARY
COTTAGE GROVE EAST

1. PART B PERMIT
   a. Is the Part B Permit on site? Yes ____ No ____
   b. Is the Part B Permit up-to-date? Yes ____ No ____

2. TRAINING
   a. Have all new employees completed their training? Yes ____ No ____
   b. Are all new employees current in their training? Yes ____ No ____
   c. Are all training records intact and up-to-date? Yes ____ No ____

3. INSPECTIONS
   a. Have all Daily inspection forms been completed? Yes ____ No ____
   b. Have all Weekly inspection forms been completed? Yes ____ No ____
   c. Have all Monthly inspection forms been completed? Yes ____ No ____
   d. Have all Corrective actions been completed? Yes ____ No ____

4. a. Number of gallons in RCRA Container storage (231,000) _____
   b. Number of gallons in RCRA Bulk storage (66,500) _____
   c. Is the RCRA waste in storage within Part B Permit limits? Yes ____ No ____

5. Were there any injuries, fires, or other emergencies which required implementation of the Contingency Plan? If yes, attach summary of action taken.

If the answer to any of the above questions is "no", complete the attached chart, recording the Item, Issue, Corrective Action, Person Assigned and Date of Correction.

COMMENTS:

_____

_____

_____

_____

Prepared by: _____ Position: _____

Signed: _____ Date: _____

HYDRITE CHEMICAL CO.

Power Failure Checklist

Date: ___/___/___

No.	Procedure Description		
I.	**Upon Power Failure**	**Initials**	**Time**
1.	Shut down QM-516 per SOP		
2.	Close the inlet valves to the following vacuum pumps:		
	Busch RA 830 (VP-107)		
	Busch RA 830 (VP-201)		
	Busch RA 830 (VP-301)		
	Busch RA 250 (VP-106)		
	Busch RA 250 (VP-206)		
3.	Clear lines of high freezers		
	Column 1		
	Column 2		
	Column 3		
	Column 4		
4.	Clear steam condensate from copper tracing lines during winter		
	Column 1, 2, & 3 Headers		
	N Loading Dock Header		
	CR4 Header		
	Breezeway Headers		
5.	Complete shut down per process specific SOP		
	Column 1		
	Column 2		
	Column 3		
	Luwa 1		
	Luwa 3		
	Luwa 4		
	Column 4		
	Reactor 6		
	Reactor 10		
	Reactor 11		
	Centrifuge		
	Reactor 12 (Emergency Cooling Manual Valves Closed – Three Jacket Inlets)		
	Reactor 13		
	Reactor 1		
	Reactor 2		
	Reactor 5		
	B4		
	B5		
	B8		
	Reactor 15		
	ST-100/Enzinger		
6.	Monitor local pressure gauges:		
	Column 1		
	Column 2		
	Column 3		
	Column 4		
	Reactor 6		
	Reactor 10		
	Reactor 11		
	Reactor 1		
	Reactor 2		
	Reactor 5		

No.	Procedure Description		
II.	**Upon Power Restoration:**	**Initials**	**Time**
7.	Annex 1 air compressors **CAUTION** VERIFY THAT O_2 LEVEL IS BETWEEN 19.5 AND 21% BEFORE ENTERING THE COMPRESSOR ROOM		
	Restart Atlas Copco GA55 (Plant Air)		
	Verify that Kaeser SFC 90 S restarted (Plant Air)		
	Verify that Kaeser SM10 restarted (Annex 1 N2O2 Air)		
8.	Verify water level in boiler feed tank (FT-901) and boilers		
9.	Verify that two boiler feed-water pumps restarted - 3rd is a backup:		
	Feed Pump 1 (FP-FT-901A)		
	Feed Pump 2 (FP-FT-901B)		
	Feed Pump 3 (FP-FT-901C)		
10.	Verify that the Vapor Power Steam Generator (B-200) restarted - control valve uses Nitrogen		
11.	Restart the Cleaver-Brooks Boiler (B-100) - control valve uses Air Requires reset of the Low Water-Level Cut Out		
12.	Verify that the APACS computer SOLA UPSs are operating normally (DI System Room, Panel D-1 #19 & #21)		
13.	If needed, restart APACS communications programs		
14.	If needed, restart Allen Bradley communication program		
15.	Verify that the SPR chiller pumps restarted		
	To S Chillers: Peerless (South Electrical Room #77C)		
	To S Process (WP-900): Peerless (South Electrical Room #65D)		
16.	Verify that the NPR chiller pumps restarted		
	To NE Chiller (NWP-900): Deanline (North Electrical Room #25I)		
	To N and NW Process (WP-950): Goulds (Northeast Electrical Room #31A)		
17.	Restart NW Chiller recirculation pump: Dean Pump (Northwest Electrical Room #11I)		
18.	Verify that chillers restarted		
	South West (CHLR-901A): Trane (South Electrical Room #57-#2)		
	South East (CHLR-901B): Carrier (South Electrical Room #57-#8)		
	North East (CHLR-910A): Carrier (North Electrical Room #1-D)		
19.	Restart North West Chiller (CHLR-910B): Carrier - generally requires an alarm reset (Northwest Electrical Room #MDP-#6)		
20.	Verify that the C30 Chiller restarted: Drake (Southwest Electrical Room #7, 9, 11)		
21.	Verify that cooling tower fans restarted		
	East (CLTR-900): Marley (Northeast Electrical Room 51 A)		
	West (NS-CLTR-001): Marley (Northwest Electrical Room 2-A)		
22.	Restart Cooling Tower Water supply pumps in N Process Room		
	To L1, L3, R1, R2, & R5 (CWP-750): Gusher (North Electrical Room #25-2J)		
	To C1, C2, C3, & L4 (CWP-760): Gusher (North Electrical Room #25-1J)		
	To ST100, B4, B5, C4, R6, & R10 (NUP-940): Envir Namics (NWER-3-0)		
	To ST100 B4, B5, C4, R6, & R10 (NUP-941): Envir Namics (NWER-2-M)		
23.	Verify that S Warehouse Cooling Tower System restarted (YC_GP_710)		
	Cooling Water Pumps Running		
	To R12, R13, & R15 (CWP-GP-710): S Griswold (Southwest Electrical 3-I)		
	To R12, R13, & R15 (CWP-GP-715): N Griswold (Southwest Electrical 15-A)		
	Cooling Tower Fans Running		
	North (CTF-GP-700): Marley (Southwest Electrical Room 10-F)		
	South (CTF-GP-705): Marley (Southwest Electrical Room 7-F)		

No.	Procedure Description		
II.	**Upon Power Restoration (continued):**	**Initials**	**Time**
24.	Restart tank recirculation pumps		
	T347 Reclaimed Epichlorohydrin (South Electrical Room #67C) Only needed if Epoxies are not running		
	T158 DEA (South Electrical Room, #67D)		
25.	Restart scrubber spray pumps		
	North Scrubbers (UP-998): ANSIMAG (South Electrical Room, #73H)		
	South Scrubber (UP-999): Deanline (South Electrical Room, #75F)		
	Ammonia Scrubber (RP-SC-300): ANSIMAG (Northwest Electrical Room, #9C)		
	Acid Scrubber (RP-SC-305): Deanline (Northwest Electrical Room, #8E)		
	Ammonia Scrubber (SC-29-100): ANSIMAG (Northwest Electrical Room, #3U)		
	Zirc Room Air Washer (Northwest Electrical Room #6-W)		
26.	Verify that pressure control loop settings are correct (default to "MAN" on power restoration)		
	Column 1 (PIC_C1_300)		
	Column 2 (PIC_C2_300)		
	Column 3 (PIC_C3_300)		
	Luwa 1 (PIC_L1_300)		
	Luwa 3 (PIC_L3_300)		
	Luwa 4 (PIC_L4_405)		
	Column 4 (PIC_CR4_300)		
	Reactor 6 (PIC_R6_300)		
	Reactor 10 (PIC_R10_300)		
	Reactor 12 (PI_R12_100)		
	Reactor 13 (PI_R13_400)		
	Reactor 1 (PIC_103)		
	Reactor 2 (PIC_203)		
	Reactor 5 (PIC_503)		
27.	Restart tempered water pumps on individual systems		
	Column 1 (UP-105) (Northeast Electrical Room, #49A)		
	Column 2 (UP-202) (Northeast Electrical Room, #51B)		
	Column 3 (UP-305) (North Electrical Room, #25F)		
	Column 4 (TWP-C4-460) (Northwest Electrical Room, #5-G)		
	Reactor 6 Condenser (Northwest Electrical Room, #8-A)		
	Reactor 6 Jacket (Northwest Electrical Room, #10-O)		
	Reactor 10 (Northwest Electrical Room, #10-A)		
	S Process tempered water system (WP-208) (South Electrical Room, #63E)		
	Reactor 5 Pick Heater (South Electrical Room, #75C)		
	B8 (TWP_B8_700)		
	ST-100 Pot Cooler (#10-S)		
	ST-100 Enzinger (#11-W)		

No.	Procedure Description		
II.	**Upon Power Restoration (continued):**	**Initials**	**Time**
28.	Verify that vessel agitator control loop settings are correct		
	Column 4 (SIC_CR4_100)		
	Reactor 6 (SIC_R6_100)		
	Reactor 12 (AG_R12_100)		
	Reactor 13 (AG_R13_100)		
	Reactor 15 (SCD_R15_100)		
	B4 (SIC_B4_100)		
	B8 (SCD_B8_100)		
	R15 (SCD_R15_100)		
29.	Verify that mass meter settings are correct (defaults to "TOTAL" on power restoration)		
	DEA Feed Flow Rate (FT_902)		
30.	Restart tank-farm tempered-water pumps in boiler room		
	100 Tank Farm RP-930 (South Electrical Room #59J)		
	If loop is being used to heat a tanker, T418 (South Electrical Room #57D)		
31.	Verify that the thermal-oxidizer hot-oil recirculation pump restarted (HOP-V2-002)		
32.	Verify that ceiling blower for the Vapor liquid-phase heaters restarted (#6A) **CAUTION** VAPOR ROOM MUST BE PRESSURIZED TO PREVENT THE ENTRY OF FLAMMABLE VAPORS		
33.	Restart Vapor liquid-phase heaters		
	Vapor HI-R Temp 5933 (V-1) (if in service)		
	Vapor HI-R Temp 5935 (V-2)		
34.	Verify that LEL meters restarted		
	LEL 1 (LEL-TOX-1)		
	LEL 2 (LEL-TOX-2)		
35.	Verify Thermal Oxidizer control loop settings		
	Surge Tank Inlet Header Pressure (PIC_TOX_01) SP = -5.00		
	Surge Tank Pressure (PIC_TOX_02) SP = -14.00		
	Controlling LEL Level (FIC_LEL03) SP = 45.00		
36.	Restart and Enable Thermal Oxidizer (see Thermal Oxidizer SOP)		
37.	Verify that C30/C31 Epichlorohydrin Emissions Control System restarted (YC-C031-100)		
	C31 Blower Running (BL-C031-300): Roots (Southwest Electrical Room 15 I)		
	C30 Scrubber Discharge Pump Running (BP-C031-820): (Southwest Electrical 6 I)		
	C31 Scrubber Feed Pump Running (BP-C031-825): (Southwest Electrical 6 D)		
	C31 Cell #1 Agitator Running (AG-C031-805): (Southwest Electrical Room 2 A)		
	C31 Cell #2 Agitator Running (AG-C031-810): (Southwest Electrical Room 6 G)		
	C31 Cell #3 Agitator Running (AG-C031-815): (Southwest Electrical Room 6 H)		
	Thermal Oxidizer is enabled and C30/C31 is operational		
	Open C31 Suction Pressure Control Valve (PCV-C031-300)		
38.	T346 & T347 Manual Nitrogen Pad Supply Valves Open		
	To T346 Control Valve (PCV-T346-100A)		
	To T347 Control Valve (PCV-T347-100A)		
39.	R12 Air Supply to Epichlorohydrin charge valves Open		
	Virgin Epichlorohydrin (RCV-T346-105)		
	Reclaimed Epichlorohydrin (RCV-T347-105)		
40.	R12 Emergency Cooling Manual Valves Open (Jacket Inlet Valves – Dish, Lower, Upper)		

No.	Procedure Description		
II.	**Upon Power Restoration (continued):**	**Initials**	**Time**
41.	Restart tank agitators		
	T212 (Northeast Electrical Room, #33C)		
	T213 (Northeast Electrical Room, #33D)		
	T214 (Northeast Electrical Room, #33E)		
	T215 (Northeast Electrical Room, #33F)		
	T241 (Northeast Electrical Room, #47D)		
	T242 (Northeast Electrical Room, #47F)		
	DT3 (Northwest Electrical Room, #6-0)		
42.	Verify Cobra DI Water control loop settings (PIC_GP_710) MODE = AUTO, SP = 50, DB = 10		
43.	Restart individual processes per process specific SOPs		

Notes:
Verify – Equipment that generally will restart on its own on power restoration.
Restart – Equipment that must be manually restarted on power restoration.

HYDRITE CHEMICAL CO. STANDARD OPERATING PROCEDURE

Original SOP Effective Date: 2/1/98	Supersedes SOP Dated: 4/1/11	Effective Date: 5/1/12	Procedure No.: AD052AF
Facility: AF	Approval Name & Signature: Tom Miazga		Revision No.: 11.2
Review Frequency: 1 Year	Approval Title: Director of Safety, Quality and Regulatory Affairs		Page 1 of 9
Without a green control label to the right of this statement, this procedure is a draft. A draft or an uncontrolled copy cannot be used to manage a process or task.			If this block is black, this is NOT a controlled document

I. TITLE: INCIDENT INVESTIGATION, REPORTING & CORRECTIVE ACTION PROCEDURE

II. KEY WORDS: Incident, Injury, Nonconformance, Release, Spill

III. PURPOSE: To determine the root cause of an incident or nonconforming process, to identify corrective actions to prevent the recurrence of incidents and process nonconformance, and to identify opportunities for process improvements throughout the company.

IV. APPLICATION: This procedure applies to all incidents at all facilities as defined below.

V. DEFINITIONS:

Chemical Release: any chemical that is not completely contained within the container, equipment, vessel or process it is designed to be contained within.

Crisis: an incident that has or exhibits the potential to significantly impact the operability of an individual facility or the company as a whole, or to pose a significant health, environmental, financial or legal threat.

Incident: any event that has caused, or has the potential to cause (near miss), an injury, chemical release or property damage and any system process that does not produce its intended or desired product, result, or outcome.

Injury: any medical event, including but not limited to: cuts, scrapes, muscle strains, sprains, chemical exposures, heat stress, foreign objects in the eye, et cetera.

Near Miss: An event that a serious consequence did not occur, but could have.

Property damage: any alteration of the grounds, physical improvement or equipment beyond expected normal wear.

VI. ASSOCIATED MATERIAL(S):

Chemical Release Reporting SOP CR001AF
Crisis Management Plan SOP ER013AF
Control of Nonconforming Products SOP QA009AF
Corrective or Preventive Action SOP QA008xx
Management of Change SOP QA005AF
Workers Compensation Incidents SOP SF032AF
General Liability Claims or Potential Claims Handling SOP FD007CO
Incident Investigation Form AD052Afa.doc-AF Appendix A (attached)
Incident Keywords and Phrases Guide (included)
Records Management SOP AD005AF
Sample Retention SOP QC006xx
Disciplinary and Termination Practices SOP HR003AF

VII. PROCEDURE:

1. Crisis Situation Communication

1.1. A crisis situation is realized when a significant event requires notification to or assistance from a government agency, medical/emergency response team, legal counsel or insurance provider.

1.2. It is the responsibility of any employee who is involved in the event, observes the event and/or contacts an emergency response agency to inform the facility manager, ranking person-in-charge or respective department manager of the crisis situation.

1.3. The facility manager / ranking person-in-charge or department manager must immediately determine the severity of the crisis situation and contact, or direct the Facility Emergency Communications Coordinator to contact, a member of the crisis management team, if deemed necessary.

1.3.1. Contact with the Crisis Management Team does not replace or relieve any other reporting responsibilities required by company SOP.

2. Documentation

2.1. Incidents shall be documented per the Workers Compensation Accidents/Injuries SOP, General Liability Claims SOP or the Chemical Release Reporting SOP, respectively.

2.1.1. If the non-conformance fits the definition of "Incident" according to this SOP (AD052AF), investigate as an "Incident" per this SOP (AD052AF), and not as a product or process non-conformance.

3. Investigation Teams

3.1. Within 1 hour of an incident or the abatement of an emergency, the SQRA Coordinator (or Office Manager – Corp) will assemble an on-site Incident Review Team. The team will consist of:

3.1.1. The SQRA Coordinator; (or Dir SQRA – Corp);

3.1.2. The Operations Manager of the facility (or Plant Manager – CGE), (or Office Manager – Corp);

3.1.3. The Manager or Supervisor of the affected Department;

3.1.4. Any other parties selected for their expertise in the type of incident.

3.1.5. The SQRA Coordinator and the Operations Manager (or Plant Manager – CGE) shall designate employees to act on their behalf as Incident Review Team members during times when they are not present at the facility.

4. Investigation Team Duties

4.1. Incident Review Teams under the direction of the SQRA Coordinator:

4.1.1. The initial duties of the Incident Review Team are to:

4.1.1.1. Immediately photo-document the scene of the incident,

4.1.1.1.1. Implement the Hot Work Permit SOP, as required by the nature of the incident or the hazard rating of the area in which the incident occurred.

4.1.1.1.2. Pictures are not required of personal injury victims. (However if applicable, pictures of the scene should be taken.)

4.1.1.2. Initiate the Incident Investigation Form (Appendix A),

4.1.1.3. Document the individuals or property, product or process involved;

4.1.1.4. Document the chain of events that preceded the incident;

4.1.1.5. Document the actions taking place at the time of the incident;

4.1.1.6. Determine if the process in which the incident occurred can be safely restarted without any corrective action,

4.1.2. The remaining duties of the Incident Review Team are to:

4.1.2.1. Document the SOPP references (SOP Title, SOP Number, applicable SOP Section) that applied to the events that occurred prior to and at the time of the incident,

4.1.2.2. Document the root cause of the incident,

4.1.2.3. Determine the corrective actions necessary to prevent the incident from recurring,

4.1.2.4. Identify process improvement opportunities discovered during the incident investigation.

4.1.2.5. Complete the Incident Investigation Form (Appendix A).

5. Preservation of Evidence Requirements

5.1. For incidents, the site of the incident must remain undisturbed until all necessary information and photographs pertaining to the incident have been gathered.

5.1.1. The SQRA Coordinator and the Operations Manager (or Plant Manager for CGE) will jointly decide when the site is released.

5.2. Original or copies of documents, laboratory analytical, production batch and campaign records, checklists, inspection forms, bill of lading, charts should be obtained, reviewed and retained with the Incident Investigation Form.

5.2.1. All retain samples of product, if needed, will be retained according to the Sample Retention SOP QC006xx.

6. Written Statement Guidance

6.1. The SQRA Coordinator or designee shall be responsible for obtaining a written statement from each individual who has or may have knowledge about the incident.

6.1.1. This shall include the employees of contractors, temporary employees, visitors or any other person on the facility grounds that may have knowledge about the incident and/or the events preceding the incident.

6.1.2. The statement should be obtained as soon as practical following the incident.

6.1.3. Employees shall be held available for interview by members of the Incident Review Team.

6.1.4. Contact phone numbers shall be obtained for all non-employees providing a statement for follow up questioning if necessary.

7. Guidance for Interviews

7.1. The purpose of the interview is to determine the facts about the incident.

7.1.1. The emphasis is on identifying what was happening immediately prior to and during the incident.

7.1.2. The answers to some questions should suggest other questions or avenues of investigation.

7.1.3. Prior to the interview:

7.1.3.1. The Incident Review Team members will read the written statements to assist in question preparation.

7.1.3.2. Original documents, checklists, inspection forms, bill of lading, charts, scratchpads, permits and notes from the time of the incident should be obtained and reviewed.

7.1.4. A portion of the interview should address the individual's opinions concerning why the event occurred and what could have prevented the event.

8. Identification of the Root Cause Requirements

8.1. After all of the interviews have been completed, the Incident Review Team will identify the chain of events which directly proceeded, and resulted in, the incident.

8.1.1. The Root Cause of the incident is identified by the Incident Review Team.

8.1.1.1. An incident has a single root cause, being either:

8.1.1.1.1. Inadequate/Lack of SOPP,

8.1.1.1.2. Inadequate Training,

8.1.1.1.3. Equipment Failure/Inadequate Design,

8.1.1.1.4. Failure to follow SOPP, Work Rules or General Expectations of the Job, or

8.1.1.2. A root cause leads to a chain of events that result in the occurrence of an incident.

8.1.1.3. A considerable amount of care needs to be exercised to identify all the points in the chain of events, including the SOPP citations applicable to each point.

8.1.1.4. Each point in the chain of events needs to be evaluated to determine if additional failures or secondary incidents occurred.

8.2. Secondary causes may also be determined and listed on the Incident Investigation Form.

9. Documentation of Disposition of Non-Conforming Product resulting from an Incident

9.1. Determine the disposition according to instructions in the SOP, Control of Non-Conforming Product QA009AF.

9.2. Document the final disposition on the Incident Investigation Form.

10. Corrective Action Requirements

10.1. Once the root cause has been identified and the chain of events evaluated, the SQRA Coordinator shall document appropriate corrective action(s) and a time frame for implementation on the Incident Investigation Form.

10.2. When developing a corrective action plan, the following procedure is suggested:

10.2.1. Clearly identify and state the identified root cause of the incident. Clear definition at this point can limit misunderstandings about the scope of work being planned.

10.2.2. Thoroughly evaluate the job that was being performed at the time of the event. Consider re-engineering, as well as, procedural changes. The goal is to identify how the job would ideally be performed according to Best Management Practices.

10.2.3. Identify the strengths and weaknesses of each suggested corrective action, including time and economic variables.

10.2.4. Identify controls and methods from the "ideal" situation that can be implemented to minimize the chance for the incident to recur.

10.3. Each step in the proposed corrective action should be evaluated to identify signals of impending trouble. Sometimes, corrective actions are proposed which may increase another hazard.

10.4. The risks to personnel, the environment, equipment, operations, and products that can be foreseen are to be identified and listed for incidents.

10.4.1. Potential methods of minimizing the risks are to be identified, discussed and methods selected to control the risks.

10.4.2. If two methods present different risks to personnel, the environment, equipment, operations, and products, the method presenting the least risk to personnel shall be adopted.

10.4.2.1. If personnel risks are comparable, the method that presents the least potential for environmental impact shall be selected.

10.5. A schedule for implementing the corrective action(s) shall be specified by the Incident Review Team and documented on the Incident Investigation Form.

10.5.1. The process in which the incident occurred cannot be restarted or resumed until all prescribed corrective actions are complete.

10.5.2. Interim corrective actions that allow the safe operation of a process on a temporary basis, are allowed as long as these actions are documented and explained as temporary measures, and, are made part of the corrective action schedule.

10.5.3. The production of product or process from which the incident occurred can be restarted before all prescribed corrective actions have been completed, as long as interim corrective actions have been determined to control any non-conforming output.

10.6. If the Root Cause of the incident is determined to be a Failure to Follow SOPP, Work Rules or General Expectations of the Job, refer to the Disciplinary and Termination Practices SOP HR003AF for disciplinary procedure and sample documentation forms. One of the forms must be completed by the subject employee, his/her Supervisor and the Facility Operations Manager.

10.6.1. Once completed, the form is to be placed in the subject employee's personnel file and a copy forwarded to the Corporate HR Manager.

11. Written Report Requirements

11.1. The completed Incident Investigation Form shall include:

11.1.1. A narrative description of the nature of the event;

11.1.2. The root cause;

11.1.3. The corrective action plan and schedule;

11.1.4. The following attachments (if applicable);

11.1.4.1. Written statements from all involved parties;

11.1.4.2. Photographs;

11.1.4.3. Transcripts of the interviews;

11.1.4.4. Original (or copies for process non-conformances) documents, charts, notes, etc. which assisted in clarifying the understanding of the incident or non-conforming process.

12. Management Review Requirements

12.1. The reports should be routed as instructed on the Incident Investigation Form to:

12.1.1 Operations Manager at the branch where the incident occurred (Plant Manager for CGE).

12.1.2 Regional Operations Manager.

12.1.3 Director of Safety, Quality, and Regulatory Affairs

12.1.4 The SQRA Coordinator shall perform a final review of and sign/date the Incident Investigation Form and file the form and any attachments in the proper location.

12.1.4.1This final review should include:

12.1.4.1.1 Assurance of form completeness;

12.1.4.1.2 Review of appropriateness of corrective actions for the nature of the incident; and

12.1.4.1.3 Identification of any additional corrective or preventive actions or improvements.

13. Recordkeeping Requirements:

13.1. The Incident Investigation Forms specified in the Written Report section and supporting documents shall be maintained in the facility legal file.

13.1.1. If applicable, the Process Safety Management or Risk Management Plan shall be amended by the SQRA Coordinator to indicate the location of the Incident Investigation Report.

13.2. Retain reports and documents according to the Records Retention Schedule in the SOP, Records Management AD005AF.

14. INCIDENT KEYWORDS AND PHRASES GUIDE

Type of Incident (Select All that Apply)

	Employee Injury
	Contractor Injury
	Other Third Party Injury
	Nonconforming Processes
	Onsite Release
	Offsite Release in Transit
	Offsite Release at Customer
	Fire / Explosion
	Fire / Explosion in Transit

Incident Severity (Select all that apply)

	Near Miss
	First Aid Injury
	OSHA Recordable Injury
	Lost Time Injury
	Fatality
	Operations Level Clean up
	Emergency Response Team Clean up
	Public Agency Response
	In transit, Driver Response
	In transit, Hydrite Personnel Response
	In transit, Public Agency Response
	No employees evacuated
	Partial facility evacuation
	Facility Evacuation
	Surrounding Neighborhood Evacuation
	Public Road closed to traffic

Chemical Releases / Fire (Select All that Apply)

	OSHA Non-hazardous material
	OSHA Hazardous material
	OSHA PSM regulated material
	EPA RMP regulated material
	RCRA Hazardous Waste
	Other regulated material

Reported To for Releases / Fire (Select All that Apply)

	No Report required
	LEPC
	EPA / DOT
	POTW
	Fire Department

Type of Container for Releases and/or Fire (Select All that Apply)

	Bag
	Supersack
	Pail
	Drum
	Tote
	Bulk Truck
	Rail Car
	Barge
	Process Vessel
	Storage Tank
	Pipe
	Hose

Type of Failure for Releases / Fire (Select all that apply)

	Mechanical defect		Container over pressured
	Punctured by outside object		Hose failed
	Corrosion		Gasket leaked
	Valve left open		Pump seal failed
	Operator error in making connection		

Type of Injury (Select all that apply)

	Fall		Contact with Blood or Body Fluid
	Slip		Noise
	Trip		Muscle strain from Lifting
	Struck by Object		Muscle strain from Pushing / Pulling
	Caught by Object		Muscle strain from Bending
	Cut / Punctured by contact with Object		Muscle strain from Reaching / Twisting
	Contact with Chemical		Insect Bite
	Contact with Electricity		Repetitive Motion
	Contact with Fire / Flame		Aggravated Existing Injury
	Contact with Hot Surface		Other
	Contact with Cold Surface		

Identify All Contributing Factors (Select all that apply)

	Housekeeping		Inappropriate Workstation Layout
	Equipment Failure		Walking / Work surface condition
	Equipment Malfunction		Failure to recognize hazard
	Equipment used improperly		Alcohol / Substance abuse
	Inadequate Procedure in SOP		Horseplay
	SOP not followed		Distracted / Lack of Attention
	Inadequate PPE specification		Other Person
	PPE specification not followed		

Identify the Root Cause of the Incident (Select One)

	Inadequate/Lack of SOPP
	Inadequate Training
	Equipment Failure/ Inadequate Design
	Failure to Follow SOPP

INCIDENT INVESTIGATION FORM

(APPENDIX A)

Branch: Time: _____ __ AM __PM

Date: _____ Does PSM Apply? Y/N (circle or bold)

Identification of Incident:

Investigation Team members:

Photo Documentation Required (3 copies of each needed; 1 for branch record, 1 for Reg. Ops mgr. and 1 for Dir. SQRA)

Photos taken by: Time: __ AM __PM Date:_____ No. of photos: __

WHAT HAPPENED?

I. Briefly describe the incident: (if more space is needed for hardcopy, attach page)

II. List each point of the chain of events preceding and through the occurrence of the incident, including SOPP reference(s) as applicable to each point: (if more space is needed for hardcopy, attach page)

III. List the individuals interviewed and attach interview notes: (if more space is needed for hardcopy, attach page)

IV. List the physical evidence collected: (if more space is needed for hardcopy, attach page)

ROOT CAUSE ANALYSIS

VI. Identify the root cause of the incident and explain the rational:
(mark one with X and add detail) (if more space is needed for hardcopy, attach page)

__*Inadequate/lack of SOP* or __*Inadequate training* or __*Equipment Failure/Inadequate design* or __Failure *to follow SOPP*

Details:

VII. Identify and list secondary causes: (if more space is needed for hardcopy, attach page)

RE-STARTING THE PROCESS

VIII. Can the process from which the incident occurred be safely restarted? __ Yes __ No

Describe what immediate actions were taken to re-start the process. (if more space is needed for hardcopy, attach page)

Signature: **Date:** **Time:** **__ AM __ PM**
Type/Print Name:

Before continuing, fax or email this form to the Regional Ops. Mgr, (Ops Mgr for CG) & Dir of SQRA

CORRECTIVE ACTION TO PREVENT RECURRENCE

IX. Identify the additional Corrective or Preventive Actions required to improve the process and prevent recurrence. (if more space is needed for hardcopy, attach page)

Verification of Corrective Action: Name: _____ Date: _____

POTENTIAL FOR RECURRENCE?

X. Does the potential exist for this incident to occur elsewhere at this facility? __ Yes __ No
If yes, can you identify the additional corrective or preventive actions necessary to prevent recurrence?

XI. Does the potential exist for this incident to occur elsewhere within the company? __ Yes __ No
Please add your comments, thank you!

XII. Incident Team Member Signature: Date: Time: __AM __ PM
Type or Print Name:

Submit a final cop of this form and all associated documentation to the Regional Ops Mgr, (Ops Mgr for CG), & Dir of SQRA

Cottage Grove
Quarterly Grounding Bonding Inspection Form

Inspector Name: _____ Inspection Date: _____

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
1	heavy gauge braided cable							
2	heavy gauge braided cable							
3	heavy gauge braided cable							
4	exothermic weld							
5	heavy gauge braided cable							
6	heavy gauge braided cable							
7	reel							
8	heavy gauge braided cable							
9	ground reel							
10	heavy gauge braided cable							
11	reel							
12	reel							
13	reel							
14	exothermic weld							
15	heavy gauge braided cable							
16	Ground reel							
17	heavy gauge braided cable							
18	heavy gauge braided cable							
19	heavy gauge braided cable Reel							
20	heavy gauge braided cable							
21	heavy gauge braided cable							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
22	heavy gauge braided cable							
23	Heavy Gauge by C3							
24	no reel							
25	Ground reel							
26	reel							
27	no reel							
28	reel							
29	reel							
30	reel							
31	no reel							
32	no reel							
33	no reel							
34	no reel							
35	reel							
36	water Grnd							
37	heavy gauge braided cable							
38	heavy gauge braided cable							
39	heavy gauge braided cable							
40	heavy gauge braided cable							
41	heavy gauge braided cable							
42	reel							
43	heavy gauge braided cable							
44	service bond							
45	exothermic weld							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
46	heavy gauge braided cable							
47	ground rods							
48	ground rods							
49	reel							
50	reel							
51	heavy gauge							
52	reel							
53	reel							
54	reel							
55	reel							
56	reel							
57	heavy gauge braided cable							
58	heavy gauge braided cable							
59	heavy gauge braided cable							
60	heavy gauge braided cable							
61	heavy gauge braided cable							
62	heavy gauge braided cable							
63	heavy gauge braided cable							
64	heavy gauge braided cable							
65	heavy gauge braided cable							
66	heavy gauge braided cable							
67	reel							
69	reel							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
70	reel							
72	heavy gauge braided cable							
73	heavy gauge braided cable							
74	heavy gauge braided cable							
75	heavy gauge braided cable							
76	heavy gauge braided cable							
77	heavy gauge braided cable							
78	reel							
79	reel							
81	reel							
84	exothermic weld							
85 (CW)	exothermic weld							
86 (CW)	main service ground							
88 (CW)	exothermic weld							
90 (CW)	exothermic weld							
91 (CW)	exothermic weld							
93 (CW)	exothermic weld							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
94 (CW)	exothermic weld							
96 (CW)	exothermic weld (lightning cable)							
97 (CW)	heavy gauge braided cable							
98 (CW)	heavy gauge braided cable							
99 (CW)	heavy gauge braided cable							
100 (CW)	heavy gauge braided cable							
101(CE)	heavy gauge braided cable							
101 (CE)	reel							
102 (CE)	no reel							
102 (CW)	heavy gauge braided cable							
103	heavy gauge braided cable							
104	heavy gauge braided cable							
105	heavy gauge braided cable							
106	heavy gauge braided cable							
107	heavy gauge braided cable							
108	reel							
109	railroad car							
110	railroad car							
111 (CW)	reel							
113 (CW)	flammable cabinet							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
114 (CW)	exothermic weld							
115 (CW)	flammable cabinet							
117 (CW)	building steel ground							
120								
122	reel							
123	reel							
124	reel							
125	ground reel (breezeway)							
126	reel							
127 (CW)	reel							
128	reel							
129	reel							
130	ground reel							
131	heavy gauge braided cable							
132	Heavy Gauge							
133	reel							
150	reel NW unloading							
151	reel							
152	reel							
153 (CW)	water Grnd							
156	ground reel							
157	ground reel							
158 (CW)	reel							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
159	ground reel							
160 (CE)	ground reel (next to B4 load cell)							
160 (CW)	flammable cabinet							
161	ground reel (next to R10 control panel)							
162	ground reel							
163	rail car pump							
164	L4 Reel							
165	reel							
166 (CE)	SW service ground							
167	heavy gauge braided cable							
168	heavy gauge braided cable							
169	heavy gauge braided cable							
170	heavy gauge braided cable							
171	heavy gauge braided cable							
172	heavy gauge braided cable							
173	heavy gauge braided cable							
174	heavy gauge water main							
175	heavy gauge braided cable							
176	heavy gauge braided cable							
177	heavy gauge braided cable							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly
178	heavy gauge braided cable							
179	heavy gauge braided cable							
180	heavy gauge braided cable							
181	heavy gauge braided cable							
182	heavy gauge braided cable							
183	heavy gauge braided cable							
184	R14 Bond							
185	R13 Bond							
186	R12 Bond							
187	steel structure bond							
188	RCR-R13-410							
189	RCR-R13-405							
190	steel structure bond							
191	PT800 Bond							
192	PT810 Bond							
193	PT805 Bon							
194	FT4 Bond							
195	ground reel							
196	ground reel							
197	ground reel							

Cottage Grove
Quarterly Grounding Bonding Inspection Form

ID	Description	Resistivity • (<10)	Wire		Clamp		Internal Inspection of reel	
			Connections tight, not loose or frayed	cracked, wire not kinked or corroded	Makes firm connection, not spongy	Bonding points sharp enough to contact metal through paint	Coil and latching device not corroded	Reel able to recoil properly

4 cables on flammable cabinets to the west of the east dock in the west plant

Areas Checked	OK/NOT OK	CORRECTIVE ACTION	DATE COMPLETED
100 TANK FARM			
200 TANK FARM			
300 TANK FARM			
400 TANK FARM			
CW TANK FARM			

Instructions:
Mark N/A if item is nonexistent and not needed.
Mark OK if proper operation is observed as described on table.
Mark Not OK for noncompliant checks. Mark Grounding and Bonding system "Out of Service" until repair is complete and system is retested. Request repair with a Maintenance Work Order (MWO) and document follow up resistivity measurement on MWO. Attach copies of MWO to this inspection form.

EMPLOYEE TRAINING RECORD SLIP
HAZARDOUS WASTE INTRODUCTION

EMPLOYEE NAME: _____

BRANCH: _____

DATE OF TRAINING: _____ **LENGTH OF TRAINING:** _____ **(MINUTES)**

TRAINERS: _____

TRAINING REQUIREMENTS

Training Objective: To meet the basic requirements of the applicable regulatory standards, provide the employee with basic information related to hazardous waste regulation and basic technical information related to the safe handling, storage and disposal of hazardous wastes. The training objective will be met by reviewing documents listed in the material section, discussion and completion of a quiz.

Standards:
29 CFR 1910.1200 - Hazard Communication Standard
29 CFR 1910.120 - Hazardous Waste Operations & Emergency Response
40 CFR 260-264 and NR630 (and related parts) Solid and Hazardous Waste Regulations
ALL OTHER FEDERAL, STATE, AND LOCAL REGULATIONS WHICH APPLY.

Materials:
ENU SOP
Land Ban Form
MSDS
Non-Hazardous Waste Management Policy
Obsolete Inventory & Hazardous Waste Mngt. SOP

I have completed the training outlined in the sections above.

EMPLOYEE SIGNATURE: _____

DATE: _____

Original: Employee's Training File