

**STORM WATER POLLUTION PREVENTION PLAN**

**L'ANSE WARDEN ELECTRIC COMPANY, LLC  
FUEL AGGREGATION FACILITY  
L'ANSE, MICHIGAN**

**September 2012  
Revised May 2013  
Final Revision July 2013**



**Coleman  
Engineering**

*Civil Engineering • Environmental Engineering  
Geotechnical Engineering • Land Surveying • Test Drilling  
Construction Quality Control • Materials Laboratory Testing*

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**CEC Project #EE-10295B**

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## I. PLAN REVIEW AND REVISIONS

This Storm Water Pollution Prevention Plan (SWPPP) has been reviewed by and/or updated with changes submitted to the appropriate individuals as of:

Date	By	Representing
May 3, 2013	J.R. Richardson	LWEC
	Steve Walsh	Traxys Power
	Darryl Koski	LWEC
	John Polkky	LWEC

Note:

L’Anse Warden Electric Company, LLC (LWEC) Fuel Aggregation Facility (FAF) should internally review this plan on an annual basis. This review should include an amendment to the SWPPP if there is any expansion, production increases, process modifications, changes in material handling or storage, or if other activities are planned which will result in significant increases in exposure of pollutants to storm water or if site compliance inspections, other inspections or other means reveals that provisions of the SWPPP are ineffective in controlling storm water pollutants discharged to the waters of the State. Each time the plan is reviewed and/or amended, the above form should be completed for recordkeeping purposes.

## **II. PURPOSE OF PLAN**

The purpose of this SWPPP shall be to:

- Identify sources of storm water contamination to the storm water drainage system at the L'Anse Warden FAF.
- Identify and prescribe appropriate “source area control” best management practices designed to prevent storm water contamination from occurring.
- Identify and prescribe “storm water treatment” best management practices to reduce pollutants in storm water prior to discharge.
- Prescribe actions needed either to bring non-storm water discharges under National Pollutant Discharge Elimination System (NPDES) permit or to remove these discharges from the storm drainage system.
- Prescribe an implementation schedule so as to ensure that the storm water management actions described in the SWPPP are carried out and evaluated on a regular basis.

The purpose of the SWPPP and the requirements for implementation are more fully explained in the General Permit No. MIS310000 (effective April 1, 2008, expiring April 1, 2013) and Notice of Intent filed August 20, 2010, and the Certificate of Coverage No. MIS310650 dated March 22, 2012, a copy of which is included in Appendix A.

### III. BACKGROUND INFORMATION

**Location:** L’Anse Warden Electric Company, LLC (LWEC) Fuel Aggregation Facility (FAF) is located at 17696 US Hwy 41, L’Anse, Michigan. More specifically, the FAF is located in the Northeast ¼ of the Northwest ¼ of Section 8, Township 50 North, Range 33 West, Township of L’Anse, Baraga County, Michigan, as presented in Figure 1. The property is leased from CertainTeed Gypsum and Ceiling Manufacturing, Inc. (CertainTeed) located at 200 South Main Street, L’Anse, Michigan.

**Operations:** LWEC owns a former coal, fuel oil, and natural gas fired electrical generation station which has been converted to a biomass fueled electrical and steam generating station at 157 South Main Street in L’Anse, Michigan. As part of an initiative to develop sustainable energy through reuse, scrap wood is being used as biomass fuel at the LWEC facility which is permitted under Part 55, Air Pollution Control, of the NREPA, as evidenced in Renewable Operating Permit (ROP) No. B4260-2011. LWEC and its subcontractors intend to collect and process scrap wood at the FAF also located in L’Anse as noted above. A copy of the LWEC Scrap Wood Management Plan, dated January 2011, is presented in Appendix H.

The FAF will aggregate and process scrap wood, including construction debris, industrial wood, wood waste from secondary manufacturing, and wood or wood products treated with creosote or pentachlorophenol (i.e., railroad ties).

Materials will be delivered to the FAF from multiple sources. All materials brought to the FAF will be logged to identify source supplier, weight, and date of delivery. The FAF operator is required to specify to his suppliers those materials that are unacceptable.

The raw materials used at the L’Anse Warden FAF are summarized and presented in Table 2. Raw materials are received and unloaded outside of the buildings. The LWEC Scrap Wood Management Plan outlines the storage and handling practices of the raw wood materials delivered to the site and the storage of processed scrap wood and railroad ties. Efforts are made to keep raw materials and finished products from contacting storm water runoff. Chipping and sorting operations are conducted outdoors using a portable wood chipper/sorter. Finished products are generally stored outdoors on graveled surfaces. Processed railroad ties are stored temporarily outdoors under tarpaulin coverage in accordance with the Scrap Wood Exemption before reuse or final disposition within 60 days or under roof until shipment to the customer (LWEC) in accordance with the L’Anse Warden FAF Scrap Wood Management Plan. Processed wood chips are transferred to the LWEC Facility Fuel Storage Building via the FAF Overland Conveying System or directly into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building. The FAF Overland Conveying System consists of a loading bin, covered wood chip conveyor, wood room containing a chip resizer wood feed screw, rotary feeder, disc screen dust collector and blower.

Wood chips are transported from the Wood Room Building via pneumatic conveyor (a fully enclosed elevated pipeline) to the LWEC Facility Fuel Storage Building.

Five (5) bulk storage systems are located at the FAF. Raw materials stored in four (4) separate systems are liquid propane, scrap wood, scrap railroad ties, and fuel oil. The fifth storage system is the processed wood storage, one for untreated wood and the other being the railroad tie storage building.

- Liquid propane is delivered by the local supplier to the facility via bulk truck and unloaded into the liquid propane aboveground storage tank (AST) operated by Verso. The liquid propane product is extremely volatile; it will rapidly evaporate if spilled, and, therefore, not impact storm water quality.
- Scrap railroad ties are delivered to the facility in railroad car or truckload quantities, sorted as creosote-treated or pentachlorophenol-treated, and stacked outdoors at the site prior to processing.
- A front end grapppler loader moves the scrap railroad ties to the portable chipper/sorter for processing. The chipper/sorter conveyor discharges processed railroad tie products on to a concrete pad. The processed railroad ties are then hauled by a front end loader to the respective storage building, the FAF Loading Bin and Overland conveying system or loaded directly into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building, or otherwise handled in accordance with the Scrap Wood Management Plan.
- Untreated scrap wood is off-loaded from semi-trailers via truck dumper, outdoors onto concrete surface. A front end loader then moves the scrap wood to the portable chipper/sorter for processing and then to the respective storage area. A front end loader then transfers processed wood chips to the FAF Loading Bin and Overland Conveying System or directly into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building, unless otherwise handled in accordance with the Scrap Wood Management Plan.
- Processed untreated scrap wood is off-loaded from semi-trailers via truck dumper, outdoors onto concrete surface. A front end loader then moves the processed wood chips to the FAF Loading Bin and Overland conveying system or directly into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building, unless otherwise handled in accordance with the Scrap Wood Management Plan.
- Fuel oil is delivered to the facility via tanker trailer and unloaded into the double walled bulk storage tank owned and operated by Verso or directly into mobile heavy equipment such as front end loader, grapplers, carrylift, or material handlers with trailers as well as the portable chipper.

#### **IV. POLLUTION PREVENTION TEAM**

A pollution prevention team (PPT) has been established for the L’Anse Warden FAF. The PPT consists of employee’s of LWEC. These individuals shall be responsible for development, evaluation, maintenance and updating of the SWPPP, monitoring/inspection activities, employee training programs, implementation of the maintenance practices, preparing and submitting reports, serving as a Certified Storm Water Operator and a Michigan Department of Environmental Quality (MDEQ) contact and the coordination of facility compliance as directed by the SWPPP. The key member of the PPT, their job title, and their specific duties are presented in Table 1.

**TABLE 1**  
L’Anse Warden Electric Company, LLC Fuel Aggregation Facility  
**POLLUTION PREVENTION TEAM**

Name	Position	Responsibilities
Darryl Koski	PPT Leader General Foreman	Development of SWPPP Plan Overall facility compliance Plan updating DEQ contact Employee training MDEQ Certified Operator # I-09627
J.R. Richardson	PPT Member Technical Manager & Regulatory Affairs	Development of SWPPP Plan Overall facility compliance Plan updating Perform employee training programs Implement maintenance practices MDEQ Certified Operator #I-09631
John Polkky	PPT Member	Plan updating Perform employee training programs Implement maintenance practices



## V. FACILITY SITE DESCRIPTION

The L'Anse Warden FAF occupies approximately 7 acres. Additional lands have been leased from CertainTeed Ceilings Corporation to accommodate the right-of-way required for the FAF Loading Bin and Overland Conveying System. The adjacent industrial properties are presented below:

- North: CertainTeed Gypsum and Ceiling Manufacturing, Inc.
- West: Undeveloped lands owned by CertainTeed Gypsum and Ceiling Manufacturing, Inc., Keweenaw Bay
- South: U.S. 41 and Commercial properties
- East: Verso Wood Yard, UPPCO Substation, Falls River and L'Anse Warden Power Plant

The L'Anse Warden FAF has two (2) drainage areas and two (2) outfalls, Outfalls 001 and 002. The drainage areas, their respective pattern of flow, and associated receptors are illustrated on the "Drainage Map" (Figure 3). Each drainage area and each outfall has been denoted by separate color coding or numerical designation.

Outfall 001 receives drainage from the gravel roadways and wood storage areas of the L'Anse Warden FAF, Wood Chip Conveyor, FAF Wood Room Building, the VERSO Log Storage Areas, scrap tie storage area on Verso leased property, property leased to VERSO from CertainTeed, and the Union Pacific Railroad siding. This storm water is conveyed to CertainTeed Outfall 007 via a ditch line extending along the southern boundary of the Union Pacific Railroad line to a culvert system at the junction of the railroad tracks and CertainTeed western access road, then northwesterly in a ditch way to a culvert discharging into Keweenaw Bay of Lake Superior (i.e., Outfall 007).

Outfall 002 receives drainage from the U.S. 2 culvert and ditch via buried pipeline to an infiltration area west of the FAF loading bin and wood room conveyor, a buried pipeline from the truck dumper area, and the surface runoff from the railroad tie processing area.

This extended infiltration area exists along the western portion of the L'Anse Warden FAF site. Drainage from the roof of the processed railroad tie storage building and gravel roadways areas located in the southern half of the facility flow to vegetated areas along the western property limits. Any excess storm water runoff from this infiltration area discharges to the ditch line along the southern boundary of the Union Pacific Railroad tracks and ultimately CertainTeed Outfall 007.

- All wood-based raw materials utilized by L'Anse Warden FAF are stored outdoors without cover at this facility. Finished products are stored on gravel surfaces, either outdoors or in the case of the processed railroad ties within a building or under tarpaulin cover, awaiting shipment to LWEC, except as permitted by the Scrap Wood Management Plan. LWEC is responsible for storage of all wood-based raw materials utilized by the

FAF and corresponding storm water management associated with runoff from these materials, either staged on FAF property or adjacent Verso/ CertainTeed properties.

Approximately 80 percent of the total area of the facility is currently used for production purposes. All the production activities occur outside buildings. The remaining 20 percent is non-production area, consisting of roadways, parking lots, undeveloped lands, and green space. As such, the SWPPP includes management of storm water from these storage areas.

## **VI. EXISTING SAMPLING DATA OR OBSERVATIONS**

No chemical analyses of storm water discharges from the L'Anse Warden FAF facility have been performed to date. However, a visual examination of storm water leaving the facility at the outfalls (after a runoff event) has been completed by the PPT members. No visible evidence of storm water impacts were noted at any of the outfalls during the examination. Water quality of the surface water receptors adjacent to the L'Anse Warden FAF facility and aquatic life, including vegetation, that reside within these receptors did not appear to be degraded or distressed at the time of the visual inspection.

## **VII. POTENTIAL SOURCES OF STORM WATER CONTAMINATION**

Potential sources of storm water impact at the L'Anse Warden FAF facility are directly associated with the transporting and storing of materials and equipment.

Materials having the potential to contaminate storm water have been inventoried and are summarized in Table 2, Material Storage. The inventory data sheet also includes information on location, length of exposure, and current best management practices specific to each potential source of storm water impact.

According to available information, typical pollutants associated with the products from this type of industry are:

- Soil – from the exposed areas to in-storage equipment and materials
- Steel and wood debris – from transportation and storage
- Oil and grease – from equipment and vehicle maintenance and operation
- pH – from wood and metal components
- Creosote – treated railroad ties and processed chipped product
- Pentachlorophenol – treated railroad ties and processed chipped product

Reasonable potential for runoff of all significant particulate generating processes:

- Railroad tie processor/chipper operations.
- Processed wood loading into FAF loading Bin.
- Processed wood transfer from Loading Bin via inclined conveyor to Woodroom Building.
- Rejects/bypass conveyor from Woodroom Building.
- Pneumatic conveyor system.

Based upon laboratory analytical data provided in the Scrap Wood Management Plan (Appendix H), the leachable concentrations of the metals, VOCs, and SVOCs analyzed were all less than the level of detection and, therefore, should not contribute to storm water contamination.

**TABLE 2**  
L'Anse Warden Electric Company, LLC Fuel Aggregation Facility  
**MATERIAL STORAGE**

Material	Location	Does Material Contact Storm Water? If Yes, Why?	History of Exposure	Current Material Management Practices
(1) Gravel Parking Lot & Roadways	Shipping, Storage & Receiving Area Semi-Trailers & Mobile Equipment	Yes – Located Outdoors	>3 Years	Preventative Maintenance/Routine Inspection
(2) Scrap Railroad Ties	1) Pentachlorophenol-treated 2) Creosote--treated	Yes – Stored Outdoors 1) Eastside of Access Roadway 2) South of Verso Woodyard, South side of Property Boundary, and west of Processed Tie Storage Building	< 60 days	Routine Inspection, Good Housekeeping,
(3) Processed Railroad Ties	Southwest Side of Site Processed Railroad Tie Storage Building and Concrete Pad.	Normal – Stored Indoors Temporary Outdoor Storage	<1 Year	Covered Storage Building or under tarpaulin cover. Chips transported by conveying systems or loaded into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building.
(4) Employee Gravel Parking Lot	East Side of Site	Yes – Located Outdoors	>3 Years	Routine Inspection/Preventative Maintenance
(5) Untreated Scrap Wood and Processed Wood	Outside Storage Area Concrete Pad	Yes – Stored Outdoors	<1 Year	Scrap Wood processed into chips then transported by conveying systems or loaded into live bottom or dump trailers for delivery to the LWEC Facility Fuel Storage Building.
(6) Hydraulic Fluid	Truck Dumper – Hydraulic Fluid Reservoir	Yes – Located Outdoors	<1 Year	Routine Inspection, Good Housekeeping, Reservoir Tank with Secondary Containment

Material	Location	Does Material Contact Storm Water? If Yes, Why?	History of Exposure	Current Material Management Practices
(7) Trash/Refuse/ Scrap Metal/ Solid Waste	East of Site Entrance Access Road from US Hwy 41 and east of paved access roadway to UPPCO L'Anse Substation.	Yes – Stored Outdoors	< 1 Month	Routine Inspection, Prevention Maintenance, Open Dumpster with No Cover, Periodic Pickup. Scrap metal dumpsters are tarped.
(8) Liquid Propane	VERSO AST	Yes – Leaks	None	Routine Inspection, Good Housekeeping, Evaporates Quickly
(9) Diesel Fuel Oil	VERSO AST, Portable Chipper, Mobile equipment	No - Secondary Containment	None	Double-walled Storage Tank, Periodic Delivery, Paved Surface Unloading Area
(10)Lubricants – oils	Maintenance Shop and Wood Room Stationary Equipment oil reservoirs	Normal – Stored Indoors	<1 Year	Routine Inspection, Good Housekeeping, Reservoir Tank with Secondary Containment

**VIII. STATUS OF NON-STORM WATER DISCHARGES TO THE STORM  
SEWER OR OUTFALLS**

An on-site review of the facility was made to identify any non-storm water discharges. It was found that currently, there are no non-storm water discharges at the L'Anse Warden FAF facility.

## **IX. SOURCE AREA CONTROL BEST MANAGEMENT PRACTICES**

In an effort to minimize storm water contamination and protect adjacent surface water quality, L'Anse Warden FAF shall employ various source area control best management practices (BMP's). Source area BMP's outlined within this plan is designed to prevent storm water from coming in contact with potential contaminants present at the facility. A discussion of each proposed BMP is presented in the following paragraphs and a schedule for implementation is outlined in a forthcoming section.

### **A. Non-Structural BMP's**

#### **1. Practices To Control Significant Soil Erosion**

The surface grade across the entire L'Anse Warden FAF facility is relatively flat. Areas that are prone to erosion due to slope factors and high traffic volumes have been ripped and/or paved, i.e. scrap wood processing and storage areas. The employee and visitor parking areas are aggregate cover. The access roadway and temporary parking area for semi-tractor/trailers is aggregate cover. This area could be susceptible under extreme conditions to moderate erosion when subjected to storm water runoff. To minimize the loss of sediments and their negative effect on storm water quality, L'Anse Warden FAF will implement the following programs:

- Aggregate cover will be maintained in all exposed areas of the facility in an effort to stabilize sediments and reduce erosion.
- Unpaved areas of the L'Anse Warden FAF facility shall be leveled once per year in an effort to reduce ponding and to minimize the exposure of soil particles to effects of storm water runoff.
- Vegetated buffer zones around the perimeter of the outdoor areas and the storm water outfall will be maintained and avoided by all equipment and industrial activities in order to promote control of the effects of erosion.
- Re-establish a vegetated buffer zone along the railroad siding ditch line adjacent to the northern perimeter of the facility.

#### **EMPLOYEE PARKING LOT**

Storm water management of this employee parking lot is the responsibility of the owner, the L'Anse Warden FAF. It will be the L'Anse Warden FAF's responsibility to maintain vegetated buffer zones surrounding this area, in particular adjacent to the western property boundary and maintenance of riprap and/or pilings along the wood storage areas as well. General/routine housekeeping practices will be handled by L'Anse Warden FAF or its contractor.

#### **VACANT LAND**

The surface grade across the vacant lands surrounding the L'Anse Warden FAF facility is highly variable, from relatively flat terrain to steep side slopes. Areas to the east of the L'Anse Warden FAF facility have been disturbed during the operations of the VERSO

woodyard and railroad sidings. A small intermittent stream traverses the adjacent CertainTeed property to the west of the FAF before it discharges to Keweenaw Bay along the western edge of the CertainTeed property. Vegetated buffer zones and infiltration areas have been established to reduce storm water volumes discharged from these areas. Areas along the hillside to the south of the L'Anse Warden FAF and the US Hwy 41 corridor have not been disturbed by the site development. These areas will remain vegetated and maintained as infiltration areas to control discharge of storm water discharge off site.

A vegetative buffer zone (green space) has been established south of the L'Anse Warden FAF facility and the US Hwy 41 corridor.

## 2. Good Housekeeping

All employees of L'Anse Warden FAF shall be required to practice good housekeeping habits in order to maintain a working area free of materials that may cause storm water impact. Good housekeeping includes the following measures:

- Material handling equipment will not be operated with significant oil or hydraulic leaks. Equipment that develops a leak will be immediately turned off and brought to a repair area for maintenance. Absorbent materials will be used to contain and absorb oil spills. Spilled material and absorbents will be collected for proper disposal or recycling.
- Small quantity wastes (including used oils, oil filters, and antifreeze) generated during regular work activities or through equipment maintenance procedures will be consolidated in proper covered locations or in closed containers for disposal or recycling.
- Scrap metals recovered during regular work activities (railroad tie S-irons, tie plates, steel banding, nails, etc.) or through equipment maintenance procedures will be consolidated in proper closed containers for recycling.
- Drums, containers, storage racks and raw/finished materials will be organized in an orderly manner, out of high traffic areas, as to reduce accidental discharges and to promote easy access or transfer.
- All chemicals, degreasers, cleaning liquids/agents, and oils and greases shall be stored in designated locations out of contact with storm water.
- All routine mobile equipment maintenance shall be performed in the maintenance building and out of contact with storm water.
- Litter and debris around the entire facility and that which is trapped within the vegetative buffers adjacent to property boundaries and outfalls will be picked up, as necessary.



- Large quantity wastes (railroad tie splinters and entrapped soils) generated during the unloading and storage operations will be consolidated into a storage pile. Silt fence will be installed on the downgradient sides of this storage pile. Periodically, contents of this pile will be loaded into dumpsters and hauled by outside contractor to a licensed landfill for disposal.

The PPT member shall be responsible for communicating and emphasizing the good housekeeping concepts through training, visual displays, and periodic staff safety meetings.

### 3. Preventative Maintenance

L'Anse Warden FAF employees will be required to service production equipment on the following basis:

#### a. Materials handling equipment:

All routine preventive maintenance activities specified above will occur under roof, and following applicable good housekeeping practices. Contractor owned transport vehicles bringing/storing/staging raw supplies and removing finished product are expected to be serviced by the owner on a schedule similar to that recommended by the manufacturer.

#### b. Stationary/mobile processing equipment:

All stationary/mobile manufacturing equipment is positioned outdoors and may have contact with storm water. Each piece of equipment will, however, be serviced on the schedules recommended by the manufacturer. Special precautions will be taken during these maintenance periods to avoid petroleum product spills and subsequent contact with storm water or runoff.

Routine service activities shall be performed to the extent possible under roof by L'Anse Warden FAF authorized personnel. Arrangements shall be made to perform extraneous and labor intensive repair/service work to materials handling and/or stationary equipment performed by in-house personnel or by contracted personnel on the premises or at a off site location, dependent upon the magnitude of the work involved.

All production equipment and areas adjacent to that equipment, product storage areas, and raw materials stockpiles will also be inspected by the PPT member on a monthly basis during a site walkover or at more frequent intervals as dictated by the situation.

### 4. Visual Inspections

Visual inspections will be performed at the L'Anse Warden FAF to determine the effectiveness of the good housekeeping and preventative maintenance programs. The

inspections will be conducted on a monthly basis and periodically during storm events producing a significant amount of runoff. The PPT member will perform these inspections. All indoors and outdoors storage, handling, and production areas will be examined in addition to the production equipment. A careful inspection of the outfalls, areas upgradient of the outfalls, and vegetative buffer zones adjacent to the surrounding surface waters will be performed at this time to further evaluate BMP effectiveness. Copies of the housekeeping and preventive maintenance inspection forms are presented in Appendix F of this plan.

## 5. Spill Prevention and Response

A material spill can occur at any of the aforementioned areas, or at any location at the L'Anse Warden FAF at any time. Spill prevention shall include good housekeeping measures, deployment of unloading area catch basin covers when receiving raw materials, leak detection through routine preventative maintenance and inspections, and proper usage of all equipment through employee training programs. Good housekeeping and preventative maintenance measures are discussed within Section IX 2 and 3 of this plan, respectively. Employee training programs are briefly discussed within Section IX 6 of this plan.

All employees, especially those working in areas or with equipment capable of discharging an environmentally hazardous material, shall be prepared to respond immediately to minimize the threat of the environmentally hazardous material(s) from contacting storm water after an accidental discharge. Emergency situations include those that are immediately harmful or have the potential to harm human health, safety, welfare, or the environment. Examples include fire, explosion, or any unplanned discharge of waste to the air, land, groundwater, or surface water. L'Anse Warden FAF company policy in the event of an emergency dictates the following:

The objectives of the emergency response actions are to:

- Protect life, health, drinking water supplies, property, and natural resources
- Identify and control the source of the discharge
- Prevent or abate the migration of the discharge

Emergency response actions will be implemented as soon as possible. Responsibilities for emergency response actions are divided between the facility, MDEQ, and local authorities. Potential emergency response actions and persons responsible for emergency response actions include, but are not limited to:

- a. Contain, control or remove contaminated materials by L'Anse Warden FAF personnel, if appropriate:

These actions may include, but are not limited to:

- 1) Constructing barriers such as berms, dikes, booms, or trenches.

- 2) Using fog spray on gaseous emissions.
  - 3) Preventing the flushing of hazardous substances to sewer systems, surface or groundwaters, or sensitive environments.
  - 4) Preventing damage of non-leaking containers.
  - 5) Plugging or over-packing leaking containers.
  - 6) Chemically treating or otherwise altering the hazardous substance to render it less of a threat to public health and safety, and the environment than the original substance. Not all chemical treatments are acceptable (e.g. use of surfactants/dispersants in response to a petroleum product discharge) and requirements should be checked before use of such products.
  - 7) Removing remaining product from containers, or other processing or storage systems to contain or control further discharges.
- b. Contacting an immediate supervisor and/or the emergency coordinator. The emergency coordinator will contact the necessary agencies.
  - c. Securing the facility.
  - d. Limiting access to the site or facility.
  - e. Evacuating the area that is threatened.
  - f. Arranging provision of safe, alternative water supplies to impacted persons.
  - g. Prevention of further discharges to the environment, including the removal of as much materials as necessary from the source to prevent continued discharges. Such actions may include, but are not limited to:
    - 1) Soaking up liquids with sorbants (e.g. oil dry).
    - 2) Using skimmers or other mechanical collectors for floating solids or liquids.
    - 3) Vacuum dredging for sunken solids, or liquids.
    - 4) Aerating contaminated waters and soils.
    - 5) Excavation, treatment, storage, or disposal of contaminated soil.
    - 6) Installing recovery trenches or wells for free product recovery.
  - h. Identification, mitigation, and continued monitoring for fire, explosion, and vapor hazards, including venting of enclosed areas.
  - i. Protecting the discharged hazardous substance from weather conditions that may affect the chemical state, composition or movement of the hazardous substance.

On-site spill control equipment at the L'Anse Warden FAF includes shovels, brooms, and adsorbents. These materials are readily available and are stored in designated areas, as shown on Figure 3, throughout the facility for use in containing spills. Fire fighting equipment is also located throughout the facility. In the event of large spills or to offer additional assistance, L'Anse Warden FAF has access to outside remediation contractors.

All employees of the L'Anse Warden FAF who respond to an incident shall use equipment and protective clothing designed to insure their health and safety. Key personnel will be notified of each incident. The PPT leader will be notified of all

emergencies. The PPT leader will contact company employees, local emergency response units, county, state, and/or federal agencies, as necessary.

The PPT leader, upon remediation of each incident, shall complete an incident report. A copy of an incident report sheet is presented in Appendix C of this plan.

## 6. Employee Training and Awareness

The PPT members shall coordinate annual employee awareness meetings. These meetings will stress storm water pollution prevention and include information and responses discussed in the previous sections of this plan. Orientation shall be provided for all new employees and refresher training shall be provided at least annually. Orientation and refresher training programs will include erosion control, good housekeeping, preventative maintenance programs, visual inspections, and spill prevention and responses. Successful implementation of source control measures begins with an informed workforce. Awareness of one non-structural source control component will lend itself well to implementation of the others. A copy of an employee training attendance sheet is presented in Appendix D of this plan.

## B. Structural BMP's

Eleven (11) structural source controls have been implemented at the L'Anse Warden FAF at this time. Property boundary constraints as well as budgetary restraints and costs associated with implementation of structural BMP's are also factors used in this recommendation.

Structural and non-structural source controls are presented in Table 3, "Storm Water Source Control Best Management Practices." Eleven (11) areas were considered for structural BMP development including:

- Wood Room Stationary Equipment – Petroleum product reservoirs utilizing the building as secondary containment.
- Gravel Parking Lot and Roadways – routine grading of gravel surfaces.
- Scrap Railroad Ties – storage in designated areas only. Maintain vegetative buffers and silt fence along western property boundary. Maintain vegetative buffer and berm along southern property boundary.
- Processed Railroad Ties – Temporary storage on concrete pad, longer storage within Processed Railroad Tie Storage Building.
- Fuel Oil – double walled storage tanks located adjacent to Maintenance Shop Building.
- Lubricants / Hydraulic Oil – Maintenance Shop storage within secondary containment.
- Processed Wood Storage – long term storage on concrete pad, sheet pile wall along western perimeter of storage area.
- Woodroom Loading Bin area – maintain silt fence about infiltration area. Maintain vegetated buffer and rip rapped areas.

- Woodroom Building rejects/bypass conveyor – discharge on to concrete pad, temporary storage.
- Scrap railroad tie/soils pile – silt fence along downgradient side of pile.
- Outfall 001 Area – maintain vegetative buffer west of Woodroom Building in ditch along south side of railroad tracks.
- Outfall 002 Area – maintain infiltration area and vegetated buffer. Install silt fence along property boundary as needed.

**TABLE 3**

L'Anse Warden Electric Company, LLC Fuel Aggregation Facility  
**STORM WATER SOURCE BEST MANAGEMENT PRACTICES**

Material	Proposed Source Control Best Management Practice	Implementation Deadline
Gravel Parking Lot And Roadways	Maintain Gravel, Vegetative Buffer Zones, Routine Maintenance	February 2011
Scrap Railroad Ties	Maintain Gravel, Vegetative Buffer Zones, Routine Maintenance, silt fence. Good Housekeeping	September 2012
Processed Railroad Ties	Concrete pad, storage building. Good Housekeeping.	February 2011
Scrap Railroad Tie/Soils Pile	Downgradient silt fence. Good Housekeeping.	February 2011
Fuel Oil	Double wall tanks. Good Housekeeping.	February 2011
Processed Wood	Concrete Pad, Sheet pile wall/containment. Good Housekeeping.	February 2011
Lubricants/Hydraulic Oil	Spill Prevention/Containment. Good Housekeeping.	February 2011
Outfall 001 Area	Maintain vegetative buffer. Good Housekeeping.	February 2011
Outfall 002 Area	Maintain infiltration area, silt fence. Good Housekeeping	May 2013

Note: All current non-structural and existing treatment BMP's will remain in place.

## **X. RESIDUAL POLLUTANTS**

Currently, none of the following residual pollutants are exposed to storm water at the L'Anse Warden FAF:

- A. Pollutant for which an effluent limitation is contained in any discharge permit issued to the permittee, for this facility, by the MDEQ.
- B. Pollutant contained in a categorical effluent limitation or pretreatment standard to which the permittee is subject for this facility.
- C. SARA Title Section 313 "Water Priority Chemicals" [42 U.S.C. s. 11023(c)] for which the permittee, for this facility, has reporting requirements and which has the potential for contaminating storm water.
- D. Any other toxic or hazardous pollutants from present or a past activity at the site that remain in contact with precipitation or storm water and which could be discharged to the waters of the state, and which are not regulated by another environmental program.

However, any one, or combination thereof, of the following parameters may be present in storm water discharged from the L'Anse Warden FAF:

- Oil and Grease
- Total Suspended Solids
- 5 - Day Biochemical Oxygen Demand, BOD5
- pH
- Chemical Oxygen Demand, COD
- Creosote
- Pentachlorophenol

With the implementation of an effective SWPPP, the residual concentrations should be negligible.

## **XI. STORM WATER TREATMENT BMP's**

Based upon information gathered thus far, the potential for residual pollutant loadings after non-structural and structural source control implementation is believed to be minimal. Therefore, storm water treatment practices are not warranted. L'Anse Warden FAF will however, continue to maintain naturally occurring vegetative buffers, which exist along property boundaries, and outfalls. Maintenance will be minimal. Filter strip grasses will require periodic upkeep to promote a dense and healthy plant stock. Forested species will be left alone to naturally succeed. Materials and debris trapped in the vegetative filters will be periodically removed.

## **XII. FACILITY MONITORING PLAN**

The PPT leader shall perform comprehensive annual facility site compliance inspections, regular visual inspection of storm water discharge quality, and annual chemical storm water monitoring (if necessary). The PPT leader, for purposes of comparison and tracking, shall keep copies of inspection records on file. These records will be an effective tool for establishment of standard protocol, identification of trends, tracking progress, development of improved BMP's, and for identification of storm water impacts and problem areas. The SWPPP shall be amended, as necessary, if the inspections yield problem areas, which warrant corrective actions.

The monitoring and reporting activities are discussed in greater detail within the forthcoming sections.

### **A. Comprehensive Annual Facility Site Compliance Inspection**

The PPT members shall perform a comprehensive evaluation of the entire facility once a year to confirm drainage patterns and any new potential for storm water impact. Emphasis shall be placed on areas with the highest potential (discussed in Section VIII of this plan) for impact. However, the entire site, outfalls, infiltration areas, up gradient areas, down gradient areas and all activities shall be carefully examined.

The L'Anse Warden FAF members will also evaluate the effectiveness and operation of implemented BMP's. The lists of BMP's are presented in Section IX of this plan. The SWPPP shall be modified accordingly based upon findings of these inspections. All observations shall be recorded on Annual Facility Site Compliance Inspection data sheets. A copy of an Annual Facility Site Compliance Inspection data sheet is provided in Appendix E of this plan. The Annual SWPPP Review Report Form and the MDEQ SWPPP Annual Review Checklist are provided in Appendix I of the Plan.

### **B. Quarterly Comprehensive Site Inspection of Storm Water Discharge Quality**

On a quarterly basis, a PPT member shall conduct a comprehensive site inspection of storm water discharges at each outfall. Areas upgradient of the L'Anse Warden FAF shall be inspected to confirm that impacts (if present) are not coming from off-site sources. The inspections will be conducted when all of the following climatic elements have been satisfied:

- During daylight hours.
- When sufficient runoff occurs (moderate rainfall or snowmelt events).
- Within 30 minutes of a runoff event, as practical, but not to exceed 60 minutes.

Observations of storm water color, odors, turbidity, floating solids, foam, oil or iridescent sheens, or any other visual or olfactory indicators of storm water impact will be recorded. Special attention will be given to sediment loads. If evidence of impact is identified, an



effort to determine the probable source shall be performed and recorded on field data sheets and follow-up action required. Monthly housekeeping and preventive maintenance inspection reports will be reviewed and attached to the Inspection Data Sheet. A copy of an Inspection Data Sheet is provided in Appendix F of this plan. The PPT documents the state of compliance with the General Permit and SWPPP on this form. The SWPPP shall be amended accordingly to reduce or eliminate identified storm water impacts.

### C. Chemical Storm Water Monitoring

With the implementation of an effective SWPPP, the residual concentration of significant materials should be negligible. Therefore no chemical monitoring is proposed. This belief is contingent upon the findings of subsequent facility and outfall inspections performed after source control BMP implementation. If these inspections yield evidence of degraded storm water quality, then L'Anse Warden FAF shall give careful consideration to the need for chemical monitoring as appropriate.

If chemical monitoring is found to be necessary to properly evaluate and implement this SWPPP, samples shall be collected by auto samplers or manually by a designated pollution prevention individual(s) during rainfall events that meet the MDNRE criteria.

Composite samples shall be collected from maximum mixing zones at the discharge points for all parameters except those for which analytic techniques require a grab. Each composite shall be collected during the first 30 minutes of runoff. At a minimum, three (3) individual samples shall be collected for compositing, and collection of each sample shall be evenly timed throughout the sampling period. Samples shall be automatically drawn from a discrete point within the stream of storm water. Where well-defined channels or discernible outfall points are lacking, temporary structures shall be installed to channelize flow and facilitate the collection of samples.

Collected samples shall be immediately cooled to four degrees (4°) Celsius. Care shall be taken to insure the samples are kept at four degrees (4°) Celsius during transport from their collection point to the laboratory. At the time the samples are retrieved, the pH of a collected composite sample shall be recorded. The pH shall be determined to the nearest  $\pm 0.1$  pH unit using a portable pH meter. The following climatic and physical conditions shall also be recorded:

- Storm date and duration (in hours).
- Rainfall measurements or estimates (in inches) of the storm, which generated the sampled runoff.
- Duration (in days) between the storm sampled and the end of the previous measurable (greater than 0.1 inches of rainfall) storm.
- Estimated total discharge of storm water (in gallons) for the subject storm event.

At the time samples are retrieved, each discharge outfall shall be inspected for visual indications of storm water pollution such as odor, color, turbidity, floating solids, foam, iridescent sheens, and/or floating product. These observations shall be added to the field notes.

All equipment shall be properly decontaminated prior to and after each use. A standard rain gauge shall be set up at the subject facility to accurately provide rainfall measurements to the nearest tenth of an inch.

Runoff samples shall be submitted to a qualified laboratory capable of furnishing the necessary analytical test methods. Results of the chemical analysis shall be incorporated into the SWPPP. Indications of source control BMP failure shall result in modifications to existing source control BMP's or the implementation of new source control or treatment BMP's.

#### D. Record Keeping and Reporting Procedures

L'Anse Warden FAF shall establish a system for documenting incidents and inspections. Management and the pollution prevention individual(s) shall track all spills, leaks, and other discharges of substances that may negatively impact storm water quality. Recorded information at the time of an incident shall include:

- Date and time.
- Type of release.
- Released substance.
- Location.
- Duration.
- Cause.
- Associated environmental affects.
- Person's notified.
- Response actions.

In the event of a discharge of a hazardous material or substance which will result in the discharge of pollutants to the waters of the state or creates a condition that may contaminate storm water discharged to waters of the state, the PPT leader will notify the MDEQ within 24 hours of the release. All other proper state and federal authorities shall be contacted as necessary.

#### E. Monthly Preventive Maintenance Inspection

The PPT members shall maintain records of all equipment inspection/service and facility monitoring activities performed at the L'Anse Warden FAF.

Copies of the Spill History and Inspection Tracking form are provided in Appendix G of this plan.

### **XIII. SWPPP IMPLEMENTATION SCHEDULE**

The activities outlined in this plan will become effective on the date as required by the General Permit No. MIS310000 (effective April 1, 2008, expiration date April 1, 2013), Notice of Intent filed August 20, 2010, Certificate of Coverage No. MIS310650 dated March 22, 2012.

The National Pollutant Discharge Elimination System Wastewater Discharge General Permit, also included in Appendix A, was in effect as of April 1, 2008. Non-structural source controls are currently in place. Anticipated dates for BMP implementation and the inspections are presented in Table 4.

**TABLE 4**  
L'Anse Warden Electric Company, LLC Fuel Aggregation Facility  
SWPPP IMPLEMENTATION SCHEDULE

Function	Scheduled Initiation Date	Deadline for Compliance
Implement Storm Water Pollution Prevention Plan	January 2011	February 28, 2011
First Six Month Facility Comprehensive Inspection	July 2011	July 31, 2011
All Non-Structural Control In-Place	July 2011	August 2011
First Annual Facility Comprehensive Inspection	November 2011	December 2011
All Structural Control In-Place As Necessary	November 2011	December 2011
Notice of Intent to Renew Permit	June 2012	December 2012

The outlined efforts comply with the schedule prescribed in Part I.C. of the NPDES general permit, (see Appendix A). Amendments shall be made based upon the findings of the respective inspections.

**XIV. CERTIFICATION**

“I certify under penalty of law that this document and 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 contained in the plan. Based upon my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information, the information contained in this document is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for providing false information, including the possibility of fine and imprisonment. In addition, I certify under penalty of law that, based upon inquiry of persons directly under my supervision, to the best of my knowledge and belief, the provisions of this document adhere to the provisions of the storm water permit for the development and implementation of a Storm Water Pollution Prevention Plan and that the plan will be complied with.”

\_\_\_\_\_  
Mike Reid  
General Manager & COO  
L’Anse Warden Electric Company, LLC

\_\_\_\_\_  
Date

\_\_\_\_\_  
Darryl Koski  
Generation Foreman  
L’Anse Warden Electric Company, LLC  
Certified Operator No. I-09627

\_\_\_\_\_  
Date

**APPENDIX A**

**STORM WATER DISCHARGE PERMIT**



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 WATER BUREAU  
 www.michigan.gov/deq

DEQ only-do not write in this space

**NOTICE OF INTENT**  
 FOR COVERAGE UNDER THE  
 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY  
 By Authority of Act 451, PA 1994, Part 31

Submission of this Notice of Intent (NOI) constitutes notice that the party identified as Owner/Permittee requests authorization to discharge under the NPDES General Permit issued for storm water discharges associated with industrial or other activity in Michigan. The Michigan Department of Environmental Quality may deny coverage under the general permit and require submittal of an application form for an individual permit. Becoming a permittee obligates a discharger to comply with the terms and conditions of the General Permit, including **annual payment of a \$260.00 fee billed each January**. Failure to comply with these provisions may result in fines of up to \$25,000 per day and the possibility of imprisonment, in accordance with Act 451, PA 1994, Part 31.

<b>FACILITY INFORMATION (where discharge occurs)</b>			<b>OWNER/PERMITEE INFORMATION</b>		
SITE/FACILITY NAME L'Anse Warden Electric Company LLC Fuel Aggregation Facility			NAME L'Anse Warden Electric Company, LLC Subsidiary of Traxys North America, LLC		
ADDRESS 17696 U.S. Highway 41			ADDRESS 29639 Willow Road P.O. Box 695		
CITY L'Anse	STATE MI	ZIP CODE 49946	CITY White Pine	STATE MI	ZIP CODE 49971
RECEIVING WATERS Lake Superior			CONTACT PERSON Mike Reid		
LATITUDE 46		LONGITUDE 88	CONTACT PERSON'S TELEPHONE (INCLUDING AREA CODE) 906-885-7910		
NE 1/4 of NW 1/4 of Section 8, Town 50N, Range 33W Township L'Anse, County Baraga			<b>MAILING INFORMATION (for billing)</b>		
Is the facility discharge: (must complete) New <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Facility started operations: July 1, 2008 If existing with NPDES coverage: NPDES number(s):			NAME		
			ADDRESS		
CITY		STATE	ZIP CODE		
TELEPHONE NUMBER (INCLUDING AREA CODE)					

**PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE**

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TO DETERMINE THE PRIMARY INDUSTRIAL ACTIVITY, USE THE VALUE OF NET REVENUES. IF SUCH INFORMATION IS NOT AVAILABLE FOR A PARTICULAR FACILITY, THE NUMBER OF EMPLOYEES OR PRODUCTION RATE FOR EACH PROCESS MAY BE COMPARED. THE OPERATION THAT GENERATES THE MOST NET REVENUE OR EMPLOYS THE MOST PERSONNEL IS THE OPERATION IN WHICH THE FACILITY IS PRIMARILY ENGAGED.

**FACILITY IS ENGAGED IN:** CHECK THOSE THAT APPLY (if none apply, skip this block)

- |  |  |
|--|--|
| <input type="checkbox"/> HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL | <input type="checkbox"/> LANDFILL  |
| <input type="checkbox"/> LAND APPLICATION SITE OR OPEN DUMP              | <input checked="" type="checkbox"/> STEAM ELECTRIC POWER GENERATING FACILITY       |
| <input type="checkbox"/> SEWAGE TREATMENT WORKS                          | COAL HANDLING? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

CERTIFIED STORM WATER OPERATOR NAME (INDUSTRIAL ONLY): Darryl Koski	CERTIFICATION NUMBER: I-09627
--	----------------------------------

Any person requesting authorization to discharge from an area described below may be subject to the terms of the NPDES General Permit for storm water discharges with **required monitoring**, and should examine the requirements of that permit prior to submitting this NOI. (if none apply skip the block)

- SECONDARY CONTAINMENT**  
 I (we) request to discharge storm water to a surface water of the state from a secondary containment structure installed at the facility as required by required by state or federal law.  
**\*Request not necessary if discharging storm water to a sanitary or combined sewer system.**
- ENVIRONMENTAL CONTAMINATION SITE**  
 I (we) request to discharge storm water from an area identified on Michigan's list of Sites of Environmental Contamination pursuant to the Natural Resources and Environmental Protection Act, PA 451 of 1994, Part 201(formerly 307).  
**\*Request only necessary if storm water comes into contact with contaminated materials.**
- OTHER SIGNIFICANT CONTRIBUTOR**  
 The Department of Environmental Quality has determined that the storm water discharges from this facility are a significant contributor of pollutants to waters of the state.

### CERTIFICATION

State of Michigan regulations require this form be signed as follows:

**Corporation:** By the principal executive officer or vice president or higher, or his/her designated representative if the representative is responsible for the overall operation of the facility from which the discharge described originates.

**Partnership:** By a general partner

**Sole Proprietorship:** By the proprietor

**Municipal, State, or Other Public Facility:** By a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee

**\*\*Note: If the signatory is not listed above, but is authorized to sign the Application please provide documentation of that authorization.**

I certify that my facility has developed a **Storm Water Pollution Prevention Plan (SWPPP)** according to the requirements of the Storm Water General Permit.

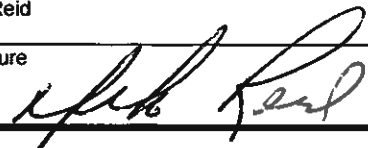
I certify that my facility has **no unauthorized discharges**.

I certify that my facility has implemented the **non-structural controls** as described in the **SWPPP**. New facilities shall fulfill requirement when industrial activity begins.

I certify my facility has completed construction and will put into operation all **structural controls** as described in the **SWPPP**. If necessary, new facilities shall fulfill requirement when industrial activity begins.

I certify, under penalty of law, that this document and all attachments were prepared by me, or under my direction or supervision in accordance with a system to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I understand that my signature constitutes a legal agreement to comply with the requirements of the appropriate NPDES General Storm Water Permit. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this Notice of Intent.

Printed name Mike Reid	Title General Manager & COO
Signature 	Date 8/20/10

IF YOU HAVE ANY QUESTIONS ABOUT THE PREPARATION OF THIS FORM, PLEASE CALL 517-335-4137.

RETURN THIS COMPLETED FORM (original signatures only), AND ANY ATTACHMENTS TO:

KELLY PLOEHN  
 MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 WATER BUREAU  
 2<sup>ND</sup> FLOOR NORTH  
 525 WEST ALLEGAN STREET  
 P.O. BOX 30273  
 LANSING MI 48909





RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



DAN WYANT  
DIRECTOR

EE-10295

March 23, 2012

Mr. Mike Reid  
L'Anse Warden Electric Company LLC  
29639 Willow Road  
PO Box 695  
White Pine, Michigan 49971

Dear Mr. Reid:

**SUBJECT:** Storm Water General Permit  
Certificate of Coverage No. MIS310650  
Designated Name: L'Anse Warden Electric-Fuel Agg

The Water Resources Division of the Department of Environmental Quality received on February 8, 2011, your Notice of Intent to be covered under the Storm Water General Permit (Permit No. MIS310000).

Please find enclosed Certificate of Coverage (COC) No. MIS310650 granting this request. If needed, a copy of the Storm Water General Permit can be obtained via the Internet at: (<http://www.michigan.gov/deqnpdes>. click on "General NPDES Permits" which is under the Permits banner), or call 517-241-1346 to request a paper copy be sent to you. This COC takes effect immediately. The granting of this coverage under this storm water general permit establishes several compliance requirements which are detailed in the COC.

The issuance of this COC does not authorize the violation of any federal, state, or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Department of Environmental Quality permits, or approvals from other units of government as may be required by law.

Based on the issuance of this COC, your storm water discharge control facility is officially classified as an A.1.i, Storm Water Management Industrial Site. By letter dated February 8, 2011, L'Anse Warden Electric Company LLC submitted certification that their Storm Water Pollution Prevention Plan has been developed for the Fuel Aggregation Facility. Please contact Lindsey Ringuette at 906-346-8518 if you have any questions.

Sincerely,

Kelly Ploehn  
Storm Water Program  
Water Resources Division

Enclosure

cc: Upper Peninsula District Office, Water Resources Division (electronic)



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 WATER BUREAU  
 www.michigan.gov/daq

DEQ only-do not write in this space

**NOTICE OF INTENT**  
 FOR COVERAGE UNDER THE  
 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY  
 By Authority of Act 451, PA 1994, Part 31

Submission of this Notice of Intent (NOI) constitutes notice that the party identified as Owner/Permittee requests authorization to discharge under the NPDES General Permit issued for storm water discharges associated with industrial or other activity in Michigan. The Michigan Department of Environmental Quality may deny coverage under the general permit and require submittal of an application form for an individual permit. Becoming a permittee obligates a discharger to comply with the terms and conditions of the General Permit, including **annual fee of \$260.00 will be billed each JANUARY - DO NOT SEND MONEY WITH THIS APPLICATION.** Failure to comply with these provisions may result in fines of up to \$25,000 per day and the possibility of imprisonment, in accordance with Act 451, PA 1994, Part 31.

FACILITY INFORMATION (where discharge occurs)			OWNER/PERMITEE INFORMATION		
SITE/FACILITY NAME L'Anse Warden Electric Company, LLC Fuel Aggregation Facility			NAME L'Anse Warden Electric Company, LLC Subsidiary of Traxys North America, LLC		
ADDRESS 17696 U.S. Highway 41			ADDRESS 29639 Willow Road PO Box 695		
CITY L'Anse	STATE MI	ZIP CODE 49946	CITY White Pine	STATE MI	ZIP CODE 49971
RECEIVING WATERS Lake Superior			CONTACT PERSON NAME AND EMAIL ADDRESS Mike Reid		
LATITUDE 46		LONGITUDE 88	CONTACT PERSON'S TELEPHONE NUMBER 906-885-7910		
NE 1/4 of NW 1/4 of Section 8 Town: 50N, Range: 33W Township: L'Anse County: Baraga			MAILING INFORMATION (for billing)		
Is the facility discharge: (must complete) New <input type="checkbox"/> or Existing <input checked="" type="checkbox"/>			NAME L'Anse Warden Electric Company, LLC		
Facility started operations: July 1, 2008			ADDRESS PO Box 695		
If existing with NPDES coverage: NPDES number(s):			CITY White Pine	STATE MI	ZIP CODE 49971
			TELEPHONE NUMBER (INCLUDING AREA CODE) (906) 885-7100		

CERTIFIED STORM WATER OPERATOR NAME (INDUSTRIAL ONLY): Darryl Koski	CERTIFICATION NUMBER: I-09627
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PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE (this information can be found in the corporate tax returns under Schedule K listed as the "Business Activity Code" or the "Manufactures Identity Code")

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TO DETERMINE THE PRIMARY INDUSTRIAL ACTIVITY, USE THE VALUE OF NET REVENUES. IF SUCH INFORMATION IS NOT AVAILABLE FOR A PARTICULAR FACILITY, THE NUMBER OF EMPLOYEES OR PRODUCTION RATE FOR EACH PROCESS MAY BE COMPARED. THE OPERATION THAT GENERATES THE MOST NET REVENUE OR EMPLOYS THE MOST PERSONNEL IS THE OPERATION IN WHICH THE FACILITY IS PRIMARILY ENGAGED.

FACILITY IS ENGAGED IN: CHECK THOSE THAT APPLY (if none apply, skip this block)

- |  |  |
|--|--|
| <input type="checkbox"/> HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL | <input type="checkbox"/> LANDFILL  |
| <input type="checkbox"/> LAND APPLICATION SITE OR OPEN DUMP              | <input checked="" type="checkbox"/> STEAM ELECTRIC POWER GENERATING FACILITY       |
| <input type="checkbox"/> SEWAGE TREATMENT WORKS                          | COAL HANDLING? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

Any person requesting authorization to discharge from an area described below may be subject to the terms of the NPDES General Permit for storm water discharges with **required monitoring**, and should examine the requirements of that permit prior to submitting this NOI. (if none apply skip the block)

- SECONDARY CONTAINMENT**  
I (we) request to discharge storm water to a surface water of the state from a secondary containment structure installed at the facility as required by required by state or federal law.  
**\*Request not necessary if discharging storm water to a sanitary or combined sewer system.**
- ENVIRONMENTAL CONTAMINATION SITE**  
I (we) request to discharge storm water from an area identified on Michigan's list of Sites of Environmental Contamination pursuant to the Natural Resources and Environmental Protection Act, PA 451 of 1994, Part 201 (formerly 307).  
**\*Request only necessary if storm water comes into contact with contaminated materials.**
- OTHER SIGNIFICANT CONTRIBUTOR**  
The Department of Environmental Quality has determined that the storm water discharges from this facility are a significant contributor of pollutants to waters of the state.

**CERTIFICATION**

**State of Michigan regulations require this form be signed as follows:**  
**Corporation:** By the principal executive officer or vice president or higher, or his/her designated representative if the representative is responsible for the overall operation of the facility from which the discharge described originates.  
**Partnership:** By a general partner  
**Sole Proprietorship:** By the proprietor  
**Municipal, State, or Other Public Facility:** By a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee  
**\*\*Note: If the signatory is not listed above, but is authorized to sign the Application please provide documentation of that authorization.**

I certify that my facility has developed a **Storm Water Pollution Prevention Plan (SWPPP)** according to the requirements of the Storm Water General Permit.

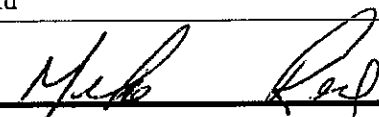
I certify that my facility has **no unauthorized discharges**.

I certify that my facility has implemented the **non-structural controls** as described in the **SWPPP**. New facilities shall fulfill requirement when industrial activity begins.

I certify my facility has completed construction and will put into operation all **structural controls** as described in the **SWPPP**. If necessary, new facilities shall fulfill requirement when industrial activity begins.

I certify, under penalty of law, that this document and all attachments were prepared by me, or under my direction or supervision in accordance with a system to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I understand that my signature constitutes a legal agreement to comply with the requirements of the appropriate NPDES General Storm Water Permit. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this Notice of Intent.

Printed Name <b>Mike Reid</b>	Title <b>General Manager and COO</b>
Signature 	Date <b>3-12-12</b>

IF YOU HAVE ANY QUESTIONS ABOUT THE PREPARATION OF THIS FORM, PLEASE CALL 517-335-4137.

RETURN THIS COMPLETED FORM (original signatures only), AND ANY ATTACHMENTS TO:

**KELLY PLOEHN**  
**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**WATER BUREAU**  
**2<sup>ND</sup> FLOOR NORTH**  
**525 WEST ALLEGAN STREET**  
**P.O. BOX 30273**  
**LANSING MI 48909**

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER RESOURCES DIVISION  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
Authorized by Michigan Act 451, Public Acts of 1994, as amended, Part 31

CERTIFICATE OF COVERAGE

Under General Permit No. MIS310000  
SW-Industrial CY3 General Permit

CERTIFICATE OF COVERAGE NO.: MIS310650  
DESIGNATED NAME: L'Anse Warden Electric-Fuel Agg  
PERMITTEE: L'Anse Warden Electric Company LLC  
MAILING ADDRESS: 29639 Willow Road  
PO Box 695  
White Pine, Michigan 49971

This certificate of coverage authorizes L'Anse Warden Electric Company LLC to discharge an unspecified amount of storm water which meets the criteria established in General Permit No. MIS310000. The discharge is from the L'Anse Warden Electric Company LLC, Fuel Aggregation Facility, located at 17696 US Highway 41, L'Anse, Michigan 49946. The discharge is to Lake Superior, in the NE1/4, NW1/4, Section 8, Town 50 N, Range 33 W, Baraga County.

This authorization is based on written certification received on February 8, 2011, that the permittee is in compliance with the following requirements of the Storm Water Pollution Prevention Plan and the general permit:

- Source identification requirements.
- Certified storm water operator requirements.
- Prohibition of unauthorized non-storm water discharges.
- Non-structural preventative measures and source controls.
- Structural storm water pollution control requirements as needed.

Unless specified otherwise in the General Permit, all contact with the Department, and all Department approvals, shall be directed to or made by the Upper Peninsula District Supervisor of the Water Resources Division. The Upper Peninsula District Office is located at the K. I. Sawyer International Airport and Business Center, 420 Fifth Street, Gwinn, Michigan 49841, telephone: 906-346-8300, fax: 906-346-4480.

Any person to whom this certificate of coverage is not acceptable may file a sworn petition for a contested case hearing on this certificate of coverage with the Office of Regulatory Reintervention within the Michigan Department of Licensing and Regulatory Affairs in accordance with the provisions of R323.2192(c) of the Michigan Administrative Code. The Department of Licensing and Regulatory Affairs may reject any petition filed more than 60 days after issuance as being untimely.

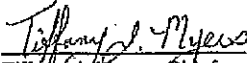
The issuance of this certificate of coverage does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Department of Environmental Quality (Department) permits, or approvals from other units of government as may be required by law.

This certificate of coverage is based on a complete application received by the Department on February 8, 2011, and is subject to all conditions specified in General Permit No. MIS310000 issued September 19, 2007, expiring April 1, 2013. This certificate of coverage may be modified, terminated, reissued, or revoked as allowed for in General Permit No. MIS310000.

This COC takes effect on the date of issuance.

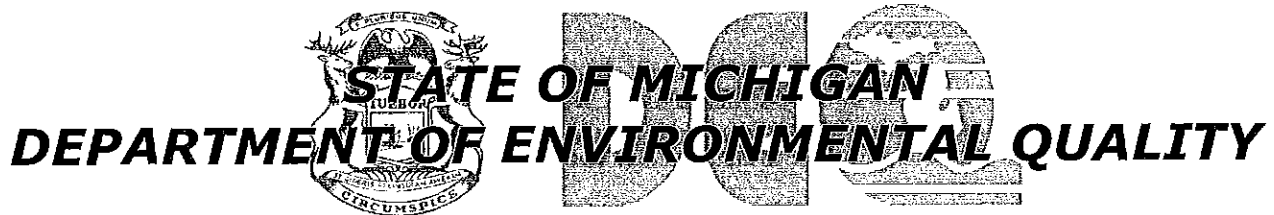
March 22, 2012  
Date Issued

EQP 4677 (10/97)

  
Tiffany J. Myers, Chief  
Lakes Michigan & Superior Permits Unit  
Permits Section  
Water Resources Division

Note: Pursuant to the Executive Order 2011-1, all references to the "Water Bureau" in the general permit should now be interpreted as the "Water Resources Division" and all references to the Department in this Certificate of Coverage and the general permit should now be interpreted as the "Department of Environmental Quality".

PERMIT NO. MIS310000



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTEWATER DISCHARGE GENERAL PERMIT

STORM WATER FROM INDUSTRIAL ACTIVITY  
IN CYCLE-YEAR 3 WATERSHEDS

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18, storm water associated with industrial activity, as defined under 40 CFR 122.26(b)(14)(i-ix) and (xi), or as deemed necessary under Section 402(p)(2)(E) of the Federal Act, and other storm water which is adequately regulated by this general permit is authorized to be discharged from facilities specified in individual "certificates of coverage" in accordance with effluent limitations, monitoring requirements and other conditions set forth in this general National Pollutant Discharge Elimination System (NPDES) permit (the "permit").

The applicability of this permit shall be limited to facilities which discharge storm water to surface waters of the state located within a cycle-year 3 watershed, as listed in <http://www.deq.state.mi.us/documents/deq-water-mpdes-basins-BY01map.pdf>. This permit does not authorize discharges determined by the Michigan Department of Environmental Quality (the "Department") to need individual NPDES permits or different general permits, or that may cause or contribute to a violation of the Water Quality Standards.

In order to constitute a valid authorization to discharge, this permit must be complemented by a certificate of coverage (COC) issued by the Department.

Unless specified otherwise, all contact with the Department required by this permit shall be to the position indicated in the COC.

This permit shall take effect **April 1, 2008**. The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended or revoked in whole or in part during its term in accordance with applicable laws and rules.

This permit shall expire at midnight, **April 1, 2013**.

**Issued** September 19, 2007.

Original Permit Signed by William Creal  
William Creal, Chief  
Permits Section  
Water Bureau

### **PERMIT FEE REQUIREMENTS**

In accordance with Section 324.3118 of the Michigan Act, the permittee shall make payment of an annual storm water fee to the Department for each January 1 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. The fee shall be postmarked by March 15 for notices mailed by February 1. The fee is due no later than 45 days after receiving the notice for notices mailed after February 1.

### **CONTESTED CASE INFORMATION**

The terms and conditions of this permit shall apply to an individual facility on the effective date of a COC for the facility. The Department of Labor and Economic Growth may grant a contested case hearing on this permit in accordance with the Michigan Act. Any person who is aggrieved by this permit may file a sworn petition with the State Office of Administrative Hearings and Rules of the Michigan Department of Labor and Economic Growth, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department of Labor and Economic Growth may grant a contested case hearing on the COC issued to an individual facility under this permit in accordance with Rule 2192(c) (Rule 323.2192 of the Michigan Administrative Code).

## PART I

### Section A. Discharge Authorization

During the period beginning on the effective date of this permit and an individual COC and lasting until the expiration of this permit or termination of the individual COC, the permittee is authorized to discharge storm water to the surface waters of the State of Michigan.

### Section B. Schedules and Certifications

A Notice of Intent (NOI) or other Department-approved application shall be submitted to the Department to obtain a COC authorizing discharge under this permit. The permittee must comply with the schedule and certification requirements in either Part I.B.1. or Part I.B.2., below.

#### 1. Schedules and Certifications for New Storm Water General Permit Applicants

Applicants requesting first-time authorization to discharge storm water associated with an industrial activity under a general permit shall comply with the following requirements prior to submittal of an NOI or other Department-approved application to be covered under this permit:

a. Schedule

A first-time applicant will not receive a COC issued under this permit unless the NOI or application is accompanied by certification of compliance with the certified operator and Storm Water Pollution Prevention Plan (SWPPP) requirements of this permit as follows:

1) Certified Operator

The applicant shall have a storm water operator certified by the Department, as required by Section 3110 of the Michigan Act. The certified operator shall have supervision over the facility's storm water treatment and control measures included in the SWPPP.

2) SWPPP

The applicant's SWPPP shall be developed in accordance with Parts I.C.1. through I.C.3. and ready for implementation prior to submittal of an NOI or other application to be covered under this permit. The SWPPP shall be signed by the certified operator and the permittee. Applicants shall be fully ready to carry out the activities specified in their SWPPP and comply with this permit in order to be issued a COC. New facilities shall have a COC issued under this permit prior to commencement of discharge of storm water associated with industrial activity.

b. Certification

When submitting an NOI or other application for this permit, the permittee shall also submit a written certification that the facility is in compliance with the requirements identified in Parts I.B.1.b.1) through 5). The certification shall be a written statement that the SWPPP has been completed and is being implemented. It is not necessary to submit the SWPPP to the Department unless requested. New facilities shall fulfill the requirements of Parts I.B.1.b.4) and 5) when industrial activity begins.

- 1) The facility has a certified storm water operator as required in Part I.B.1.a.1). All operators' names and certification numbers shall be included in the written certification. If a certified operator's number is not available at the time the written certification is submitted, provide the date the operator took the certification exam, the location of the Department's office where the exam was taken, and the signature of the person who took the exam.
- 2) The source identification requirements of the SWPPP are completed and identified in the plan (see Part I.C.1.).
- 3) Non-structural preventative measures and source controls are being implemented (see Part I.C.2.).
- 4) The structural controls for prevention and treatment (see Part I.C.3.), if needed, are installed and operational. If no structural controls are needed, indicate so in writing.
- 5) Non-storm water discharges are eliminated or authorized by an NPDES permit (see Part I.D.3.).

## Part I

### Section B. Schedules and Certifications

#### 2. Schedules and Certifications for Storm Water Dischargers with Previous Permit Requirements for a SWPPP

A permittee who has been authorized to discharge storm water under a permit other than this permit, which required a SWPPP, and who submits an NOI or other application for authorization to discharge under this permit, shall comply with the following:

- a. Schedule  
Continue development and implementation of the SWPPP in accordance with the schedule established under the individual permit, or general permit and COC, held previous to this permit. That schedule shall be enforceable under this permit.
- b. Certification
  - 1) When submitting an NOI or other application for this permit, the permittee shall also submit a written certification that the facility is in compliance with its current storm water general permit and COC or the SWPPP requirements of its individual permit. The certification shall be a written statement that the SWPPP has been completed and is being implemented. The written certification shall include the name and certification number of the certified storm water operator. It is not necessary to submit the SWPPP to the Department unless requested to do so.
  - 2) The applicant shall have a storm water operator certified by the Department, as required by Section 3110 of the Michigan Act. The certified operator shall have supervision over the facility's storm water treatment and control measures included in the SWPPP.



**PART I****Section C. SWPPP****1. Source Identification**

To identify potential sources of significant materials that can pollute storm water and subsequently be discharged from the facility, the SWPPP shall, at a minimum, include the following items:

- a. A site map identifying the following:
  - 1) buildings and other permanent structures;
  - 2) storage or disposal areas for significant materials;
  - 3) secondary containment structures and descriptions of what they contain;
  - 4) storm water discharge outfalls (numbered for reference);
  - 5) location of storm water and non-storm water inlets contributing to each outfall;
  - 6) location of NPDES permitted discharges other than storm water;
  - 7) outlines of the drainage areas contributing to each outfall;
  - 8) structural runoff controls or storm water treatment facilities;
  - 9) areas of vegetation (with brief description such as lawn, old field, marsh, wooded, etc);
  - 10) areas of exposed and/or erodible soils;
  - 11) impervious surfaces (roofs, asphalt, concrete);
  - 12) name and location of receiving water(s); and
  - 13) areas of known or suspected impacts on surface waters as designated under Part 201 (Environmental Response) of the Michigan Act.
  
- b. A list of all significant materials that could pollute storm water. For each material listed, the SWPPP shall include each of the following descriptions:
  - 1) Ways in which each type of material has been or has reasonable potential to become exposed to storm water (e.g., spillage during handling; leaks from pipes, pumps, and vessels; contact with storage piles, contaminated materials or soils; waste handling and disposal; deposits from dust or overspray; etc.).
  
  - 2) An evaluation and written description of the reasonable potential for contribution of significant materials to runoff from at least the following areas or activities:
    - a. loading, unloading, and other material handling operations;
    - b. outdoor storage including secondary containment structures;
    - c. outdoor manufacturing or processing activities;
    - d. significant dust or particulate generating processes;
    - e. discharge from vents, stacks and air emission controls;
    - f. on-site waste disposal practices;
    - g. maintenance and cleaning of vehicles, machines and equipment;
    - h. areas of exposed and/or erodible soils;
    - i. Sites of Environmental Contamination listed under Part 201 (Environmental Response) of the Michigan Act;
    - j. areas of significant material residues;
    - k. areas where animals congregate (wild or domestic) and deposit wastes; and
    - l. other areas where storm water may contact significant materials.
  
  - 3) Identification of the outfall(s) through which the material may be discharged if released.
  
- c. A listing of significant spills and significant leaks of polluting materials that occurred at areas that are exposed to precipitation or that otherwise discharge to a point source at the facility. The listing shall include spills that occurred over the three (3) years prior to the effective date of a COC authorizing discharge under this permit. The listing shall

**PART I****Section C. SWPPP**

include the date, volume and exact location of release, and the action taken to clean up the material and/or prevent exposure to storm water runoff or contamination of surface waters of the state. Any release that occurs after the SWPPP has been developed shall be controlled in accordance with the SWPPP and is cause for the SWPPP to be updated as appropriate within 14 calendar days of obtaining knowledge of the spill or loss.

- d. If there is a Total Maximum Daily Load (TMDL) established by the Department for the receiving water, which restricts the discharge of any of the identified significant materials or constituents of those materials, then the SWPPP shall identify the level of control for those materials necessary to comply with the TMDL, and an estimate of the current annual load of those materials via storm water discharges to the receiving stream.
- e. A summary of existing storm water discharge sampling data (if available) describing pollutants in storm water discharges associated with industrial activity at the facility. This summary shall be accompanied by a description of the suspected source(s) of the pollutants detected.

**2. Preventive Measures and Source Controls, Non-Structural**

To prevent significant materials from contacting storm water at the source, the SWPPP shall, at a minimum, include each of the following non-structural controls:

- a. A program which includes a schedule for routine preventive maintenance. The preventative maintenance program shall consist of routine inspections and maintenance of storm water management and control devices (e.g., cleaning of oil/water separators and catch basins, routine housekeeping activities, and cleaning out catch basins) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. The routine inspection shall include those areas of the facility in which significant materials have the reasonable potential to contaminate runoff. A log of the inspection and corrective actions shall be maintained on file by the permittee, and shall be retained in accordance with Part I.D.1.
- b. A schedule for comprehensive site inspection to include visual inspection of equipment, plant areas, and structural pollution prevention and treatment controls to be performed at least quarterly. The permittee may request Department approval of an alternate schedule for comprehensive site inspections. A report of the results of the comprehensive site inspection shall be prepared and retained in accordance with Part I.D.1. The report shall identify any incidents of non-compliance with the SWPPP or this permit. If there are no reportable incidents of non-compliance, the report shall contain a certification that the facility is in compliance with this permit.
- c. A description of good housekeeping procedures to maintain a clean, orderly facility. Good housekeeping procedures shall include routine inspections of the areas of the facility in which the procedures are implemented. The routine inspections of good housekeeping procedures may be combined with the routine inspections for the preventative maintenance program.
- d. A description of material handling procedures and storage requirements for significant materials. Equipment and procedures for cleaning up spills shall be identified in the SWPPP and made available to the appropriate personnel. The procedures shall identify measures to prevent spilled materials or material residues on the outside of containers from being discharged into storm water. The SWPPP may include, by reference, requirements of either a Pollution Incident Prevention Plan (PIPP) prepared in accordance with the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code); a Hazardous Waste Contingency Plan prepared in accordance with 40 CFR 264 and 265 Subpart D, as required by Part 111 of the Michigan Act; or a Spill Prevention Control and Countermeasure (SPCC) plan prepared in accordance with 40 CFR 112.
- e. Identification of areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion. The SWPPP shall also identify measures used to control soil erosion and sedimentation.
- f. A description of employee training programs which will be implemented to inform appropriate personnel at all levels of responsibility of the components and goals of the SWPPP. The SWPPP shall identify periodic dates for such training.

## PART I

### Section C. SWPPP

- g. Identification of actions to limit the discharge of significant materials in order to comply with TMDL requirements.
- h. Identification of significant materials expected to be present in storm water discharges following implementation of non-structural preventative measures and source controls.

### 3. Structural Controls for Prevention and Treatment

Where implementation of the measures required by Part I.C.2. does not control storm water discharges in accordance with Part I.D.2., the SWPPP shall provide a description of the location, function, and design criteria of structural controls for prevention and treatment. Structural controls may be necessary:

- 1) To prevent uncontaminated storm water from contacting or being contacted by significant materials; or
- 2) If preventive measures are not feasible or are inadequate to keep significant materials at the site from contaminating storm water. Structural controls shall be used to treat, divert, isolate, recycle, reuse or otherwise manage storm water in a manner that reduces the level of significant materials in the storm water and provides compliance with the Water Quality Standards as identified under Part I.D.2.

### 4. Keeping Plans Current

- a. The permittee shall review the SWPPP annually after it is developed and maintain written summaries of the reviews. Based on the review, the permittee shall amend the SWPPP as needed to ensure continued compliance with the terms and conditions of this permit.
- b. The SWPPP developed under the conditions of a previous permit shall be amended as necessary to ensure compliance with this permit.
- c. The SWPPP shall be updated or amended whenever changes or spills at the facility increase or have the potential to increase the exposure of significant materials to storm water, or when the SWPPP is determined by the permittee or the Department to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Updates based on increased activity or spills at the facility shall include a description of how the permittee intends to control any new sources of significant materials or respond to and prevent spills in accordance with the requirements of Parts I.C.1., I.C.2., and I.C.3. of this permit.
- d. The Department or authorized representative may notify the permittee at any time that the SWPPP does not meet minimum requirements. Such notification shall identify why the SWPPP does not meet minimum requirements. The permittee shall make the required changes to the SWPPP within 30 days after such notification from the Department or authorized representative, and shall submit to the Department a written certification that the requested changes have been made.
- e. Amendments shall be signed and retained with the SWPPP on site pursuant to Part I.C.6.a.

### 5. Certified Operator Update

If the certified operator is changed or an additional certified operator is added, the permittee shall provide the name and certification number of the new certified operator to the Department. The new operator shall review and sign the SWPPP.

### 6. Signature and SWPPP Review

- a. The SWPPP shall be signed by the storm water certified operator and by either the permittee or an authorized representative in accordance with 40 CFR 122.22. The SWPPP shall be retained on-site at the facility which generates the storm water discharge.
- b. The permittee shall make the SWPPP, reports, log books, storm water discharge sampling data (if collected), and supporting documents available upon request to the Department or authorized representative.

## PART I

### Section D. Special Conditions

#### 1. Record Keeping

The permittee shall maintain records of all SWPPP related inspection and maintenance activities. Records shall also be kept describing incidents such as spills or other discharges that can affect the quality of storm water runoff. All such records shall be retained for three years. The following records are required by this permit:

- Routine maintenance inspections (Part I.C.2.a.)
- Good housekeeping inspections (Part I.C.2.c.) The routine maintenance inspection and good housekeeping inspection may be combined.
- Comprehensive inspection reports (Part I.C.2.b.)
- Written summaries of the annual SWPPP review. (Part I.C.4.a)

#### 2. Water Quality Standards

At the time of discharge, there shall be no violation of the Water Quality Standards in the receiving waters as a result of the storm water discharge. This requirement includes, but is not limited to, the following conditions:

- a. In accordance with Rule 323.1050 of the Water Quality Standards, the receiving waters shall not have any of the following unnatural physical properties as a result of this discharge in quantities which are or may become injurious to any designated use: turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits.
- b. Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Department followed by a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.
- c. Any pollutant for which a level of control is specified to meet a Total Maximum Daily Load (TMDL) established by the Department shall be controlled at the facility so that its discharge is reduced by the amount specified in the waste load allocation of the TMDL. Any reduction achieved through implementation of the non-structural controls or structural controls in accordance with Parts I.C.2. or I.C.3. shall count toward compliance with the TMDL.

#### 3. Prohibition of Non-Storm Water Discharges

Discharges of material other than storm water shall be in compliance with an NPDES permit (other than this permit) issued for the discharge. Storm water shall be defined to include all of the following non-storm water discharges provided pollution prevention controls for the non-storm water component are identified in the SWPPP:

- a. discharges from fire hydrant flushing;
- b. potable water sources including water line flushing;
- c. water from fire system testing and fire fighting training without buried materials or chemical fire suppressants;
- d. irrigation drainage;
- e. lawn watering;
- f. routine building wash down which does not use detergents or other compounds;
- g. pavement wash waters where contamination by toxic or hazardous materials have not occurred (unless all contamination by toxic or hazardous materials have been removed) and where detergents are not used;
- h. air conditioning condensate;
- i. springs;
- j. uncontaminated ground water; and
- k. foundation or footing drains where flows are not contaminated with process materials such as solvents.

**PART I****Section D. Special Conditions**

Discharges from fire fighting activities are authorized by this permit, but are exempted from the requirement to be identified in the SWPPP.

**4. Request for Discharge of Water Treatment Additives**

In the event a permittee proposes to discharge water additives, the permittee shall submit a request to discharge water additives to the Department for approval. Such requests shall be sent to the Surface Water Assessment Section, Water Bureau, Department of Environmental Quality, P.O. Box 30273, Lansing, Michigan 48909, with a copy to the Department contact listed on the COC. Instructions to submit a request electronically may be obtained via the Internet (<http://www.michigan.gov/deq> and on the left side of the screen click on Water, Water Quality Monitoring, and Assessment of Michigan Waters; then click on the Water Treatment Additive List which is under the Information banner). Written approval from the Surface Water Assessment Section to discharge such additives at specified levels shall be obtained prior to discharge by the permittee. Additional monitoring and reporting may be required as a condition for the approval to discharge the additive.

A request to discharge water additives shall include all of the following water additive usage and discharge information:

- a. Material Safety Data Sheet;
- b. the proposed water additive discharge concentration;
- c. the discharge frequency (i.e., number of hours per day and number of days per year);
- d. the monitoring point from which the product is to be discharged;
- e. the type of removal treatment, if any, that the water additive receives prior to discharge;
- f. product function (i.e. microbiocide, flocculant, etc.);
- g. a 48-hour  $LC_{50}$  or  $EC_{50}$  for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.); and
- h. the results of a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of Rule 323.1057(2) of the Water Quality Standards.

Prior to submitting the request, the permittee may contact the Surface Water Assessment Section by telephone at 517-335-1180 or via the Internet at the address given above to determine if the Department has the product toxicity data required by items g. and h. above. If the Department has the data, the permittee will not need to submit product toxicity data.

**5. Tracer Dye Discharges**

This permit does not authorize the discharge of tracer dyes without approval from the Department. Requests to discharge tracer dyes shall be submitted to the Department in accordance with Rule 1097 (Rule 323.1097 of the Michigan Administrative Code).

## PART I

### Section D. Special Conditions

#### 6. Facility Contact

The "Facility Contact" was specified in the application. The permittee may replace the facility contact at any time, and shall notify the Department in writing within 10 days after replacement (including the name, address and telephone number of the new facility contact).

- a. The facility contact shall be (or a duly authorized representative of this person):
  - for a corporation, a principal executive officer of at least the level of vice president, or a designated representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the permit application or other NPDES form originates,
  - for a partnership, a general partner,
  - for a sole proprietorship, the proprietor, or
  - for a municipal, state, or other public facility, either a principal executive officer, the mayor, village president, city or village manager or other duly authorized employee.
- b. A person is a duly authorized representative only if:
  - the authorization is made in writing to the Department by a person described in paragraph a. of this section; and
  - the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the facility (a duly authorized representative may thus be either a named individual or any individual occupying a named position).

Nothing in this section obviates the permittee from properly submitting reports and forms as required by law.

#### 7. Portable Industrial Facilities

- a. Storm water discharges from satellite locations of a portable industrial facility may be authorized by obtaining a COC issued under this permit. To obtain a COC, an NOI or other Department-approved application must be submitted to the Permits Section of the Water Bureau for a primary mailing address of the owner or operator of the portable facility. Following receipt of a COC, if the portable facility is to be moved to a satellite location, the permittee shall notify the Department of the relocation, in writing, at least 10 days prior to start-up at the satellite location. Written notification shall include the location (township, range, section, and quarter-quarter section) of the current and proposed sites for the portable facility, the receiving water for the discharge, and the anticipated date of the move. Failure to notify the Department concerning the satellite location is a permit violation.
- b. The permittee shall submit an NOI or other Department-approved application for each portable facility that could be moved to a satellite location. A SWPPP shall be in place for each facility at the time of start-up and shall be modified for each new location as necessary.

#### 8. Expiration and Reissuance

On or before October 1, 2012, a permittee seeking continued authorization to discharge under this permit beyond the permit's expiration date shall submit to the Department a written request containing such information, form, and fees as required by the Department. Without an adequate request, a permittee's authorization to discharge will expire on April 1, 2013. With an adequate request, a permittee shall continue to be subject to the terms and conditions of the expired permit until the Department takes action on the request unless this permit is terminated or revoked.

If this permit is terminated or revoked, all authorizations to discharge under the permit shall expire on the date of termination or revocation.

If this permit is modified, the Department will notify the permittee of any required action. Without an adequate response, a permittee's authorization to discharge will terminate on the effective date of the modified permit. With an adequate

**PART I****Section D. Special Conditions**

response, a permittee shall be subject to the terms and conditions of the modified permit on the effective date of the modified permit unless the department notifies the permittee otherwise.

If a discharge is terminated, the permittee shall request termination of discharge authorization.

**9. Termination of General Permit Coverage**

A permittee may submit a request to the Department to terminate the COC for a facility when:

- a. all storm water discharges associated with industrial activity are eliminated; or
- b. industrial activity has ceased and no significant materials remain or are exposed to storm water.

**10. Requirement to Obtain Individual Permit**

The Department may require any person who is authorized to discharge by a COC and this permit, to apply for and obtain an individual NPDES permit if any of the following circumstances apply:

- a. the discharge is a significant contributor to pollution as determined by the Department on a case-by-case basis;
- b. the discharger is not complying or has not complied with the conditions of the permit;
- c. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of waste applicable to the point source discharge;
- d. effluent standards and limitations are promulgated for point source discharges subject to this permit; and
- e. the Department determines that the criteria under which the permit was issued no longer apply.

Any person may request the Department to take action pursuant to the provisions of Rule 2191 (Rule 323.2191 of the Michigan Administrative Code).

## PART II

### Section A. Definitions

This list of definitions may include terms not applicable to this permit.

**Acute toxic unit (TU<sub>A</sub>)** means  $100/LC_{50}$  where the  $LC_{50}$  is determined from a whole effluent toxicity (WET) test which produces a result that is statistically or graphically estimated to be lethal to 50% of the test organisms.

**Bioaccumulative chemical of concern (BCC)** means a chemical which, upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor of more than 1000 after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation. The human health bioaccumulation factor shall be derived according to R 323.1057(5). Chemicals with half-lives of less than 8 weeks in the water column, sediment, and biota are not BCCs. The minimum bioaccumulation concentration factor (BAF) information needed to define an organic chemical as a BCC is either a field-measured BAF or a BAF derived using the biota-sediment accumulation factor (BSAF) methodology. The minimum BAF information needed to define an inorganic chemical as a BCC, including an organometal, is either a field-measured BAF or a laboratory-measured bioconcentration factor (BCF). The BCCs to which these rules apply are identified in Table 5 of R 323.1057 of the Water Quality Standards.

**Biosolids** are the solid, semisolid, or liquid residues generated during the treatment of sanitary sewage or domestic sewage in a treatment works. This includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes and a derivative of the removed scum or solids.

**Bulk biosolids** means biosolids that are not sold or given away in a bag or other container for application to a lawn or home garden.

**Certificate of Coverage (COC)** means a document, issued by the Department, which authorizes a discharge under this permit.

**Chronic toxic unit (TU<sub>C</sub>)** means  $100/MATC$  or  $100/IC_{25}$ , where the maximum acceptable toxicant concentration (MATC) and  $IC_{25}$  are expressed as a percent effluent in the test medium.

**Class B Biosolids** refers to material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PSRP) in accordance with the Part 24 Rules. Processes include aerobic digestion, composting, anaerobic digestion, lime stabilization and air drying.

**Daily concentration** is the sum of the concentrations of the individual samples of a parameter divided by the number of samples taken during any calendar day. If the parameter concentration in any sample is less than the quantification limit, regard that value as zero when calculating the daily concentration. The daily concentration will be used to determine compliance with any maximum and minimum daily concentration limitations (except for pH and dissolved oxygen). When required by the permit, report the maximum calculated daily concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the Discharge Monitoring Reports (DMRs).

For pH, report the maximum value of any individual sample taken during the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs and the minimum value of any individual sample taken during the month in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs. For dissolved oxygen, report the minimum concentration of any individual sample in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

**Daily loading** is the total discharge by weight of a parameter discharged during any calendar day. This value is calculated by multiplying the daily concentration by the total daily flow and by the appropriate conversion factor. The daily loading will be used to determine compliance with any maximum daily loading limitations. When required by the permit, report the maximum calculated daily loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMRs.

**Department** means the Michigan Department of Environmental Quality.

**Detection Level** means the lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.



## PART II

### Section A. Definitions

**EC<sub>50</sub>** means a statistically or graphically estimated concentration that is expected to cause 1 or more specified effects in 50% of a group of organisms under specified conditions.

**Fecal coliform bacteria monthly** is the geometric mean of the samples collected in a calendar month (or 30 consecutive days). The calculated monthly value will be used to determine compliance with the maximum monthly fecal coliform bacteria limitations. When required by the permit, report the calculated monthly value in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMRs.

**Fecal coliform bacteria 7-day** is the geometric mean of the samples collected in any 7-day period. The calculated 7-day value will be used to determine compliance with the maximum 7-day fecal coliform bacteria limitations. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

**Flow Proportioned sample** is a composite sample with the sample volume proportional to the effluent flow.

**Grab sample** is a single sample taken at neither a set time nor flow.

**IC<sub>25</sub>** means the toxicant concentration that would cause a 25% reduction in a nonquantal biological measurement for the test population.

**Individual Permit** means a site-specific NPDES permit.

**Inlet** means a catch basin, roof drain, conduit, drain tile, retention pond riser pipe, sump pump, or other point where storm water or wastewater enters into a closed conveyance system prior to discharge off site or into waters of the state.

**Interference** is a discharge which, alone or in conjunction with a discharge or discharges from other sources, both: 1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and 2) therefore, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or, of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act. [This definition does not apply to sample matrix interference.]

**Land Application** means spraying or spreading biosolids or a biosolids derivative onto the land surface, injecting below the land surface, or incorporating into the soil so that the biosolids or biosolids derivative can either condition the soil or fertilize crops or vegetation grown in the soil.

**LC<sub>50</sub>** means a statistically or graphically estimated concentration that is expected to be lethal to 50% of a group of organisms under specified conditions.

**Maximum acceptable toxicant concentration (MATC)** means the concentration obtained by calculating the geometric mean of the lower and upper chronic limits from a chronic test. A lower chronic limit is the highest tested concentration that did not cause the occurrence of a specific adverse effect. An upper chronic limit is the lowest tested concentration which did cause the occurrence of a specific adverse effect and above which all tested concentrations caused such an occurrence.

**MGD** means million gallons per day.

**Monthly frequency of analysis** refers to a calendar month. When required by this permit, an analytical result, reading, value or observation must be reported for that period if a discharge occurs during that period.

## PART II

### Section A. Definitions

**Monthly concentration** is the sum of the daily concentrations determined during a reporting month (or 30 consecutive days) divided by the number of daily concentrations determined. The calculated monthly concentration will be used to determine compliance with any maximum monthly concentration limitations. When required by the permit, report the calculated monthly concentration in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMRs.

For minimum percent removal requirements, the monthly influent concentration and the monthly effluent concentration shall be determined. The calculated monthly percent removal, which is equal to 100 times the quantity [1 minus the quantity (monthly effluent concentration divided by the monthly influent concentration)], shall be reported in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

**Monthly loading** is the sum of the daily loadings of a parameter divided by the number of daily loadings determined in the reporting month (or 30 consecutive days). The calculated monthly loading will be used to determine compliance with any maximum monthly loading limitations. When required by the permit, report the calculated monthly loading in the "AVERAGE" column under "QUANTITY OR LOADING" on the DMRs.

**National Pretreatment Standards** are the regulations promulgated by or to be promulgated by the Federal Environmental Protection Agency pursuant to Section 307(b) and (c) of the Federal Act. The standards establish nationwide limits for specific industrial categories for discharge to a POTW.

**New Facility** means a facility located on a newly-developed or redeveloped site which is ready to begin industrial operations on or after the effective date of this permit.

**NOI** means Notice of Intent to be covered by this permit.

**No observed adverse effect level (NOAEL)** means the highest tested dose or concentration of a substance which results in no observed adverse effect in exposed test organisms where higher doses or concentrations result in an adverse effect.

**Noncontact Cooling Water** is water used for cooling which does not come into direct contact with any raw material, intermediate product, by-product, waste product or finished product.

**Nondomestic user** is any discharger to a POTW that discharges wastes other than or in addition to water-carried wastes from toilet, kitchen, laundry, bathing or other facilities used for household purposes.

**Partially treated sewage** is any sewage, sewage and storm water, or sewage and wastewater, from domestic or industrial sources that is treated to a level less than that required by the permittee's National Pollutant Discharge Elimination System permit, or that is not treated to national secondary treatment standards for wastewater, including discharges to surface waters from retention treatment facilities.

**Point Source Discharge** means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container or rolling stock. Changing the surface of land or establishing grading patterns on land will result in a point source where the runoff from the site is ultimately discharged to waters of the state.

**Polluting Materials** means oil and any material, in solid or liquid form, identified as polluting material under the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code).

**Pretreatment** is reducing the amount of pollutants, eliminating pollutants, or altering the nature of pollutant properties to a less harmful state prior to discharge into a public sewer. The reduction or alteration can be by physical, chemical, or biological processes, process changes, or by other means. Dilution is not considered pretreatment unless expressly authorized by an applicable National Pretreatment Standard for a particular industrial category.

**POTW** is a publicly owned treatment works.

## PART II

### Section A. Definitions

**Quantification level** means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

**Quarterly frequency of analysis** refers to a three month period, defined as January through March, April through June, July through September, and October through December. When required by this permit, an analytical result, reading, value or observation must be reported for that period if a discharge occurs during that period.

**Regional Administrator** is the Region 5 Administrator, U.S. EPA, located at R-19J, 77 W. Jackson Blvd., Chicago, Illinois 60604.

**Secondary Containment Structure** means a unit, other than the primary container in which significant materials are packaged or held, which is required by State or Federal law to prevent the escape of significant materials by gravity into sewers, drains, or otherwise directly or indirectly into any sewer system or to the surface or ground waters of this state.

**Significant industrial user** is a nondomestic user that: 1) is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or 2) discharges an average of 25,000 gallons per day or more of process wastewater to a POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the permittee as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's treatment plant operation or violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

**Significant Materials** means any material which could degrade or impair water quality, including but not limited to: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (See 40 CFR 372.65); any chemical the facility is required to report pursuant to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); polluting materials (as defined above); Hazardous Wastes as defined in Part 111 of the Michigan Act; fertilizers; pesticides; and waste products such as ashes, slag, sludge, and plant and animal wastes that have the potential to be released with storm water discharges.

**Significant Spills and Significant Leaks** means any release of a polluting material reportable under the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code).

**Storm Water** means storm water runoff, snow melt runoff, surface runoff and drainage, and non-storm water included under the conditions of Part I.D.3.

**SWPPP** means the Storm Water Pollution Prevention Plan prepared in accordance with Parts I.B. and I.C. of this permit.

**Tier I value** means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier I toxicity database.

**Tier II value** means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier II toxicity database.

**Total Maximum Daily Load or TMDL** means the amount of pollutant load a water body such as a lake or stream can assimilate and still meet Water Quality Standards.

**Toxicity Reduction Evaluation (TRE)** means a site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.

**Water Quality Standards** means the Part 4 Water Quality Standards promulgated pursuant to Part 31 of Act No. 451 of the Public Acts of 1994, as amended, being Rules 323.1041 through 323.1117 of the Michigan Administrative Code.

## PART II

### Section A. Definitions

**Weekly frequency of analysis** refers to a calendar week which begins on Sunday and ends on Saturday. When required by this permit, an analytical result, reading, value or observation must be reported for that period if a discharge occurs during that period.

**Yearly frequency of analysis** refers to a calendar year beginning on January 1 and ending on December 31. When required by this permit, an analytical result, reading, value or observation must be reported for that period if a discharge occurs during that period.

**24-Hour Composite sample** is a flow proportioned composite sample consisting of hourly or more frequent portions that are taken over a 24-hour period.

**3-Portion Composite sample** is a sample consisting of three equal volume grab samples collected at equal intervals over an 8-hour period.

**7-day concentration** is the sum of the daily concentrations determined during any 7 consecutive days in a reporting month divided by the number of daily concentrations determined. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

**7-day loading** is the sum of the daily loadings of a parameter divided by the number of daily loadings determined during any 7 consecutive days in a reporting month. The calculated 7-day loading will be used to determine compliance with any maximum 7-day loading limitations. When required by the permit, report the maximum calculated 7-day loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMRs.

**PART II****Section B. Monitoring Procedures****1. Representative Samples**

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

**2. Test Procedures**

Test procedures for the analysis of pollutants shall conform to regulations promulgated pursuant to Section 304(h) of the Federal Act (40 CFR Part 136 - Guidelines Establishing Test Procedures for the Analysis of Pollutants), unless specified otherwise in this permit. Requests to use test procedures not promulgated under 40 CFR Part 136 for pollutant monitoring required by this permit shall be made in accordance with the Alternate Test Procedures regulations specified in 40 CFR 136.4. These requests shall be submitted to the Chief of the Permits Section, Water Bureau, Michigan Department of Environmental Quality, P.O. Box 30273, Lansing, Michigan, 48909-7773. The permittee may use such procedures upon approval.

The permittee shall periodically calibrate and perform maintenance procedures on all analytical instrumentation at intervals to ensure accuracy of measurements. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

**3. Instrumentation**

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring instrumentation at intervals to ensure accuracy of measurements.

**4. Recording Results**

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information: 1) the exact place, date, and time of measurement or sampling; 2) the person(s) who performed the measurement or sample collection; 3) the dates the analyses were performed; 4) the person(s) who performed the analyses; 5) the analytical techniques or methods used; 6) the date of and person responsible for equipment calibration; and 7) the results of all required analyses.

**5. Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years or longer if requested by the Regional Administrator or the Department.

## PART II

### Section C. Reporting Requirements

#### 1. Start-up Notification

If the permittee will not discharge during the first 60 days following the effective date of the facility's COC, the permittee shall notify the Department within 14 days following the effective date of the COC, and then 60 days prior to the commencement of the discharge.

#### 2. Submittal Requirements for Self-Monitoring Data

Part 31 of Act 451 of 1994, as amended, specifically Section 324.3110(3) and Rule 323.2155(2) of Part 21 allows the department to specify the forms to be utilized for reporting the required self-monitoring data. Unless instructed on the effluent limitations page to conduct "Retained Self Monitoring" the permittee shall submit self-monitoring data via the Michigan DEQ Electronic Environmental Discharge Monitoring Reporting (*e2-DMR*) system.

The permittee shall utilize the information provided on the *e2-Reporting* website @ <http://secure1.state.mi.us/e2rs/> to access and submit the electronic forms. Both monthly summary and daily data shall be submitted to the department no later than the **20<sup>th</sup> day of the month** following each month of the authorized discharge period(s).

#### 3. Retained Self-Monitoring Requirements

If instructed on the effluent limits page (or otherwise authorized by the Department in accordance with the provisions of this permit) to conduct retained self-monitoring, the permittee shall maintain a year-to-date log of retained self-monitoring results and, upon request, provide such log for inspection to the staff of the Department (Department as defined on the COC). Retained self-monitoring results are public information and shall be promptly provided to the public upon written request from the public.

The permittee shall certify, in writing, to the Department, on or before January 10th of each year, that: 1) all retained self-monitoring requirements have been complied with and a year-to-date log has been maintained; and 2) the application on which this permit is based still accurately describes the discharge. With this annual certification, the permittee shall submit a summary of the previous year's monitoring data. The summary shall include maximum values for samples to be reported as daily maximums and/or monthly maximums and minimum values for any daily minimum samples.

Retained self-monitoring may be denied to a permittee by notification in writing from the Department. In such cases, the permittee shall submit self-monitoring data in accordance with Part II.C.2., above. Such a denial may be rescinded by the Department upon written notification to the permittee.

Reissuance or modification of this permit or reissuance or modification of an individual permittee's authorization to discharge shall not affect previous approval or denial for retained self-monitoring unless the Department provides notification in writing to the permittee.

#### 4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

Monitoring required pursuant to Part 41 of the Michigan Act or Rule 35 of the Mobile Home Park Commission Act (Act 96 of the Public Acts of 1987) for assurance of proper facility operation shall be submitted as required by the Department.

## PART II

### Section C. Reporting Requirements

#### 5. Compliance Dates Notification

Within 14 days of every compliance date specified in this permit, the permittee shall submit a written notification to the Department indicating whether or not the particular requirement was accomplished. If the requirement was not accomplished, the notification shall include an explanation of the failure to accomplish the requirement, actions taken or planned by the permittee to correct the situation, and an estimate of when the requirement will be accomplished. If a written report is required to be submitted by a specified date and the permittee accomplishes this, a separate written notification is not required.

#### 6. Noncompliance Notification

Compliance with all applicable requirements set forth in the Federal Act, Parts 31 and 41 of the Michigan Act, and related regulations and rules is required. All instances of noncompliance shall be reported as follows:

- a. 24-hour reporting - Any noncompliance which may endanger health or the environment (including maximum daily concentration discharge limitation exceedances) shall be reported, verbally, within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission shall also be provided within five (5) days.
- b. Other reporting - The permittee shall report, in writing, all other instances of noncompliance not described in a. above at the time monitoring reports are submitted; or, in the case of retained self-monitoring, within five (5) days from the time the permittee becomes aware of the noncompliance.

Written reporting shall include: 1) a description of the discharge and cause of noncompliance; and 2) the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and the steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

#### 7. Spill Notification

The permittee shall immediately report any release of any polluting material which occurs to the surface waters or groundwaters of the state, unless the permittee has determined that the release is not in excess of the threshold reporting quantities specified in the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code), by calling the Department at the number indicated in the COC, or if the notice is provided after regular working hours call the Department's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706 (calls from out-of-state dial 1-517-373-7660).

Within ten (10) days of the release, the permittee shall submit to the Department a full written explanation as to the cause of the release, the discovery of the release, response (clean-up and/or recovery) measures taken, and preventative measures taken or a schedule for completion of measures to be taken to prevent reoccurrence of similar releases.

#### 8. Upset Noncompliance Notification

If a process "upset" (defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee) has occurred, the permittee who wishes to establish the affirmative defense of upset, shall notify the Department by telephone within 24-hours of becoming aware of such conditions; and within five (5) days, provide in writing, the following information:

- a. that an upset occurred and that the permittee can identify the specific cause(s) of the upset;
- b. that the permitted wastewater treatment facility was, at the time, being properly operated; and
- c. that the permittee has specified and taken action on all responsible steps to minimize or correct any adverse impact in the environment resulting from noncompliance with this permit.

In any enforcement proceedings, the permittee, seeking to establish the occurrence of an upset, has the burden of proof.

## PART II

### Section C. Reporting Requirements

#### 9. Bypass Prohibition and Notification

- a. Bypass Prohibition - Bypass is prohibited unless:
  - 1) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - 2) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass; and
  - 3) the permittee submitted notices as required under 9.b. or 9.c. below.
- b. Notice of Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least ten (10) days before the date of the bypass, and provide information about the anticipated bypass as required by the Department. The Department may approve an anticipated bypass, after considering its adverse effects, if it will meet the three (3) conditions listed in 9.a. above.
- c. Notice of Unanticipated Bypass - The permittee shall submit notice to the Department of an unanticipated bypass by calling the Department at the number indicated in the COC (if the notice is provided after regular working hours, use the following number: 1-800-292-4706) as soon as possible, but no later than 24 hours from the time the permittee becomes aware of the circumstances.
- d. Written Report of Bypass - A written submission shall be provided within five (5) working days of commencing any bypass to the Department, and at additional times as directed by the Department. The written submission shall contain a description of the bypass and its cause; the period of bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass; and other information as required by the Department.
- e. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of 9.a., 9.b., 9.c., and 9.d., above. This provision does not relieve the permittee of any notification responsibilities under Part II.C.10. of this permit.
- f. Definitions
  - 1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
  - 2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

#### 10. Notification of Changes in Discharge

The permittee shall notify the Department, in writing, within 10 days of knowing, or having reason to believe, that any activity or change has occurred or will occur which would result in the discharge of: 1) detectable levels of chemicals on the current Michigan Critical Materials Register, priority pollutants or hazardous substances set forth in 40 CFR 122.21, Appendix D, or the Pollutants of Initial Focus in the Great Lakes Water Quality Initiative specified in 40 CFR 132.6, Table 6, which were not acknowledged in the application or listed in the application at less than detectable levels; 2) detectable levels of any other chemical not listed in the application or listed at less than detection, for which the application specifically requested information; or 3) any chemical at levels greater than five times the average level reported in the complete application (see the COC for the date(s) the complete application was submitted). Any other monitoring results obtained as a requirement of this permit shall be reported in accordance with the compliance schedules.



**PART II****Section C. Reporting Requirements****11. Changes in Facility Operations**

Any anticipated action or activity, including but not limited to facility expansion, production increases, or process modification, which will result in new or increased loadings of pollutants to the receiving waters must be reported to the Department by a) submission of an increased use request (application) and all information required under Rule 323.1098 (Antidegradation) of the Water Quality Standards or b) by notice if the following conditions are met: 1) the action or activity will not result in a change in the types of wastewater discharged or result in a greater quantity of wastewater than currently authorized by this permit; 2) the action or activity will not result in violations of the effluent limitations specified in this permit; 3) the action or activity is not prohibited by the requirements of Part II.C.12.; and 4) the action or activity will not require notification pursuant to Part II.C.10. Following such notice, the permit may be modified according to applicable laws and rules to specify and limit any pollutant not previously limited.

**12. Bioaccumulative Chemicals of Concern (BCC)**

Consistent with the requirements of Rules 323.1098 and 323.1215 of the Michigan Administrative Code, the permittee is prohibited from undertaking any action that would result in a lowering of water quality from an increased loading of a BCC unless an increased use request and antidegradation demonstration have been submitted and approved by the Department.

**13. Transfer of Ownership or Control**

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall submit to the Department 30 days prior to the actual transfer of ownership or control a written agreement between the current permittee and the new permittee containing: 1) the legal name and address of the new owner; 2) a specific date for the effective transfer of permit responsibility, coverage and liability; and 3) a certification of the continuity of or any changes in operations, wastewater discharge, or wastewater treatment.

If the new permittee is proposing changes in operations, wastewater discharge, or wastewater treatment, the Department may propose modification of this permit in accordance with applicable laws and rules.

**PART II****Section D. Management Responsibilities****1. Duty to Comply**

All discharges authorized herein shall be consistent with the terms and conditions of this permit and the facility's COC. The discharge of any pollutant identified in this permit and/or the facility's COC more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit and the facility's COC. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit or the facility's COC constitutes a violation of the Michigan Act and/or the Federal Act and constitutes grounds for enforcement action; for COC termination, revocation and reissuance, or modification; or denial of an application for permit or COC renewal.

**2. Operator Certification**

The permittee shall have the waste treatment facilities under direct supervision of an operator certified at the appropriate level for the facility certification by the Department, as required by Sections 3110 and 4104 of the Michigan Act.

**3. Facilities Operation**

The permittee shall, at all times, properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures.

**4. Power Failures**

In order to maintain compliance with the effluent limitations of this permit and prevent unauthorized discharges, the permittee shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit; or
- b. upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

**5. Adverse Impact**

The permittee shall take all reasonable steps to minimize any adverse impact to the surface waters or groundwaters of the state resulting from noncompliance with any effluent limitation specified in this permit including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge in noncompliance.

**6. Containment Facilities**

The permittee shall provide facilities for containment of any accidental losses of polluting materials in accordance with the requirements of the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code). For a Publicly Owned Treatment Work (POTW), these facilities shall be approved under Part 41 of the Michigan Act.

**PART II****Section D. Management Responsibilities****7. Waste Treatment Residues**

Residuals (i.e. solids, sludges, biosolids, filter backwash, scrubber water, ash, grit, or other pollutants or wastes) removed from or resulting from treatment or control of wastewaters, including those that are generated during treatment or left over after treatment or control has ceased shall be disposed of in an environmentally compatible manner and according to applicable laws and rules. These laws may include, but are not limited to, the Michigan Act, Part 31 for protection of water resources, Part 55 for air pollution control, Part 111 for hazardous waste management, Part 115 for solid waste management, Part 121 for liquid industrial wastes, Part 301 for protection of inland lakes and streams, and Part 303 for wetlands protection. Such disposal shall not result in any unlawful pollution of the air, surface waters or groundwaters of the state.

**8. Right of Entry**

The permittee shall allow the Department, any agent appointed by the Department or the Regional Administrator, upon the presentation of credentials:

- a. to enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods and equipment regulated or required under this permit; and to sample any discharge of pollutants.

**9. Availability of Reports**

Except for data determined to be confidential under Section 308 of the Federal Act and Rule 2128 (Rule 323.2128 of the Michigan Administrative Code), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the Regional Administrator. As required by the Federal Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Act and Sections 3112, 3115, 4106 and 4110 of the Michigan Act.

**PART II****Section E. Activities Not Authorized by This Permit****1. Discharge to the Groundwaters**

This permit does not authorize any discharge to the groundwaters. Such discharge may be authorized by a groundwater discharge permit issued pursuant to the Michigan Act.

**2. Facility Construction**

This permit does not authorize or approve the construction or modification of any physical structures or facilities. Approval for such construction for a POTW must be by permit issued under Part 41 of the Michigan Act. Approval for such construction for a mobile home park, campground or marina shall be from the Water Bureau, Michigan Department of Environmental Quality. Approval for such construction for a hospital, nursing home or extended care facility shall be from the Division of Health Facilities and Services, Michigan Department of Consumer and Industry Services upon request.

**3. Civil and Criminal Liability**

Except as provided in permit conditions on "Bypass" (Part II.C.9. pursuant to 40 CFR 122.41(m)), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.

**4. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under Section 311 of the Federal Act except as are exempted by federal regulations.

**5. State Laws**

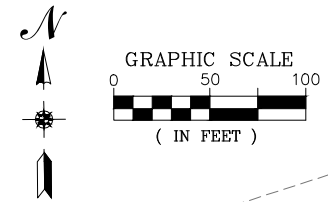
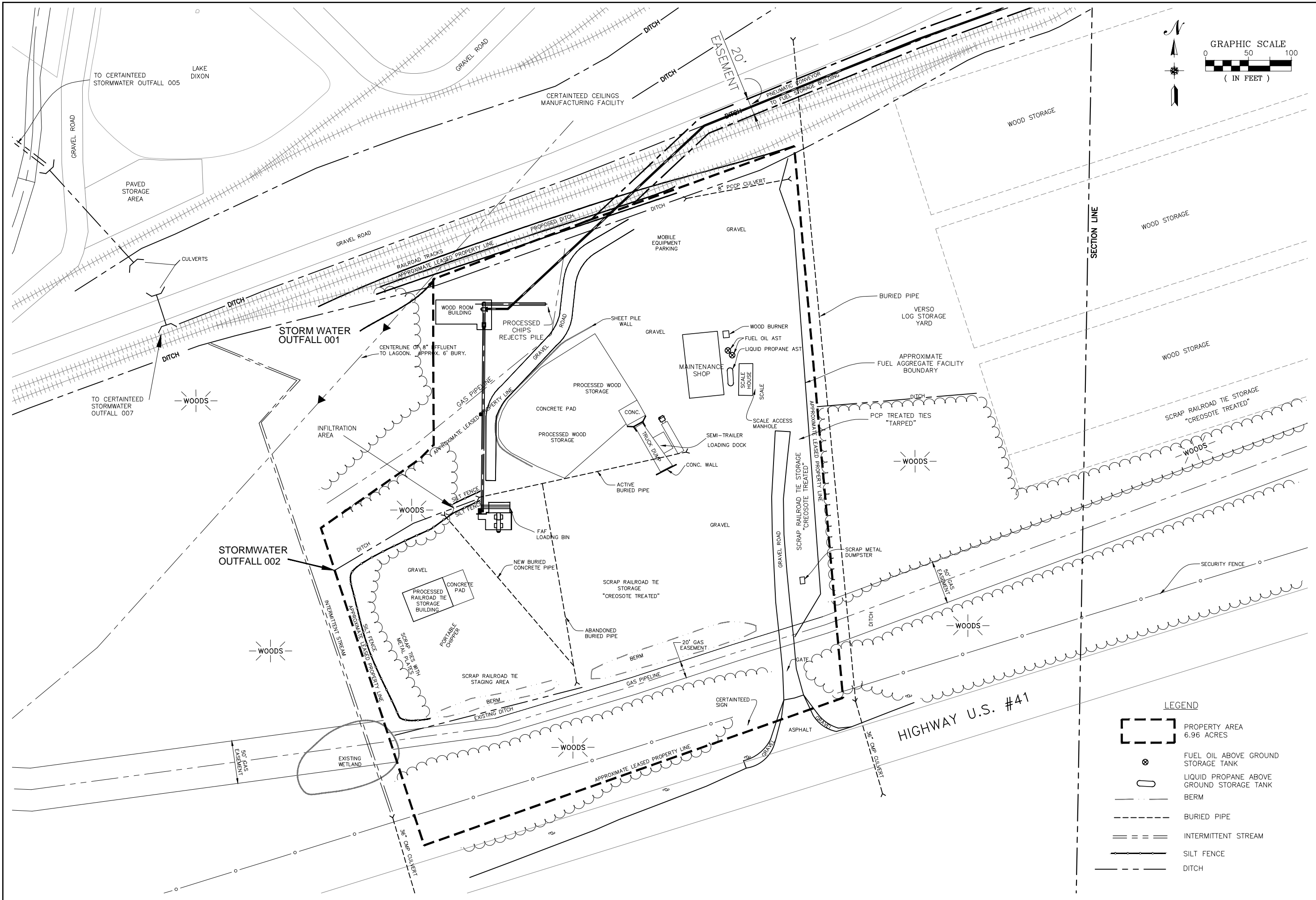
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Federal Act.

**6. Property Rights**

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Department of Environmental Quality permits, or approvals from other units of government as may be required by law.

## **APPENDIX B**

### **FIGURES**



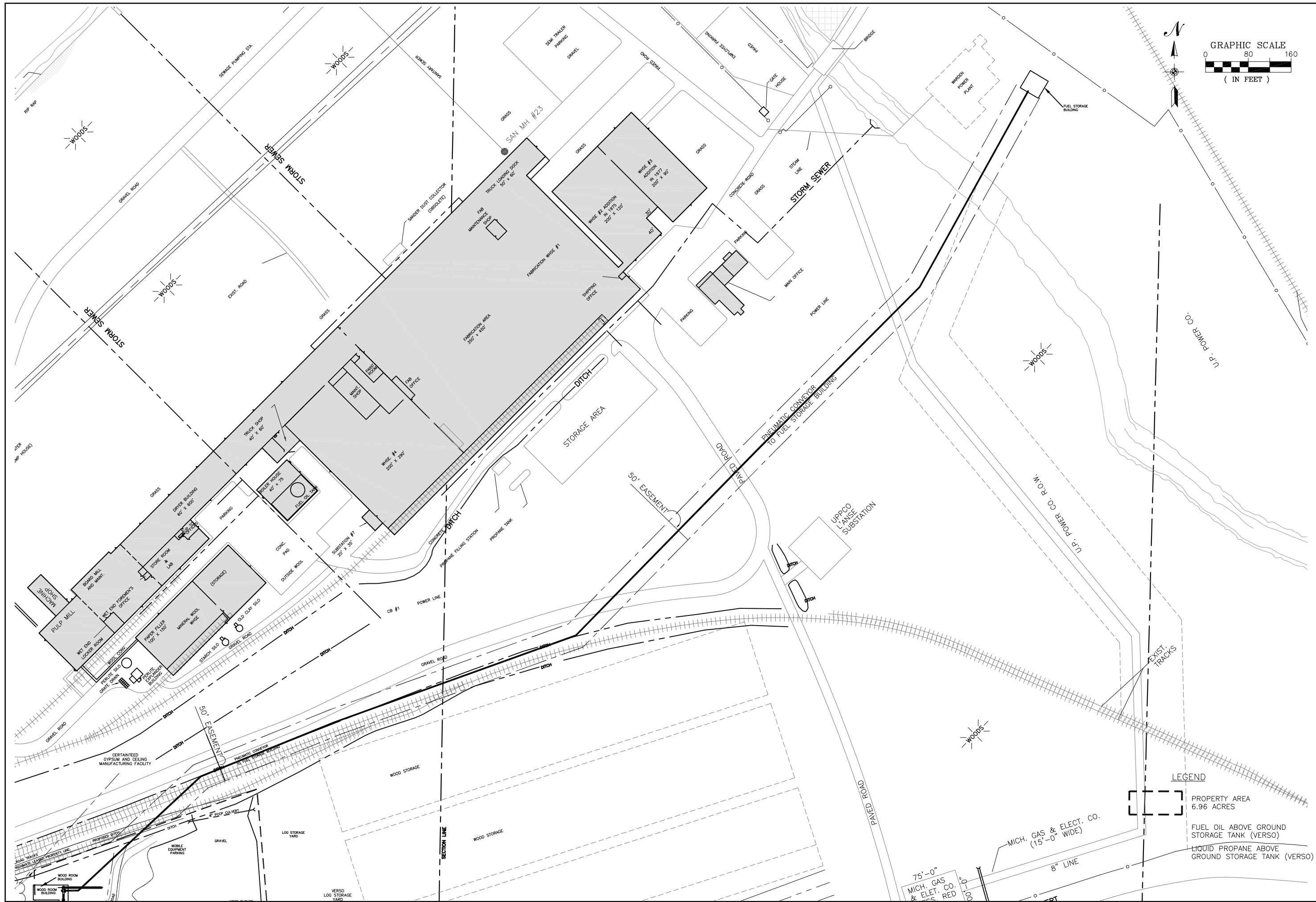
**LEGEND**

	PROPERTY AREA 6.96 ACRES
	FUEL OIL ABOVE GROUND STORAGE TANK
	LIQUID PROPANE ABOVE GROUND STORAGE TANK
	BERM
	BURIED PIPE
	INTERMITTENT STREAM
	SILT FENCE
	DITCH

**COLEMAN ENGINEERING COMPANY**  
 635 ORACLE DRIVE - IRON MOUNTAIN, MICHIGAN 49801 (906) 774-3440  
 200 EAST AYER STREET - IRONWOOD, MICHIGAN 49938 (906) 932-5046

**L'ANSE WARDEN ELECTRIC COMPANY L.L.C.**  
**FUEL AGGREGATE FACILITY SITE MAP**  
 L'ANSE, MI

SCALE	AS SHOWN	DATE	7/9/13
10295_LWEC_SITE.DWG	CAD PROJECT	10295-WPEP_LWEC_SWPP	JOB NUMBER
MRK/JA/GDH	DESIGNED	DS	APPROVED
CEC	DRAWN	9/24/12	
DRAWING NO.			1



**L'ANSE WARDEN ELECTRIC COMPANY L.L.C.**  
**FUEL AGGREGATE FACILITY SITE MAP**  
 L'ANSE, MI

DATE	REVISIONS
DATE	
SCALE	AS SHOWN
DATE	1/25/11
CAD DRAWING	10295-FUEL
CAD PROJECT	CAD10295
CAD NUMBER	10295
DRAWN BY	MRK
CHECKED	DS
APPROVED	-
DATE	8/12/10
DRAWING NO.	<b>2</b>

**LEGEND**

- PROPERTY AREA  
6.96 ACRES
- FUEL OIL ABOVE GROUND STORAGE TANK (VERSO)
- LIQUID PROPANE ABOVE GROUND STORAGE TANK (VERSO)

75'-0"  
MICH. GAS & ELECT. CO.  
& ELET. CO. RED

8" LINE

MICH. GAS & ELECT. CO.  
(15'-0" WIDE)

U.P. POWER CO.

U.P. POWER CO. R.O.M.

UPPCO  
L'ANSE  
SUBSTATION

PNEUMATIC CONVEYOR  
TO FUEL STORAGE BUILDING

50' EASEMENT

STORAGE AREA

FABRICATION AREA  
350' X 450'

WAREHOUSE #4  
200' X 280'

WAREHOUSE #3  
200' X 280'

WAREHOUSE #2  
200' X 280'

WAREHOUSE #1  
200' X 280'

WAREHOUSE #4  
200' X 280'

WAREHOUSE #3  
200' X 280'

WAREHOUSE #2  
200' X 280'

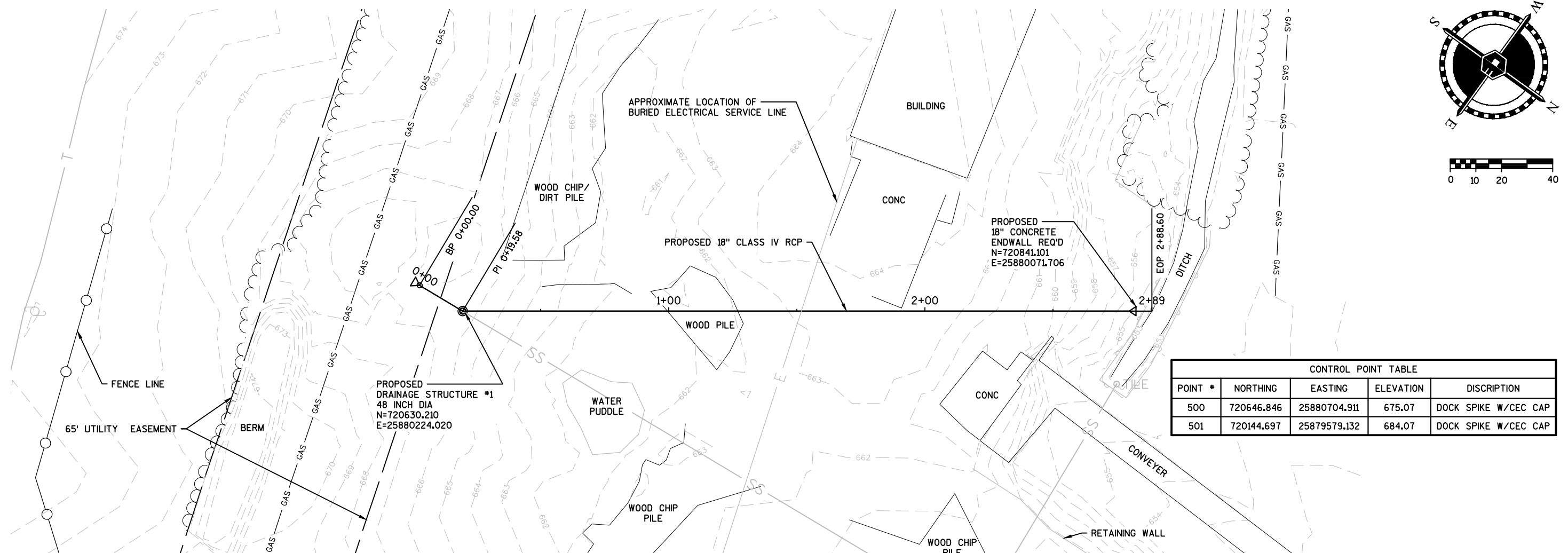
WAREHOUSE #1  
200' X 280'



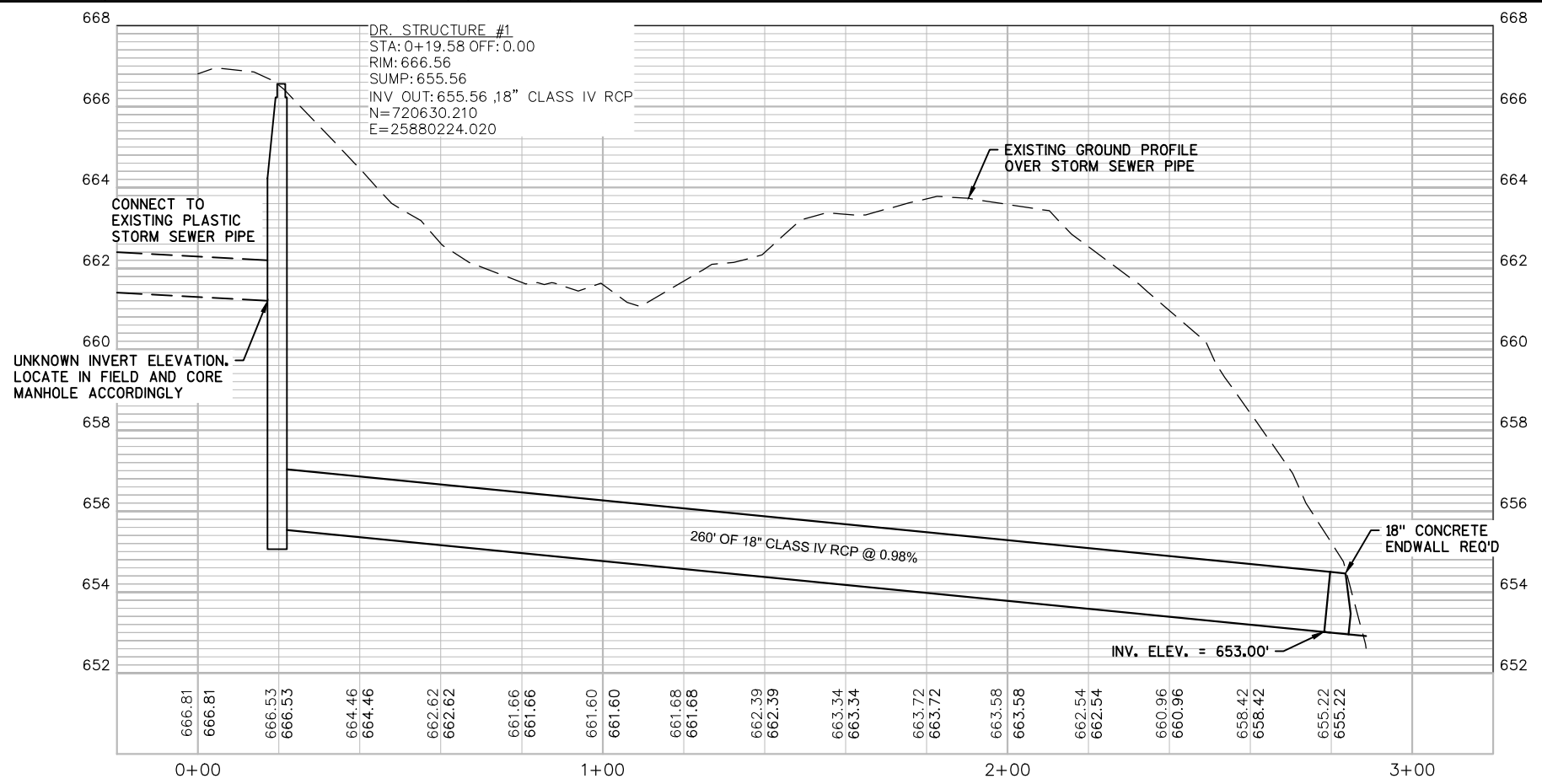








CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DISCRIPTION
500	720646.846	25880704.911	675.07	DOCK SPIKE W/CEC CAP
501	720144.697	25879579.132	684.07	DOCK SPIKE W/CEC CAP



- MISCELLANEOUS QUANTITIES THIS SHEET**
- 1 Ea Culv End Sect, Conc, 18 inch
  - 260 Ft Sewer, CI IV, 18 inch, Tr Det B
  - 1 Ea Dr Structure Cover, Type B
  - 1 Ea Dr Structure, 48 inch dia  
(11 Vertical Feet)
  - 1 LS Slope Restoration
  - 1 LS Erosion Control

**APPENDIX C**  
**SPILL OR RELEASE REPORT**



SPILL OR RELEASE REPORT

NOTE: Some regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures MUST be used and followed if reporting under those regulations. This report form is to aid persons reporting releases under regulations that do not require a specific form. This report form is not required to be used. To report a release, some regulations require a facility to call the PEAS Hotline at 800-292-4706, or DEQ District Office that oversees the county where it occurred, and other regulating agencies and provide the following information. A follow-up written report may be required. Keep a copy of this report as documentation that the release was reported. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. See the DEQ website on Spill/Release Reporting for more reporting information.

Please print or type all information.

Form section for submitter information including Name and Title, Telephone Number, Name of Business, Street Address, City, State, ZIP Code, Business Telephone Number, and Site Identification Number.

RELEASE DATA. Complete all applicable categories. Check all the boxes that apply to the release. Provide the best available information regarding the release and its impacts. Attach additional pages if necessary.

Form section for release data including Date & Time of Release, Date & Time of Discovery, Duration of Release, and Type of Incident.

Form section for material released including Material Released (Chemical or trade name), CAS Number or Hazardous Waste Code, Estimated Quantity Released, and Physical State Released.

Form section for factors contributing to release and source of loss, including Equipment failure, Training deficiencies, Container, Ship, Truck, etc.

Form section for type of material released, material listed on or defined by, and immediate actions taken.

Form section for release reached, including Surface waters, Drain connected to sanitary sewer, Groundwater, Soils, Ambient Air, and Spill contained on impervious surface.

EXTENT OF INJURIES, IF ANY  <hr/>	WAS ANYONE HOSPITALIZED? <input type="checkbox"/> Yes NUMBER _____ HOSPITALIZED: _____  <input type="checkbox"/> No	TOTAL NUMBER OF INJURIES TREATED ON-SITE:  <hr/>
---	---	--

DESCRIBE THE INCIDENT, THE TYPE OF EQUIPMENT INVOLVED IN THE RELEASE, HOW THE VOLUME OF LOSS WAS DETERMINED, ALONG WITH ANY RESULTING ENVIRONMENTAL DAMAGE CAUSED BY THE RELEASE. IDENTIFY WHO IMMEDIATELY RESPONDED TO THE INCIDENT (own employees or contractor — include cleanup company name, contact person, and telephone number). ALSO IDENTIFY WHO DID FURTHER CLEANUP ACTIVITIES, IF PERFORMED OR KNOWN WHEN REPORT SUBMITTED

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

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ESTIMATED QUANTITY OF ANY RECOVERED MATERIALS AND A DESCRIPTION OF HOW THOSE MATERIALS WERE MANAGED (include disposal method if applicable)

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

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ASSESSMENT OF ACTUAL OR POTENTIAL HAZARDS TO HUMAN HEALTH (include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.)

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

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**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED:**

**INITIAL CONTACT BY:**  Telephone  Fax  Email  Other

**DATE/TIME INITIAL CONTACT:** \_\_\_\_\_

PEAS: 800-292-4706 Log Number Assigned \_\_\_\_\_

DEQ District or Field Office Divisions or Offices Contacted:

<input type="checkbox"/> Baraga	<input type="checkbox"/> Gwinn	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Bay City	<input type="checkbox"/> Jackson	<input type="checkbox"/> Land & Water Management
<input type="checkbox"/> Cadillac	<input type="checkbox"/> Kalamazoo	<input type="checkbox"/> Office Geological Survey
<input type="checkbox"/> Crystal Falls	<input type="checkbox"/> Lansing	<input type="checkbox"/> Remediation and Redevelopment
<input type="checkbox"/> Detroit	<input type="checkbox"/> Newberry	<input type="checkbox"/> Waste and Hazardous Materials
<input type="checkbox"/> Gaylord	<input type="checkbox"/> Warren	
<input type="checkbox"/> Grand Rapids	<input type="checkbox"/> Wyoming	

Water Bureau

DEQ Office locations are subject to change

**NAME AND TITLE OF PERSON MAKING INITIAL REPORT:**

---

**DEQ STAFF CONTACTED & PHONE NUMBER:**

---

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**OTHER ENTITIES NOTIFIED:**

	Date:	Time:
<input type="checkbox"/> National Response Center (NRC): 800-424-8802	_____	_____
<input type="checkbox"/> US Coast Guard Office:	_____	_____
<input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie		
<input type="checkbox"/> US Department of Transportation	_____	_____
<input type="checkbox"/> US Environmental Protection Agency	_____	_____
<input type="checkbox"/> 911 (or primary public safety answering point)	_____	_____
<input type="checkbox"/> Local Fire Department	_____	_____
<input type="checkbox"/> Local Police and/or State Police	_____	_____
<input type="checkbox"/> Local Emergency Planning Committee	_____	_____
<input type="checkbox"/> State Emergency Response Commission via MI SARA Title III Program	_____	_____
<input type="checkbox"/> Wastewater Treatment Plant Authority	_____	_____
<input type="checkbox"/> Hazmat Team	_____	_____
<input type="checkbox"/> Local Health Department	_____	_____
<input type="checkbox"/> Department of Labor & Economic Growth MIOSHA	_____	_____
<input type="checkbox"/> Department of Labor & Economic Growth Fire Safety	_____	_____
<input type="checkbox"/> Michigan Department of Agriculture: 800-405-0101	_____	_____
<input type="checkbox"/> Other _____	_____	_____

**PERSON CONTACTED & PHONE NUMBER:**

---

---

DATE WRITTEN REPORT SUBMITTED	SIGNATURE OF PERSON SUBMITTING WRITTEN REPORT
-------------------------------	---

**APPENDIX D**

**EMPLOYEE TRAINING ATTENDANCE RECORD**





**APPENDIX E**

**ANNUAL FACILITY SITE COMPLIANCE INSPECTION**

# ANNUAL SWPPP REVIEW FORM

Date of Review:  
May 10, 2012

**Reviewer**  
 Print: David Schmutzler      Signature: *David Schmutzler*

## Annual SWPPP Review Checklist

1) Facility general information and SWPPP team information is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
2) Site map is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
3) Significant material inventory is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
4) New exposures, processes and related controls have been documented	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
5) Spills have been recorded and reported as appropriate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
6) Records of routine preventative maintenance, housekeeping and employee training are available in the SWPPP file	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
7) Comprehensive site inspections have been completed, certified and filed in the SWPPP file	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
8) Corrective actions noted in the inspection reports have been completed	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
9) Certified Storm Water Operator is current	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
10) Annual fees have been paid	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
11) Permit renewal request has been processed	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
12) SWPPP has been reviewed and signed by the Certified Storm Water Operator and the Permittee or designated representative	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

### Additional Comments:

1. SWPPP was updated April 2012. NPDES Certificate of Coverage current.
2. Site Map needs to be updated. May 2012 version attached.
3. Quarterly inspections are being documented on forms provided in SWPP.
4. Site housekeeping and Best Management Practices need to be addressed. (see attached list).
5. Photo log attached.
6. Annual SWPPP employee training conducted July 13 and 27, 2011.
7. Annual management SWPP review conducted April 26, 2012.
8. Previous annual SWPPP inspection conducted March 6, 2012.

**LWEC Fuel Aggregate Facility  
Environmental and Safety Inspection Summary of Findings  
Conducted May 10, 2012**

**Photo with Description**

**Concern**

#49, #50, #52, #53 - Waste RR Tie Storage

Storage pile location not included on site map. Insufficient silt fence coverage around the pile. Uncovered Dumpsters. "Potential contaminated storm water release."

#62, #91, #92 - Petroleum Product Storage

Two (2) double-walled aboveground storage tanks; only one previously. One (1) 500-gallon owned by Verso, one (1) 500-gallon owned by MMA. "55-gallon drums in Building - Petroleum product drums without secondary containment." SPCC plan requirement if > 1320 gallons in storage (1000 gallons in two (2) ASTs plus six (6) 55-gallon drums exceeds this threshold quantity).

#64, #65, #95 - Power Washing Vehicle

SWPPP requirement - vehicle washing restricted to within the building. "Potential petroleum product release to ground surface and future storm event."

#69, #70 - Storm Water Outfall 001

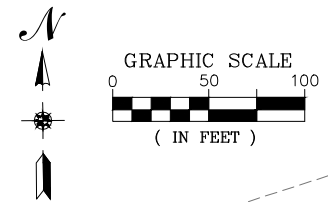
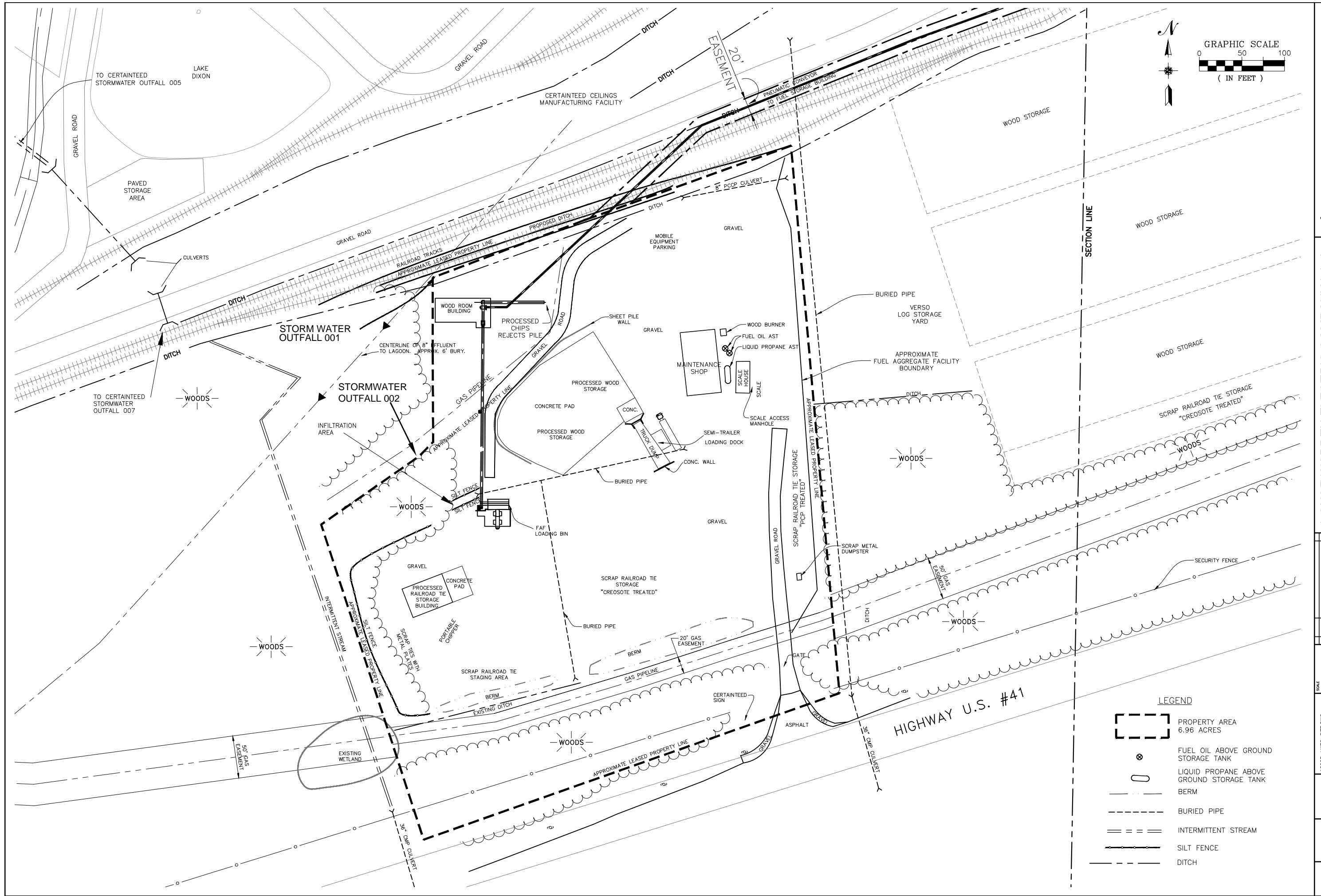
Storm water runoff to CertainTeed property. Breach of Site Specific BMP identified in SWPPP. "Potential release of silt and debris to CertainTeed property and CertainTeed storm water outfall."

#75 - RR Storage Pile West of Processed RR Tie Storage Building

Storage pile location not included on site map.

#79, #80, #81, #82 - West Project Boundary Silt Fence

Silt fence not installed according to site map. "Potential runoff from western property boundary to CertainTeed property and intermittent stream."



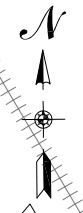
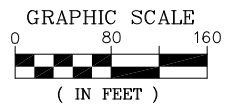
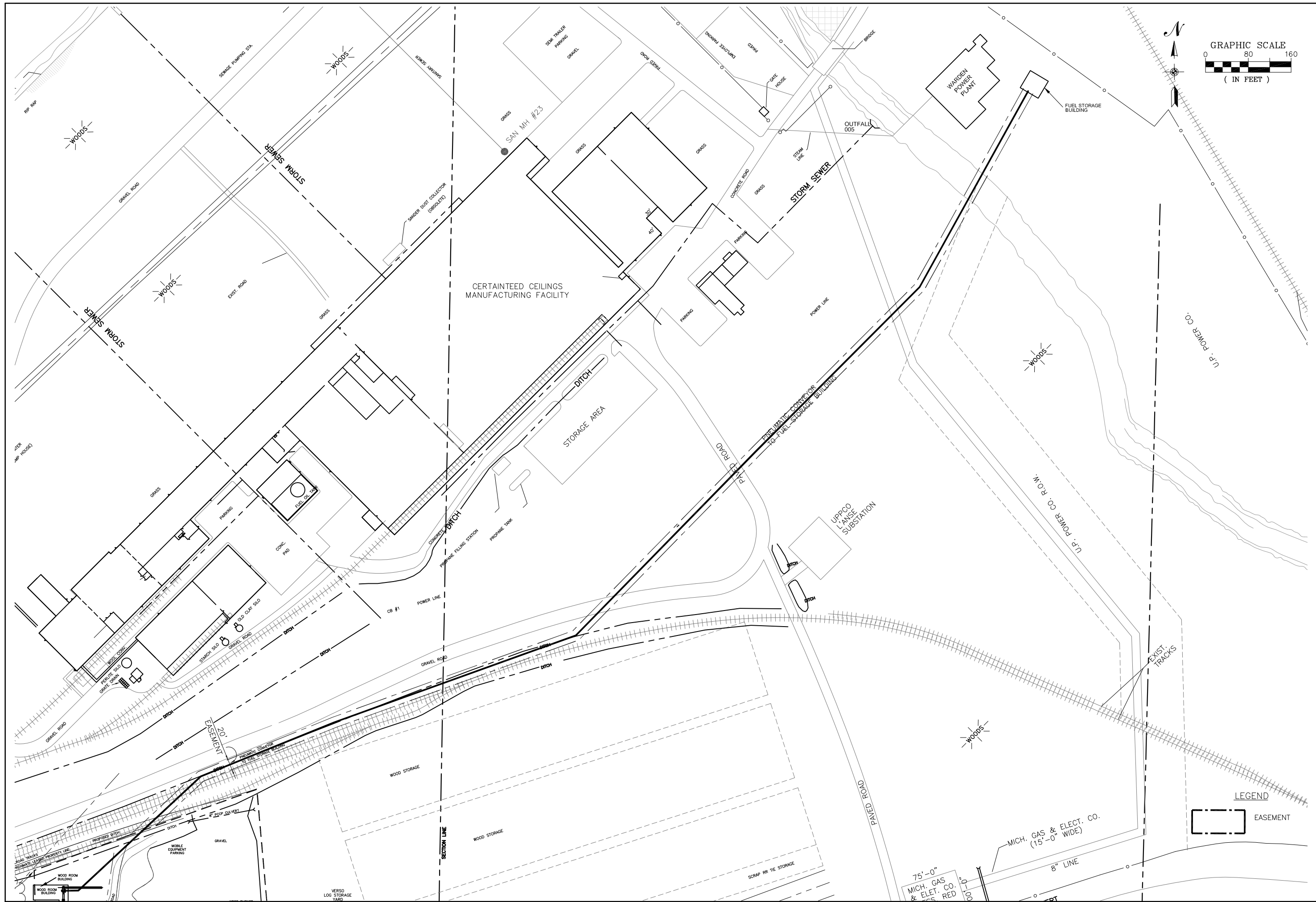
**LEGEND**

	PROPERTY AREA 6.96 ACRES
	FUEL OIL ABOVE GROUND STORAGE TANK
	LIQUID PROPANE ABOVE GROUND STORAGE TANK
	BERM
	BURIED PIPE
	INTERMITTENT STREAM
	SILT FENCE
	DITCH

**COLEMAN ENGINEERING COMPANY**  
635 ORCHARD DRIVE - IRON MOUNTAIN, MICHIGAN 49801 (906) 774-3440  
200 EAST AYER STREET - IRONWOOD, MICHIGAN 49938 (906) 932-5048

**L'ANSE WARDEN ELECTRIC COMPANY L.L.C.**  
**FUEL AGGREGATE FACILITY SITE MAP**  
L'ANSE, MI

SCALE	AS SHOWN	DATE	5/1/13
10295_LWEC_SITE.DWG	10295-LWEC-SWPP	JOB NUMBER	10295-D
MRK/JA/GDH	DS	APPROVED	
CEC	DATE	9/24/12	
<b>1</b>	DRAWING NO.		



DATE	BY	REVISIONS

SCALE	AS SHOWN	DATE
		5/17/12

DESIGNED BY	12126-SITE.DWG
DRAWN BY	MIRK/JA/GDH
CHECKED BY	DS
APPROVED BY	


PROJECT	CAD12126-WPEP-LWEC-SWPP
JOB NUMBER	12126-D

SUBMITTED BY	CEC	DATE	8/12/10
--------------	-----	------	---------

LEGEND

 EASEMENT

# ANNUAL SWPPP REVIEW FORM

Date of Review: September 28, 2012
---------------------------------------

<b>Reviewer</b>	
Print: David Schmutzler	Signature:

## Annual SWPPP Review Checklist

1) Facility general information and SWPPP team information is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
2) Site map is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
3) Significant material inventory is current and accurate	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
4) New exposures, processes and related controls have been documented	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
5) Spills have been recorded and reported as appropriate	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA
6) Records of routine preventative maintenance, housekeeping and employee training are available in the SWPPP file	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
7) Comprehensive site inspections have been completed, certified and filed in the SWPPP file	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
8) Corrective actions noted in the inspection reports have been completed In Progress	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9) Certified Storm Water Operator is current	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
10) Annual fees have been paid	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
11) Permit renewal request has been processed	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
12) SWPPP has been reviewed and signed by the Certified Storm Water Operator and the Permittee or designated representative	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

<p>Additional Comments:</p> <p>6) Records have previously been kept in Power Plant Generation Foreman's Office files. Records now transferred to LWEC FAF SWPPP Master file.</p> <p>7) Records have previously been kept in Power Plant Generation Foreman's Office files. Records now transferred to LWED FAF SWPPP Master file.</p> <p>8) Additional silt fence has been added along western project boundary. Outfall 001 area and sloped area north of Processed Railroad Tie Storage Building will be seeded and mulched. See attached photo log dated 9-19-12.</p> <p>11) NOI submitted February 8, 2011. Certificate of Coverage No. MIS 310650 dated March 22, 2012. General Permit No. MIS 310000 (effective April 1, 2008, expiring April 1, 2013).</p>
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**APPENDIX F**  
**INSPECTION REPORTS**

# QUARTERLY COMPREHENSIVE SITE INSPECTION FORM

Date:	Time:
-------	-------

<b>Inspector</b>	
Print:	Signature:

Is the Facility in compliance with the General Permit and the SWPPP?
--

Outfall Number ( make reference to site map)		Description of Outfall (e.g. ditch, concrete pipe, grassed swale, etc.)
Time of Rainfall Event	Time of Visual Inspection	<b>Optional:</b> Amount of Rainfall at the Time of Observation (nearest tenth of an inch)
Describe your observations. An easy way to conduct this inspection is to use a glass jar to collect a sample of the storm water being discharged from the facility and visually inspect the water. Include any observations of color, odor, turbidity, floating solids, foam, oil sheen or any other visual indicators of storm water pollution and the probable sources of any observed storm water contamination.		
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Red
	<input type="checkbox"/> Yellow	<input type="checkbox"/> Brown
	<input type="checkbox"/> Other:	
Odor:	<input type="checkbox"/> None	<input type="checkbox"/> Musty
	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rotten Egg
	<input type="checkbox"/> Other:	
Clarity:	<input type="checkbox"/> Clear	<input type="checkbox"/> Cloudy
	<input type="checkbox"/> Opaque	<input type="checkbox"/> Suspended Solids
	<input type="checkbox"/> Other:	
Floatables:	<input type="checkbox"/> None	<input type="checkbox"/> Foam
	<input type="checkbox"/> Garbage	<input type="checkbox"/> Oily Film
	<input type="checkbox"/> Other:	
Deposits / Stains:	<input type="checkbox"/> None	<input type="checkbox"/> Oily
	<input type="checkbox"/> Sludge	<input type="checkbox"/> Sediments
	<input type="checkbox"/> Other:	
Comments:	1) Storm Water:	Follow-up Action Required:
	2) Site Housekeeping/Maintenance:	1)
		2)
This outfall could not be evaluated during this quarter due to the following reason:		



# MONTHLY HOUSEKEEPING INSPECTION FORM

Date:	Time:
-------	-------

<b>Inspector</b>	
Print:	Signature:

	Areas Inspected	Observation	Corrective Actions Taken
1)	Gravel Parking Lot and Roadways		
2)	Pentachlorophenol – Treated Tie Storage Area		
3)	Creosote-Treated Tie Storage Area		
4)	Processed Tie Operations and Storage Area		
5)	Employee Parking Area		
6)	Processed Wood Storage Area		
7)	Truck Dumper Hydraulic Reservoir		
8)	Scrap Metal/Solid Waste Dumpsters		
9)	Scrap Tie/Soils Pile		
10)	Diesel Fuel AST and Mobil Equipment		

# MONTHLY HOUSEKEEPING INSPECTION FORM

Date:	Time:
-------	-------

<b>Inspector</b>	
Print:	Signature:

	Areas Inspected	Observation	Corrective Actions Taken
11)	Wood Chip Handling		
	1) Loading Bin Area		
	2) Inclined Conveyor to Wood Room Building Area		
	3) Rejects/Bypass Conveyor Area		
12)	Pneumatic Conveyor System to LWEC		
13)	Outfall 001 Area		
14)	Outfall 002 Area		

# MONTHLY PREVENTATIVE MAINTENANCE INSPECTION FORM

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Date:	Time:
-------	-------

<b>Inspector</b>	
Print:	Signature:

	<b>Areas Inspected</b>	<b>Observation</b>	<b>Corrective Actions Taken</b>
1)	West Property Boundary Silt Fencing		
2)	Outfall 001 Area		
3)	Scrap tie/Soils Pile Silt Fence		
4)	Truck Dumper Area		
5)	Mobil Equipment Leaks		
6)	Wood Chip Handling		
7)	Woodroom Building		
8)	Maintenance Shop Petroleum Product Storage		
9)	Outfall 002 Area		



# ANNUAL SWPPP REVIEW FORM

Date of Review:
-----------------

<b>Reviewer</b>	
Print:	Signature:

## Annual SWPPP Review Checklist

1) Facility general information and SWPPP team information is current and accurate	Yes	No	
2) Site map is current and accurate	Yes	No	
3) Significant material inventory is current and accurate	Yes	No	
4) New exposures, processes and related controls have been documented	Yes	No	NA
5) Spills have been recorded and reported as appropriate	Yes	No	NA
6) Records of routine preventative maintenance, housekeeping and employee training are available in the SWPPP file	Yes	No	
7) Comprehensive site inspections have been completed, certified and filed in the SWPPP file	Yes	No	
8) Corrective actions noted in the inspection reports have been completed	Yes	No	
9) Certified Storm Water Operator is current	Yes	No	
10) Annual fees have been paid	Yes	No	
11) Permit renewal request has been processed	Yes	No	NA
12) SWPPP has been reviewed and signed by the Certified Storm Water Operator and the Permittee or designated representative	Yes	No	

Additional Comments:
----------------------

**APPENDIX G**

**SPILL HISTORY AND INSPECTION TRACKING FORM**

L'Anse Warden Electric Company, LLC Fuel Aggregation Facility  
SPILL HISTORY AND INSPECTION FORM

Date	FAF Spill Incident Report Sheet	MDEQ Spill or Release Report	Annual Facility Compliance Inspection	Quarterly Inspection Report

**APPENDIX H**

**SUPPORT DOCUMENTATION**

**Scrap Wood Management Plan**

**Material Safety Data Sheets  
Creosote Treated Wood  
Wood Dust**

**Laboratory TCLP Analysis  
Chipped Railroad Ties – Metals, SVOCs, VOCs**





Weston Solutions of Michigan, Inc.  
Suite 200  
600 East Lakeshore Drive  
Houghton, Michigan 49931  
www.westonsolutions.com

21 July 2010

Mr. Rob Schmeling  
Michigan Department of Natural Resources and Environment  
Waste and Hazardous Materials Division  
420 Fifth Street  
Gwinn, Michigan 49841

RE: Notification of Update to Scrap Wood Management Plan  
L'Anse Warden Electric Company, LLC.

Dear Mr. Schmeling:

This updated notification for exemption from regulation of scrap wood for the storage, processing and use as fuel is being submitted to the Michigan Department of Natural Resources and Environment (DNRE) by Weston Solutions of Michigan, Inc. (WESTON®) on behalf of the L'Anse Warden Electric Company, LLC. (LWEC). LWEC is providing this update to reflect that it has recently engaged a number of specialty Contractors to operate the Fuel Aggregation Facility (FAF) on its behalf. Norman Pestka Construction, Inc., which previously operated this facility, as indicated in the April 2008 Scrap Wood Management Plan that was approved for this location, will be just one of the Contractors that LWEC will employ going forward. LWEC Contractors will perform activities under the scrap wood exemption. In accordance with the provisions of Section 11507 of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the rules promulgated under Part 115, specifically R 299.4119 and the Scrap Wood Exemption Memorandum dated March 18, 2010, scrap wood is granted a site/source-separated exemption by the authorized representative of the Director of the DNRE.

LWEC intends to continue aggregating and processing scrap wood, including construction debris, industrial wood, wood waste from secondary manufacturing, and wood or wood products treated with creosote at the FAF in L'Anse, Michigan. The property on which the FAF is located is being leased from CertainTeed by LWEC. Following processing, scrap wood will be transferred to be used as biomass boiler fuel for the production of electrical and thermal energy at the LWEC Facility in L'Anse, Michigan, which is permitted by the DNRE Air Quality Division (AQD) under Part 55, Air Pollution Control, of the NREPA as evidenced in Draft Renewable Operating Permit (ROP) MI-ROP-B4260-2010, which will be replacing previous permit MI-ROP-B4260-2004b.

The use of the scrap wood will adhere to the best management practice guidelines in the Scrap Wood Management Plan for the FAF attached herein. By receiving this exemption, LWEC will continue to divert scrap wood from Michigan landfills.





Mr. Schmeling  
DNRE

2 of 2

21 July 2010

In short, LWEC respectfully requests approval of the updated Scrap Wood Management Plan. This exemption is an important element of a unique and novel effort to reuse resources, create energy, and provide important jobs in the Upper Peninsula.

Should you have any comments or questions regarding this request, please contact WESTON at 906-482-2311, or via electronic mail at [J.Binkley@westonsolutions.com](mailto:J.Binkley@westonsolutions.com).

Very truly yours,

WESTON SOLUTIONS OF MICHIGAN, INC.

A handwritten signature in black ink, appearing to read "Jed Chrestensen".

Jed Chrestensen, P.E.  
Senior Project Engineer

A handwritten signature in black ink, appearing to read "Jeffrey S. Binkley".

Jeffrey S. Binkley  
Client Services Manager

cc: JR Richardson, LWEC  
Darryl Koski, LWEC

# **SCRAP WOOD MANAGEMENT PLAN**

## **FUEL AGGREGATION FACILITY**

U.S. 41  
L'Anse, Michigan 49946

## **L'ANSE WARDEN ELECTRIC COMPANY, LLC.**

157 South Main Street  
L'Anse, Michigan 49946

**UPDATED: JULY 2010**  
**ORIGINALLY ISSUED: APRIL 2008**

## **EXECUTIVE SUMMARY**

L'Anse Warden Electric Company, LLC. (LWEC) has updated this Scrap Wood Management Plan (Plan) to reflect current operations as part of its notification for Scrap Wood Exemption in accordance with the provisions of Section 11507 of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the rules promulgated under Part 115. This Plan is in support of the LWEC's effort to create sustainable energy through reuse. The Plan discusses best management practices associated with operation of a Fuel Aggregation Facility where scrap wood will be collected and processed.

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- Figure 1** Facility Locations Map
- Figure 2** Fuel Aggregation Facility Conceptual Layout

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- Appendix A** Monthly Storm Water Pollution Prevention Maintenance Form
- Appendix B** Weekly Fugitive Emissions Inspection and Observation Log

## **SECTION 1**

### **PROJECT DESCRIPTION AND LOCATION**

The L'Anse Warden Electric Company, LLC. (LWEC) owns a former coal, fuel oil, and natural gas fired electrical generation station which it converted to a biomass fueled electrical and steam generating station at 157 South Main Street in L'Anse, Michigan (LWEC Facility). As part of an initiative to develop sustainable energy through reuse, scrap wood is being used as biomass fuel at the LWEC Facility, which is permitted under Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, as amended (NREPA), as evidenced in Draft Renewable Operating Permit (ROP) MI-ROP-B4260-2010, which will be replacing previous permit MI-ROP-B4260-2004b. Contractors for LWEC collect and process scrap wood at a Fuel Aggregation Facility (FAF) which has been operating under the April 2008 Scrap Wood Management Plan (Plan), which was accepted by the Michigan Department of Natural Resources and Environment (DNRE), formerly the Michigan Department of Environmental Quality, in a letter dated 22 April 2008. This update to the Plan has been prepared to reflect current operations at the FAF, namely the change in operators from Norman Pestka Construction, Inc. to LWEC and a number of specialty Contractors.

The FAF is also located in L'Anse, Michigan on U.S. Highway 41. **Figure 1** depicts the location of the LWEC Facility and the FAF. **Figure 2** depicts the FAF layout. The FAF is located within the Village of L'Anse Industrial District Zone (I-1) on property leased from CertainTeed by LWEC. The operations at the FAF are permitted as a Contractor yard, equipment storage and materials handling operation under the Village of L'Anse Ordinance, Article IX – Industrial District, Section 901 Principal Uses Permitted, Part 3. The FAF is not located in close proximity to a Residential Zoned area. As required by the Village of L'Anse Ordinance, all activities, including those that have the potential to produce nuisances at the FAF, will comply with State and Federal environmental regulations and are confined to the FAF.

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**PROJECT DESCRIPTION AND LOCATION**

This Plan has been prepared pursuant to Section 11507 of Part 115, Solid Waste Management, of the NREPA, and the rules promulgated under Part 115, specifically R 299.4119, and the FAF operations are in compliance with State and Federal Solid Waste Regulations.

**MATERIALS HANDLING, PROCESSING, AND STORAGE**

**SECTION 2**

**MATERIALS HANDLING, PROCESSING, AND STORAGE**

The FAF aggregates and processes scrap wood, including construction debris, industrial wood, wood waste from secondary manufacturing, and wood or wood products treated with creosote.

The FAF only accepts materials in compliance with the scrap wood exemption. Acceptable materials are limited to plywood, pressed board, oriented strand board, other wood mixed with glue or filler from construction debris, industrial wood, and wood waste from secondary manufacturing, or wood or wood products treated with creosote (Material). Furthermore, scrap wood must not include wood that has been treated with chromated copper arsenate, ammoniacal copper quat, or ammoniacal copper zinc arsenate.

Materials are delivered to the FAF from multiple sources. All materials brought to the FAF are logged to identify source supplier, weight, and date of delivery. The FAF operator is required to specify to their suppliers those materials that are unacceptable and is trained to reject unacceptable materials.

Material that is delivered to the FAF is placed in storage areas prior to processing. Material that is delivered to the FAF is sorted, and those materials, such as general refuse or un-permitted scrap wood (e.g. chromated copper arsenate treated wood), that are unacceptable for use are rejected or segregated and placed into an appropriate container for shipment to a licensed disposal facility.

While being stored at the FAF, the Material will not come in direct contact with wetlands defined by the NREPA, groundwater, or surface water. Storm water at the FAF is managed in accordance with the LWEC FAF Storm Water Pollution Prevention Plan (SWPPP), which is being updated, under General National Pollutant Discharge Elimination System (NPDES) Permit No. MIS329000. Routine preventive maintenance inspections are conducted monthly at the FAF to ensure compliance with the SWPPP. These inspections are conducted to inspect and maintain



**MATERIALS HANDLING, PROCESSING, AND STORAGE**

storm water management and control devices, inspect vehicles and machines to identify any fluid leaks, evaluate material handling and storage structures to ensure they are completely containing materials, and evaluate material transport systems to ensure that no leaks or spills are occurring. These inspections include a reconnaissance of the FAF to identify any areas of soil erosion. Any identified problems or items in need of maintenance/updating are promptly corrected before storm water contamination occurs. An example inspection sheet is included in **Appendix A**.

In accordance with R 299.4130, Storage of Solid Waste in Contained Piles, the processed creosote treated wood/wood products will be stored in the Chipped Wood Storage Building which is a covered, leak proof building on an impervious surface that will control precipitation, leaks, and run-off or run-on such that no impacts will occur. Other materials, including unprocessed creosote treated wood/wood products, are stored in outdoor areas of the FAF. On occasion, some processed creosote treated wood/wood products may be temporarily stored in outdoor areas in accordance with the Scrap Wood Exemption before reuse or final disposition within 60 days.

Materials will not be stored in a manner constituting speculative accumulation. All material that is delivered to the FAF is logged to identify the source, weight, and date of delivery. Records are maintained to demonstrate that at least 75% of the material delivered to the FAF will be transferred to the Fuel Storage Building at the LWEC Facility during a calendar year. Following processing, chipped creosote treated wood/wood products intended to be used as fuel are stored in the Chipped Wood Storage Building or transported directly to the Fuel Storage Building. On occasion, some processed creosote treated wood/wood products may be temporarily stored in outdoor areas in accordance with the Scrap Wood Exemption before reuse or final disposition within 60 days. Other scrap wood, including creosote treated wood/wood products, are staged in outdoor areas of the FAF prior to processing and/or direct transport via live-bottom or dump truck to the LWEC Facility Fuel Storage Building.

Since LWEC Contractors store the processed creosote treated wood/wood products in a manner consistent with R 299.4130, there is no time limit for storage of the processed material as long as it is not stored in a manner constituting speculative accumulation. LWEC understands that other

**MATERIALS HANDLING, PROCESSING, AND STORAGE**

scrap wood that is not stored in accordance with R 299.4130 must be stored in accordance with R 299.4129 (2)(c) and must be transported for final reuse or other disposition within 60 days, in accordance with Condition 11 of the DNRE's Generic Scrap Wood Exemption. An example tracking sheet is provided in **Appendix B**.

In summary, no materials will come into direct contact with surface water, groundwater, or wetland areas. Furthermore, processing, transporting, storage, or use of materials will be managed in a manner to prevent nuisance conditions or the creation of fugitive dust, as explained further in **Section 4**.

## **SECTION 3**

### **MATERIALS TRANSPORTATION**

Vehicles used to transport the Material to and from the FAF will comply with the Michigan Vehicle Code (MVC), 1949 PA 300, as amended and the rules promulgated under the MVC. All vehicles are equipped with tarps to prevent loss to the environment during transport and delivery.

The processed Materials are delivered to the LWEC Facility in self-dumping trucks in compliance with the MVC. All scrap wood is transferred from the trucks into a ground receiving hopper before being transferred into the LWEC Facility Fuel Storage Building.

## **SECTION 4**

### **EMISSIONS MANAGEMENT**

Material handling activities that have the potential to produce fugitive dust include unloading of the whole and/or processed scrap wood, stockpiling of the material, and transport of the material within the FAF or to the LWEC Facility. Processing, storage, transporting, and other handling of the material is managed in such a way to prevent nuisance conditions and the release of fugitive dust or visible emissions in violation of Part 55 or the rules promulgated under Part 55.

In the event of spillage of scrap wood onto the FAF roadways, the spilled material will be collected to prevent fugitive dust emissions and to ensure that the material is not tracked off-site. The FAF roadways and a majority of the surface areas are not paved so wetting of the roadways and other areas will be conducted to control fugitive dust emissions.

Visual observation is conducted by trained FAF staff on a daily basis to evaluate the effectiveness of the fugitive dust control measures. Visual observation is performed by FAF supervisory personnel on a weekly basis to ensure the Plan is being adhered to. A sample weekly observation log has been included in **Appendix C**. Records of weekly observation logs will be maintained for a minimum of five years, unless legal requirements mandate longer retention.

## **SECTION 5**

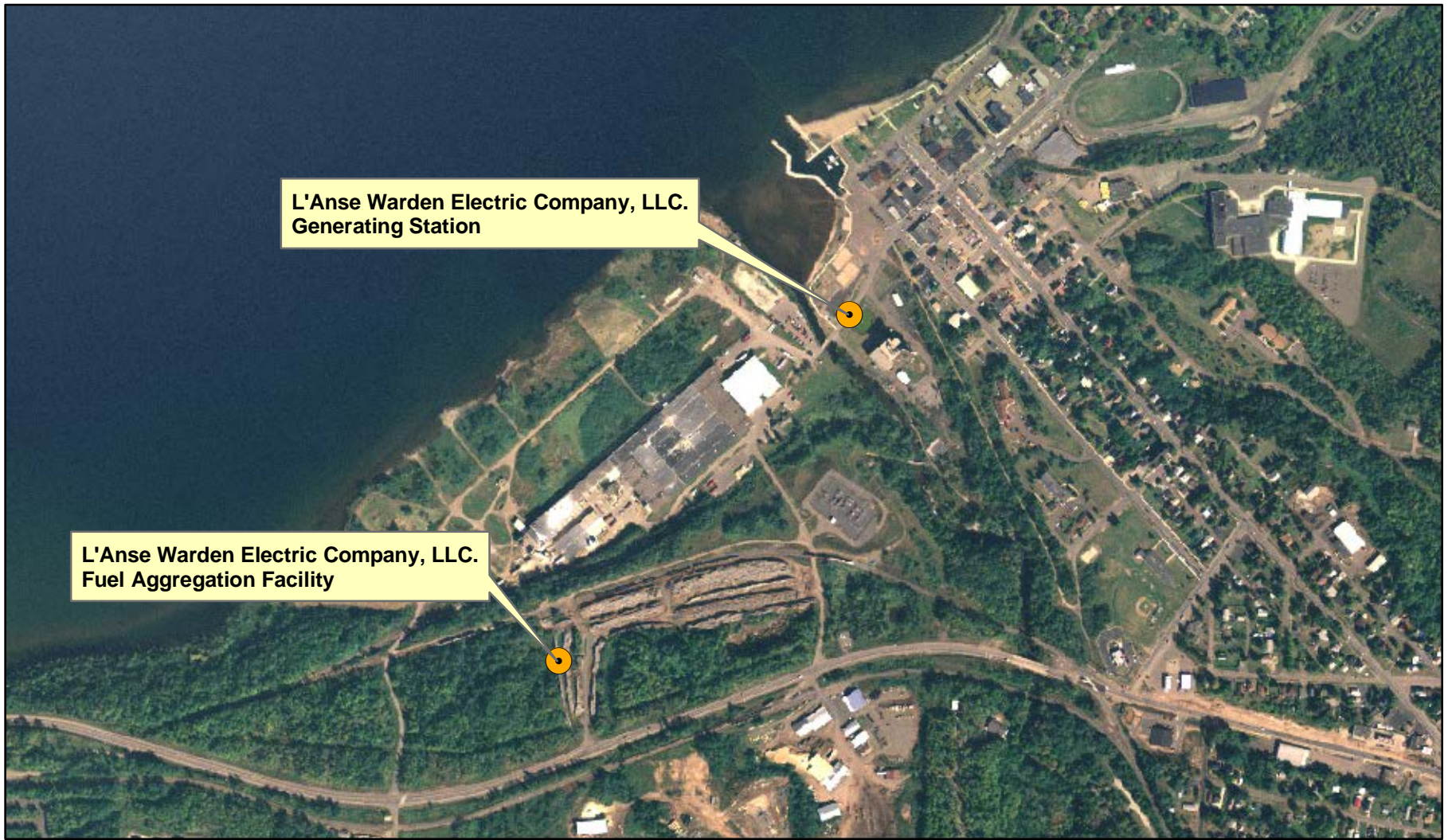
### **REPORTING AND NOTIFICATION REQUIREMENTS**

A report detailing the total volume of scrap wood received, the volume shipped for final reuse, and the location to where material is sent will be submitted to the Michigan Department of Natural Resources and Environment (MDNRE) by January 31<sup>st</sup> of each year.

Notification was previously provided to the Village of L'Anse Fire Department of the existence of the FAF within 60 days of bringing materials to the FAF. LWEC will comply with any conditions placed on the FAF by the fire authority.

## FIGURES

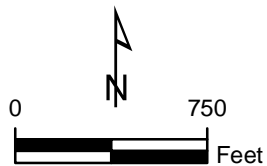
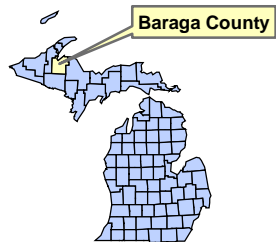
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L'Anse Warden Electric Company, LLC.  
Generating Station

L'Anse Warden Electric Company, LLC.  
Fuel Aggregation Facility

SOURCE: Michigan Geographic Data Library/L'Anse SW DOQQ 2005



**Figure: 1**

OMI\GIS\Projects\13940.004.001.0030

DESIGNED BY: KRB

DRAWN BY: KRB

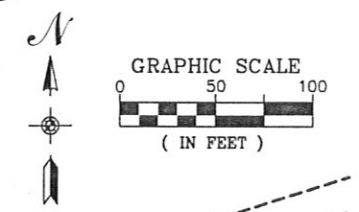
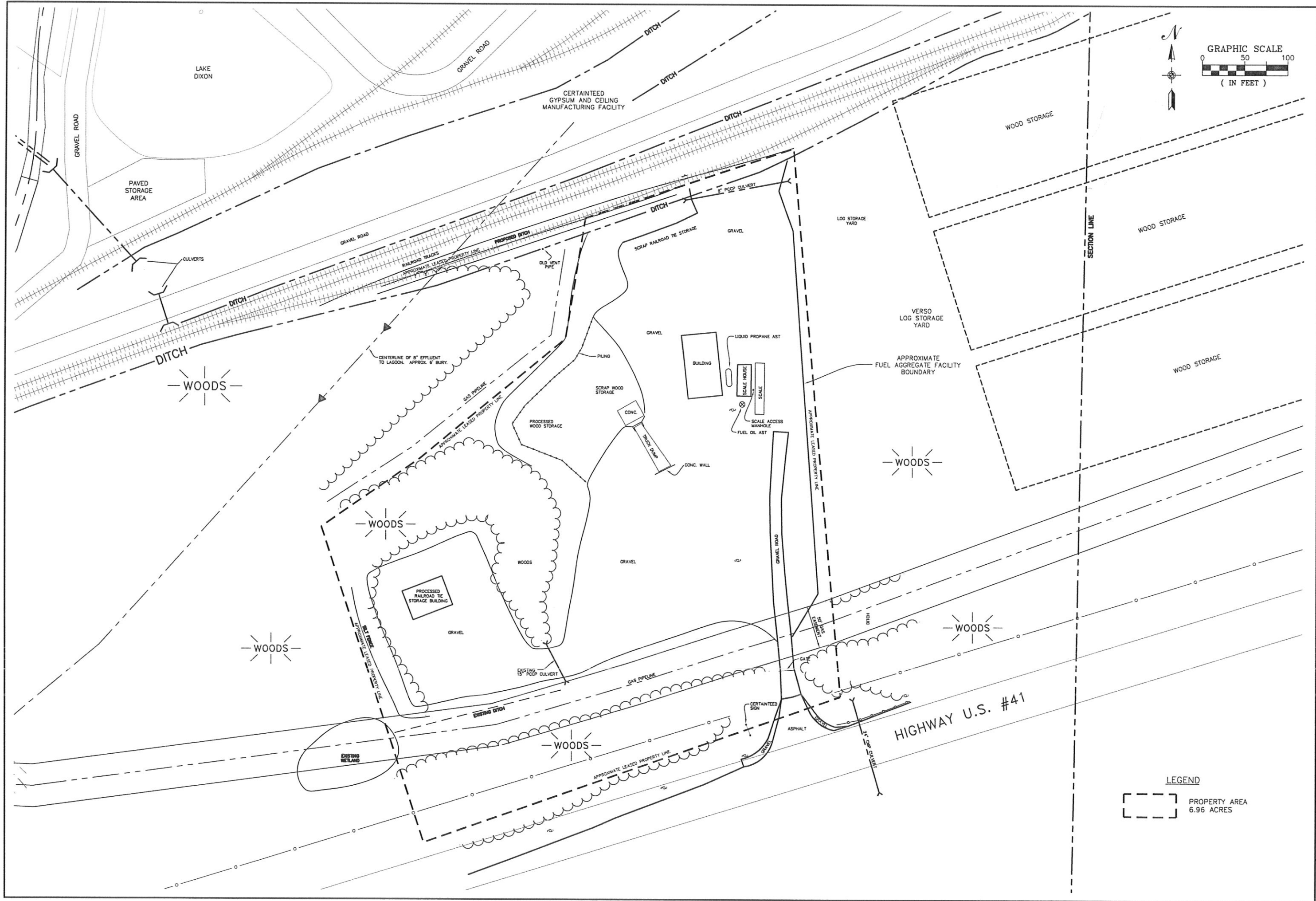
CHECKED BY: DL

APPROVED BY: JBC



600 EAST LAKESHORE DRIVE  
SUITE 200  
HOUGHTON, MI  
49931

**FACILITY LOCATIONS MAP**  
L'Anse Warden Electric Company, LLC.  
L'Anse, Baraga County, Michigan



COLEMAN ENGINEERING COMPANY  
 635 CIRCLE DRIVE - IRON MOUNTAIN, MICHIGAN 48801 774-3440  
 200 EAST AYER STREET - IRONWOOD, MICHIGAN 49938 (906) 932-5048

L'ANSE WARDEN ELECTRIC COMPANY L.L.C.  
 FUEL AGGREGATE FACILITY SITE MAP  
 L'ANSE, MI

DATE	5/2/08
SCALE	AS SHOWN
PROJECT	08100 FUEL AGGREGATE
CLIENT	CEC
DATE	4/17/08

LEGEND  
 [---] PROPERTY AREA  
 6.96 ACRES



## **APPENDICES**



**Appendix B**  
**L'Anse Warden Electric Company, LLC.**  
**Fuel Aggregation Facility**  
**Processed Creosote Treated Wood/Wood Products Tracking Form**  
**Outdoor Pile Storage**

Year: \_\_\_\_\_

Date	Processed Creosote Treated Wood Pile Present Outside Chipped Wood Building? Yes or No?	Recorded By Initials

Note: Processed creosote treated wood cannot be stored outside for more than 60 days before use or other disposition.

**Appendix C**  
**L'Anse Warden Electric Company, LLC.**  
**Fuel Aggregation Facility**  
**Weekly Fugitive Emissions Inspection and Observation Log**

Date of Inspection: \_\_\_\_\_ Time of Inspection: \_\_\_\_\_

Inspected By: \_\_\_\_\_ Title: \_\_\_\_\_

Comments:

Current weather conditions: \_\_\_\_\_

Precipitation \_\_\_\_\_ Wind conditions \_\_\_\_\_

**Visual Inspection and condition:**

The general visual inspection of the areas will include, but are not limited to the following:

- Misplaced scrap wood has been cleaned.
- Misplaced scrap wood is returned to appropriate storage areas.
- Scrap wood and materials are stored as required.
- Stockpiled scrap wood is stored as required.
- Areas are clean and generally free of fugitive dust.

1. Scrap Wood Handling area

Scrap wood receiving area:  
 Staging areas:  
 Chipped Wood Storage building:  
 Chipping area:

\_\_\_ Acceptable \_\_\_ Other (Detail below)

Condition

Action Taken: \_\_\_\_\_

**Appendix C**  
**L'Anse Warden Electric Company, LLC.**  
**Fuel Aggregation Facility**  
**Weekly Fugitive Emissions Inspection and Observation Log**

2. Roadways and General Surfaces:      Inspect all Site surfaces.

\_\_\_ Acceptable                                      \_\_\_ Other (Detail below)

Condition

Action Taken: \_\_\_\_\_

3. Supervisory Review:      Review operator logs to verify that the fugitive emissions checks have been completed.

\_\_\_ Acceptable                                      \_\_\_ Other (Detail below)

Condition

Action Taken: \_\_\_\_\_

# Material Safety Data Sheet

## CREOSOTE TREATED WOOD

---

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

**PRODUCT NAME:** CREOSOTE TREATED WOOD

**OTHER/GENERIC NAMES:** Preserved Wood

**PRODUCT USE:** Construction, transportation (railroad), communication (telephone poles)

**MANUFACTURER:**

**FOR MORE INFORMATION CALL:**

**IN CASE OF EMERGENCY CALL:**

---

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

---

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Wood	-----	85%
Creosote	8001-58-9	15%

The Creosote content of treated wood is based on a treatment level of 7 lbs. of Creosote per cubic foot of wood; the actual percentage can vary due to differences in woodstock and treatment.

Trace impurities and additional material names not listed above may also appear in Section 15. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

---

### 3. HAZARDS IDENTIFICATION

---

---

**EMERGENCY OVERVIEW:** Handling may cause splinters. Preservative treatment may cause eye and skin irritation. Observe good hygiene and safety practices when handling this product. Creosote and wood dust are classed as carcinogens. Do not use this product until MSDS has been read and understood.

---

# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

---

### POTENTIAL HEALTH HAZARDS

- SKIN:** Contact with skin can result in irritation which when not washed off or when accentuated by sunlight, can result in minor burns (i.e. sunburn).
- EYES:** Overexposure to product vapors can result in irritation. Eye contact with treated or untreated wood dust or preservative can result in irritation, which in the absence of recommended first aid can result in minor burns to the eyes.
- INHALATION:** Finely divided wood dust, treated or untreated, may cause nose, throat or lung irritation and other respiratory effects. Preservative vapor may cause respiratory tract irritation. If exposed in a closed space, vapors may produce headache, drowsiness, and possible weakness and incoordination.
- INGESTION:** Swallowing treated sawdust may cause mouth, throat and stomach irritation. Nausea, vomiting and diarrhea can occur.
- DELAYED EFFECTS: CREOSOTE PRESERVATIVE:** Prolonged and repeated skin exposure over many years in the absence of recommended hygiene practices may lead to changes in skin pigmentation, benign skin growths and may in some cases, result in skin cancer. Additionally, inhalation of creosote vapors may present a lung cancer hazard.

**UNTREATED WOOD DUST OR SAWDUST:** Wood dust has been classified as carcinogenic to humans (IARC-Group 1). Wood dust will most likely occur during the cutting of the treated wood and should not be expected during the normal handling.

**Ingredients found on one of the OSHA designated carcinogen lists are listed below.**

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
Creosote	Known Carcinogen	2A-Probable Carcinogen	----
Wood dust	----	1-Known Carcinogen	----

---

### **4. FIRST AID MEASURES**

---

- SKIN:** Rinse skin free of particulates. Wash thoroughly with soap and water. Avoid solvents. Rub gently to avoid abrasion of skin. Get medical attention if irritation persists.
- EYES:** Gently flush any particles from the eye with large amounts of clean, cool water for at least 15 minutes. DO NOT RUB EYES. Get medical attention if irritation persists.
- INHALATION:** Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated. Seek medical aid.
- INGESTION:** Wipe material from mouth and lips. If symptoms appear, seek medical aid.
- ADVICE TO PHYSICIAN:** There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition. (See Section 3. for Health Hazards and Effects).

# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

---

### **5. FIRE FIGHTING MEASURES**

---

#### **FLAMMABLE PROPERTIES**

<b>FLASH POINT:</b>	Not Applicable
<b>FLASH POINT METHOD:</b>	Not Applicable
<b>AUTOIGNITION TEMPERATURE:</b>	Not Determined
<b>UPPER FLAME LIMIT (volume % in air):</b>	Not Determined
<b>LOWER FLAME LIMIT (volume % in air):</b>	Not Determined
<b>FLAME PROPAGATION RATE (solids):</b>	Not Determined
<b>OSHA FLAMMABILITY CLASS:</b>	Not Applicable

#### **EXTINGUISHING MEDIA:**

Water/fog, carbon dioxide, foam, dry chemicals, sand, or steam.

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Water/fog can control unconfined fires.

When heated to elevated temperature, it emits lower molecular weight hydrocarbons.

#### **SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:**

Wood dust may form explosive mixture with air. Fire vapors and combustion products are irritants and toxic. Self-contained breathing apparatus (SCBA) and full protective clothing should be worn if material is involved in a fire.

### **6. ACCIDENTAL RELEASE MEASURES**

---

#### **IN CASE OF SPILL OR OTHER RELEASE:**

Not Applicable

(Always wear recommended personal protective equipment.)

**Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.**

### **7. HANDLING AND STORAGE**

---

#### **NORMAL HANDLING:** (Always wear recommended personal protective equipment.)

Wear clothing closed at the neck, long sleeves and non-porous type gloves. Industrial type resistant (e.g., vinyl coated) heavy duty flexible gloves required for prolonged or frequent contact. For dusty operations (areas), wear necessary resistant protective apparel including required head, hand and safety-type footwear. Wear tightly woven coveralls or long sleeved shirts and long pants. A complete soap and water shower at the end of each working day is recommended for all industrial work situations.

**STORAGE RECOMMENDATIONS:** Keep away from open flame.

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**ENGINEERING CONTROLS:** Avoid breathing vapors or sawdust, ventilate work area, wear respirator, goggles, or face shield. Ventilation necessary only if material handling generates dust. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits and areas below explosive dust concentrations.



# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

---

### PERSONAL PROTECTIVE EQUIPMENT

#### **SKIN PROTECTION:**

Wear necessary protective clothing to protect head, face, neck and uncovered skin from contact with wood dust or preservative. For exposed skin, the application of a commercially available sun-blocking lotion is recommended to greatly reduce the phototoxicity of creosote associated sun burning. The lotion should be applied prior to the application of a barrier cream and should have a sun protection factor (SPF) of 15 or greater. The application of a barrier cream (e.g. Ply 9 Gel, MSA's Fend AE-2, Kerodex 51, Jergens SBS-46) is recommended to prevent coal tar containing products from contacting skin.

**EYE PROTECTION:** Safety glasses, goggles or face shield when power sawing or machining.

#### **RESPIRATORY PROTECTION:**

Not normally required except when handling procedure(s) generate dust. If ventilation does not maintain inhalation exposures below PEL (TLV), use NIOSH /MSHA-approved units as per current 29 CFR 1910.134. If within OSHA protection factor, air purifying OV/filter units are acceptable. Use a NIOSH-approved respirator with suitable particulate cartridge.

#### **ADDITIONAL RECOMMENDATIONS:**

Showering and clothing change is strongly recommended at the end of each work shift.

If oily preservatives/sawdust soil clothes, launder work clothing separately from household clothing before reuse. A complete change of work clothes should be used each day if contaminated. Whenever possible, sawing/machining treated wood should be performed outdoors to avoid accumulations of airborne treated wood sawdust.

Urethane/epoxy/shellac are acceptable sealers for creosote treated wood. Coal tar pitch and coal tar pitch emulsions are effective sealers for creosote treated wood block flooring.

### EXPOSURE GUIDELINES

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Creosote (measured as Coal Tar Pitch Volatiles, CTPV)	0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	None
Wood Dust			
Hard (certain hardwood species - oak and beech)	1 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	None
Soft	5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	None

#### **OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:**

Material does not decompose. Combustion products include carbon monoxide, oxides of nitrogen.

---

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

---

<b>APPEARANCE:</b>	Treatment imparts dark brown to black color.
<b>PHYSICAL STATE:</b>	Solid
<b>MOLECULAR WEIGHT:</b>	Not Applicable
<b>CHEMICAL FORMULA:</b>	Not Applicable

# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

---

<b>ODOR:</b>	Penetrating, smoky odor	
<b>SPECIFIC GRAVITY (water = 1.0):</b>	Approximately the same as untreated wood	
<b>SOLUBILITY IN WATER (weight %):</b>	Not Applicable	
<b>pH:</b>	Not Applicable	
<b>BOILING POINT:</b>	Not Applicable	
<b>MELTING POINT:</b>	Not Applicable	
<b>VAPOR PRESSURE:</b>	Negligible @ ambient	
<b>VAPOR DENSITY (air = 1.0):</b>	Not Applicable	
<b>EVAPORATION RATE:</b>	Not Applicable	<b>COMPARED TO:</b> Not Applicable
<b>% VOLATILES:</b>	Not Applicable	
<b>FLASH POINT:</b>	Not Applicable	

(Flash point method and additional flammability data are found in Section 5.)

---

### **10. STABILITY AND REACTIVITY**

---

**NORMALLY STABLE? (CONDITIONS TO AVOID):** Stable

**INCOMPATIBILITIES:** Strong acids. Open flame.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Material does not decompose. Combustion products include carbon monoxide, oxides of nitrogen.

**HAZARDOUS POLYMERIZATION:** Will not occur

---

### **11. TOXICOLOGICAL INFORMATION**

---

**IMMEDIATE (ACUTE) EFFECTS:** Possible skin irritation which is accentuated by sunlight.

**DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:** IARC has classified wood dust as a human carcinogen. Normal handling of the creosote treated wood would not be expected to generate wood dust, but cutting, grinding and/or other activities may generate wood dust.

**OTHER DATA:**

Persons with pre-existing disease or a history of ailments involving the skin or respiratory tract may be at a greater than normal risk of developing adverse health effects from woodworking operations with this product.

The IARC monographs (Vol. 35) states that there is sufficient evidence for the carcinogenicity of creosote in experimental animals. The NTP Annual Report on Carcinogens states that creosote oils are carcinogenic in experimental animals. Creosote does not appear in the OSHA Subpart Z Table. Epidemiological studies of workers in the woodtreating industry have shown no significant health effects due to occupational exposure to creosote.

Many cohort and case-control studies of cancer of the nasal cavities and paranasal sinuses have shown increased risks associated with exposure to wood dust. Adenocarcinoma of the nasal cavities and paranasal sinuses is clearly associated with exposure to hardwood dust. Occupational exposure to wood dust does not appear to have a causal role in cancers of the oropharynx, hypopharynx, lung, lymphatic and haematopoietic systems, stomach, colon or rectum.

No known ingredients which occur at greater than 0.1%, other than those listed above, are listed as a carcinogen in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, the NTP Annual Report

# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

---

on Carcinogens or OSHA 29 CFR 1910.1001-1047 subpart Z Toxic and Hazardous Substances (Specifically Regulated Substances).

---

### **12. ECOLOGICAL INFORMATION**

---

Not Determined

---

### **13. DISPOSAL CONSIDERATIONS**

---

#### **RCRA**

**Is the unused product a RCRA hazardous waste if discarded?** Solid Waste/ Potential Hazardous Waste  
**If yes, the RCRA ID number is:** Potential characteristic waste

#### **OTHER DISPOSAL CONSIDERATIONS:**

Treated wood should not be burned in open fires or in stoves, fireplaces or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g. construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with local, state and federal regulations. Treated wood is not regulated as a hazardous waste by the USEPA, and usually does not fail the USEPA TCLP test, depending on sampling procedures, particle size, type of wood and proportion of treated to untreated wood sample. Dispose of sawdust and wood in accordance with local, state and federal regulations. Contact your direct supplier for additional disposal information.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

---

### **14. TRANSPORT INFORMATION**

---

**US DOT HAZARD CLASS:** Not Regulated  
**US DOT ID NUMBER:** Not Applicable

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

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### **15. REGULATORY INFORMATION**

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#### **TOXIC SUBSTANCES CONTROL ACT (TSCA)**

**TSCA INVENTORY STATUS:** Creosote - listed on EPA's TSCA Inventory  
**OTHER TSCA ISSUES:** None

#### **SARA TITLE III/CERCLA**

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

<b><u>INGREDIENT NAME</u></b>	<b><u>SARA/CERCLA RQ (lb)</u></b>	<b><u>SARA EHS TPQ (lb)</u></b>
Creosote	1	Not Applicable

# MATERIAL SAFETY DATA SHEET

## CREOSOTE TREATED WOOD

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**Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.**

**SECTION 311 HAZARD CLASS:** Immediate, delayed, fire (for creosote)

**SARA 313 TOXIC CHEMICALS:**

The following ingredients are SARA 313 "Toxic Chemicals". CAS numbers and weight percents are found in Section 2.

**INGREDIENT NAME**

Creosote

**COMMENT**

de minimus concentration is 0.1 %

**STATE RIGHT-TO-KNOW**

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

**INGREDIENT NAME**

None

**WEIGHT %   COMMENT**

**ADDITIONAL REGULATORY INFORMATION:** None

**WHMIS CLASSIFICATION (CANADA):**

Class D, Division 2, Subdivision A, very toxic material (For Creosote)

TDG Flammability Classification: None. Sensitivity to mechanical impact: NA.

Sensitivity to static discharge: NA.

**FOREIGN INVENTORY STATUS: (For Creosote)**

Listed on the EINECS Inventory - ID#2322875

Listed on the Canadian Inventory Domestic Substance List (DSL)

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## **16. OTHER INFORMATION**

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**CURRENT ISSUE DATE:** May, 1996

**PREVIOUS ISSUE DATE:** April, 1991

**CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:**

Updated data on wood dust carcinogenicity.

MSDS updated to include 16-Section ANSI Format for Material Safety Data Sheets.

**OTHER INFORMATION:** None

**MATERIAL SAFETY DATA SHEET**  
**Wood Dust**
**1 Product Identification**

Manufacturer Name and Address:

**The Collins Companies**

 1618 SW First Avenue, #500  
 Portland, OR 97201  
 Emergency Phone: 800.329.1219  
 Phone for Additional Information: 800.329.1219

Product Name: Wood Dust (untreated)

Synonyms(s): Wood Flour, Saw Dust, Sander Dust

Prepared By: Environmental, Safety &amp; Health Services

Date Prepared: 9/1/96

Date Revised: 4/1/10

MSDS#: CPKF-0003

**2 Hazardous Ingredient & Identify Information**

Name/CAS#	%	OSHA Current Exposure Limits	
Wood	100	OSHA PEL-TWA	15 mg/m <sup>3</sup> (a)
CAS# - None		OSHA PEL-TWA	5 mg/m <sup>3</sup> (b)
		ACGIH TLV-TWA	1 mg/m <sup>3</sup> (b)
		ACGIH TLV-STEL	10 mg/m <sup>3</sup> (c)
		ACGIH TLV-TWA	1 mg/m <sup>3</sup> (d)
		<b>Recommended Exposure Limits<sup>1</sup></b>	
		PEL-TWA	5 mg/m <sup>3</sup> (e)
		PEL-STEL	10 mg/m <sup>3</sup> (e)
		PEL-TWA	2.5 mg/m <sup>3</sup> (f)

(a) total dust

(b) respirable dust

(c) softwood total dust

(d) selected hardwood total dust (beech, oak, other)

(e) softwood or hardwood total dust

(f) Western red cedar total dust

**<sup>1</sup> Recommended exposure limits based on 1989 OSHA PELs.**

In 1992, the U.S. Court of Appeals for the Eleventh Circuit Court overturned OSHA's 1989 Air Contaminant Rule, which included specific PELs for wood dust established by OSHA at the time. Wood dust is now officially regulated as an organic dust in a category known as "Particulate Not Otherwise Regulated" (PNOR), or Nuisance Dust. However, a number of states have incorporated the OSHA PELs from the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSHA Act general duty clause under appropriate circumstances for noncompliance with the 1989 PELs.

**Appearance and odor:**

Light to dark color granular solid. Wood dust may have a slight aromatic odor. Color and odor depend on the wood species and time since dust was generated. The wood component may consist of alder, aspen, beech, birch, cottonwood, fir, gum, hemlock, hickory, maple, oak, pecan, pine, poplar, spruce, walnut, and or Western Red Cedar.

**3 Physical/Chemical Characteristics**

BOILING POINT (@ 760 MM Hg):	N/A
VAPOR PRESSURE (mm Hg):	N/A
VAPOR DENSITY (Air=1; 1 atm):	N/A
SPECIFIC GRAVITY (H2O=1):	Variable, depends on wood species and moisture
MELTING POINT:	N/A
EVAPORATION RATE ( Butyl Acetate=1):	N/A
SOLUBILITY IN WATER (% by Weight):	Insoluble
% VOLATILE BY WEIGHT @ 70°F (21°C):	N/A
pH:	N/A

**4 Fire and Explosion Hazard Data**
**FLASH POINT**  
 (METHOD USED) N/A

**FLAMMABLE LIMITS:**  
 LEL: See Below under "Unusual Fire and Explosion Hazards"  
 UEL: N/A

**EXTINGUISHING MEDIA:** Water, carbon dioxide, sand

**AUTOIGNITION TEMPERATURE:** Variable: typically 400°-500°F (204°-260°C)

**SPECIAL FIRE FIGHTING PROCEDURES:** Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned, charred or wet dust to open, secure area after fire is extinguished.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Depending on moisture content and more importantly, particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dust.

# MSDS: Wood Dust

## 5 Reactivity Data

Stability:	( ) Unstable (x) Stable
Conditions to Avoid:	Avoid open flame. Product may ignite at temperatures in excess of 400°F (204°C).
Incompatibility (Material to avoid):	Avoid contact with oxidizing agents and drying oils.
Hazardous decomposition or by-products:	Thermal decomposition products include carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, and polycyclic aromatic hydrocarbons.
Hazardous Polymerization:	( ) May occur (x) Will Not Occur

## 6 Precautions for Safe Handling and Use

### Steps to be Taken in Case Material is Released or Spilled:

Wood dust may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA approved respirator and goggles where ventilation is not possible.

### Waste Disposal Method:

Landfill or incinerate in accordance with federal, state or local regulations. It is however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste.

### Precautions to be Taken in Handling and Storage:

Avoid repeated or prolonged breathing of wood dust. Avoid eye contact and repeated or prolonged contact with skin. Keep in cool, dry place away from open flames.

### Other Precautions:

Avoid open flame and contact with oxidizing agents and drying oils. A NIOSH/MSHA approved respirator and goggles should be worn when the allowable exposure limits may be exceeded.

## 7 Health Hazard Data

### Primary Health Hazard:

The primary health hazard posed by this product is thought to be due to inhaling wood dust.

### Primary Route(s) of Exposure:

- ( ) Ingestion:
- (x) Skin: Dust
- (x) Inhalation: Dust

### Acute Health Hazards—Signs and Symptoms of Exposure/Emergency and First Aid Procedures:

INGESTION: Not applicable under normal use.

EYE CONTACT: Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

SKIN CONTACT: Wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Get medical help if rash, irritation or dermatitis persists.

SKIN ABSORPTION: Not known to occur under normal use.

INHALATION: Wood dust may cause obstruction in the nasal passages, resulting in dryness of the nose, dry cough, sneezing and headaches. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulties occur.

### Medical Conditions Generally Aggravated by Exposure:

Wood dust may aggravate pre-existing respiratory conditions or allergies.

### Chronic Health Hazards:

Wood dust, depending on the species, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels. Prolonged exposure to dust levels has been reported by some observers to be associated with nasal cancer. Wood dust has been listed as a "known human carcinogen" in the NTP's tenth Report on Carcinogens.

### Carcinogenicity Listing:

- (x) NTP: Wood Dust
- (x) IARC Monographs: Wood Dust
- (x) OSHA Regulated:

IARC – GROUP 1: Carcinogenic to humans: Sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma of the nasal cavity and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancer of the oropharynx, Hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum.

# MSDS: Wood Dust

## 8 Control Measures

### Personal Protective Equipment:

**RESPIRATORY PROTECTION** — A NIOSH/MSHA approved respirator is recommended when allowable exposure limits may be exceeded.

**PROTECTIVE GLOVES** — Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation from handling product.

**EYE PROTECTION** — Goggles or safety glasses are recommended in area with high dust levels.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT** — Outer garments may be desirable in extremely dusty areas.

**WORK/HYGIENE PRACTICES** — Follow good hygienic and house-keeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blow down or other practices that generate high airborne dust concentrations.

### Ventilation:

**LOCAL EXHAUST** — Provide local exhaust as needed so that exposure limits are met.

**MECHANICAL (GENERAL)** — Provide general ventilation in processing or storage areas so that exposure limits are met.

**SPECIAL** — Self contained breathing apparatus (SCBA) recommended when fighting fire.

**OTHER** — N/A

## 9 Transportation Data

DOT Proper Shipping Name: Not Regulated

Hazard Class/Division Number:

ID Number:

Packing Group:

Label/Placard Required:

DOT Hazardous Substance:

## 10 User's Responsibility

The information contained in this Material Safety Data Sheet is based on the experience of the Environmental, Safety & Health professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their application and to follow safety precautions as may be necessary. The user has the responsibility to make sure this sheet is the most up to date issue.

## 11 Additional Information

### Definition of Common Terms:

ACGIH = American Conference of Government Industrial Hygienists

C = Ceiling Limit

CAS # = Chemical Abstract System Number

IARC = International Agency for Research on Cancer

MSHA = Mine Safety and Health Administration

N/A = Not Applicable

NIOSH = National Institute of Occupational Safety and Health

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

STEL = Short Term Exposure Limit (15 minutes)

TLV = Threshold Limit Value

TWA = Time Weighted Average (8 hours)

The Collins Companies manufacture the following products: TruWood® Siding & Trim, Collins Pine FreeForm®, Collins Pine Particleboard®, Collins Softwood, Collins Hardwood, Collins Pacific Albus®

### Manufacturing Facility Locations:

Oregon: Klamath Falls, Boardman, Lakeview  
Chester, CA; Kane, PA; Richwood, WV

Manufactured by  
**THE COLLINS COMPANIES**  
1618 SW First Avenue, Suite 500  
Portland, OR 97201

800.329.1219 • [www.CollinsWood.com](http://www.CollinsWood.com)



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**CLIENT:** WGS Global

**Date:** 6/23/2010

**Project:** LWEC RailRoad Ties

## CASE NARRATIVE

**Lab Order:** 10060429

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Unless otherwise noted, samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

Unless otherwise noted, all method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Sample results relate only to the analytes of interest tested and to the sample received at the laboratory.

All results are reported on a wet weight basis, unless otherwise noted. Dry weight adjusted results, reporting limits, method detection limits and dilution factors are indicated by the notation "dry" in the Units column. If present, a dilution factor will adjust the method detection limits and reporting limits.

The test results contained in this report meet all of the requirements of NELAC. Accreditation by the State of Illinois or Wisconsin is not an endorsement or a guarantee of the validity of data generated. For specific information regarding EMT's scope of accreditation, please contact your EMT project manager.

The Reporting Limit listed on the Report of Laboratory Analysis is EMT's reporting limit for the analyte reported. For most test methods this reporting limit is primarily based upon the lowest point in the calibration curve.

Analyst's initials of "OUT" indicate that the analyte was analyzed by a subcontracted laboratory.

### Method References:

SW=USEPA, Test Methods for Evaluating Solid Waste, SW-846.

E=USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40 CFR Part 136, App A; methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water.

SM= APHA, Standard Methods for the Examination of Water and Wastewater.

D=ASTM, Annual Book of Standards

Batch numbers starting with a letter indicate an analytical batch while those that are exclusively numerals indicate a preparation batch.



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## Report of Laboratory Analysis

**CLIENT:** WGS Global  
**Lab Order:** 10060429  
**Project:** LWEC RailRoad Ties  
**Lab ID:** 10060429-01

**Client Sample ID:** SAMPLE 1  
**Report Date:** 6/23/2010  
**Collection Date:** 6/16/2010  
**Matrix:** Solid

Analyses	Result	EMT Reporting Limit	Units	Date Analyzed	Batch	Analyst
<b>ICP Metals, TCLP Extracted</b>		<b>Method: SW6010B / SW3015</b>				
Arsenic	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Barium	1.15	0.063	mg/L	6/22/10	59202	CS2
Cadmium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Chromium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Lead	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Selenium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Silver	< 0.063	0.063	mg/L	6/22/10	59202	CS2
<b>Mercury, TCLP Extracted</b>		<b>Method: SW7470A / HG PREP</b>				
Mercury	0.00057	0.0005	mg/L	6/21/10	59212	IG
<b>Semivolatile Organic Compounds, TCLP</b>		<b>Method: SW1311 / SW8270D / SW3510C</b>				
1,4-Dichlorobenzene	< 3.75	3.75	mg/L	6/22/10 15:49	59186	MG3
2,4,5-Trichlorophenol	< 200.	200.	mg/L	6/22/10 15:49	59186	MG3
2,4,6-Trichlorophenol	< 1.	1.	mg/L	6/22/10 15:49	59186	MG3
2,4-Dinitrotoluene	< 0.065	0.065	mg/L	6/22/10 15:49	59186	MG3
Hexachlorobenzene	< 0.065	0.065	mg/L	6/22/10 15:49	59186	MG3
Hexachlorobutadiene	< 0.25	0.25	mg/L	6/22/10 15:49	59186	MG3
Hexachloroethane	< 1.5	1.5	mg/L	6/22/10 15:49	59186	MG3
m,p-Cresol	< 100.	100.	mg/L	6/22/10 15:49	59186	MG3
Nitrobenzene	< 1.	1.	mg/L	6/22/10 15:49	59186	MG3
o-Cresol	< 100.	100.	mg/L	6/22/10 15:49	59186	MG3
Pentachlorophenol	< 50.	50.	mg/L	6/22/10 15:49	59186	MG3
Pyridine	< 2.5	2.5	mg/L	6/22/10 15:49	59186	MG3
Cresols, total	< 100.	100.	mg/L	6/22/10 15:49	59186	MG3
<b>Volatile Organic Compounds, TCLP</b>		<b>Method: SW1311 / SW8260B / SW5030A</b>				
1,1-Dichloroethene	< 0.35	0.35	mg/L	6/22/10 15:48	59249	XN
1,2-Dichloroethane	< 0.25	0.25	mg/L	6/22/10 15:48	59249	XN
1,4-Dichlorobenzene	< 3.75	3.75	mg/L	6/22/10 15:48	59249	XN
2-Butanone	< 100.	100.	mg/L	6/22/10 15:48	59249	XN
Benzene	< 0.25	0.25	mg/L	6/22/10 15:48	59249	XN
Carbon tetrachloride	< 0.25	0.25	mg/L	6/22/10 15:48	59249	XN
Chlorobenzene	< 50.	50.	mg/L	6/22/10 15:48	59249	XN

**Qualifiers:**

B - Analyte detected in the associated Method Blank  
E - Estimated  
H - Holding Time Exceeded

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
J - Analyte detected below quantitation limits



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## Report of Laboratory Analysis

**CLIENT:** WGS Global

**Client Sample ID:** SAMPLE 1

**Lab Order:** 10060429

**Report Date:** 6/23/2010

**Project:** LWEC RailRoad Ties

**Collection Date:** 6/16/2010

**Lab ID:** 10060429-01

**Matrix:** Solid

Analyses	Result	EMT Reporting Limit	Units	Date Analyzed	Batch	Analyst
Chloroform	< 3.	3.	mg/L	6/22/10 15:48	59249	XN
Tetrachloroethene	< 0.35	0.35	mg/L	6/22/10 15:48	59249	XN
Trichloroethene	< 0.25	0.25	mg/L	6/22/10 15:48	59249	XN
Vinyl chloride	< 0.1	0.1	mg/L	6/22/10 15:48	59249	XN

**Qualifiers:**

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

E - Estimated

R - RPD outside accepted recovery limits

H - Holding Time Exceeded

J - Analyte detected below quantitation limits

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## Report of Laboratory Analysis

**CLIENT:** WGS Global  
**Lab Order:** 10060429  
**Project:** LWEC RailRoad Ties  
**Lab ID:** 10060429-02

**Client Sample ID:** SAMPLE 2  
**Report Date:** 6/23/2010  
**Collection Date:** 6/16/2010  
**Matrix:** Solid

Analyses	Result	EMT Reporting Limit	Units	Date Analyzed	Batch	Analyst
<b>ICP Metals, TCLP Extracted</b>		<b>Method: SW6010B / SW3015</b>				
Arsenic	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Barium	0.899	0.063	mg/L	6/22/10	59202	CS2
Cadmium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Chromium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Lead	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Selenium	< 0.063	0.063	mg/L	6/22/10	59202	CS2
Silver	< 0.063	0.063	mg/L	6/22/10	59202	CS2
<b>Mercury, TCLP Extracted</b>		<b>Method: SW7470A / HG PREP</b>				
Mercury	< 0.0005	0.0005	mg/L	6/21/10	59212	IG
<b>Semivolatile Organic Compounds, TCLP</b>		<b>Method: SW1311 / SW8270D / SW3510C</b>				
1,4-Dichlorobenzene	< 3.75	3.75	mg/L	6/22/10 16:32	59186	MG3
2,4,5-Trichlorophenol	< 200.	200.	mg/L	6/22/10 16:32	59186	MG3
2,4,6-Trichlorophenol	< 1.	1.	mg/L	6/22/10 16:32	59186	MG3
2,4-Dinitrotoluene	< 0.065	0.065	mg/L	6/22/10 16:32	59186	MG3
Hexachlorobenzene	< 0.065	0.065	mg/L	6/22/10 16:32	59186	MG3
Hexachlorobutadiene	< 0.25	0.25	mg/L	6/22/10 16:32	59186	MG3
Hexachloroethane	< 1.5	1.5	mg/L	6/22/10 16:32	59186	MG3
m,p-Cresol	< 100.	100.	mg/L	6/22/10 16:32	59186	MG3
Nitrobenzene	< 1.	1.	mg/L	6/22/10 16:32	59186	MG3
o-Cresol	< 100.	100.	mg/L	6/22/10 16:32	59186	MG3
Pentachlorophenol	< 50.	50.	mg/L	6/22/10 16:32	59186	MG3
Pyridine	< 2.5	2.5	mg/L	6/22/10 16:32	59186	MG3
Cresols, total	< 100.	100.	mg/L	6/22/10 16:32	59186	MG3
<b>Volatile Organic Compounds, TCLP</b>		<b>Method: SW1311 / SW8260B / SW5030A</b>				
1,1-Dichloroethene	< 0.35	0.35	mg/L	6/22/10 14:39	59249	XN
1,2-Dichloroethane	< 0.25	0.25	mg/L	6/22/10 14:39	59249	XN
1,4-Dichlorobenzene	< 3.75	3.75	mg/L	6/22/10 14:39	59249	XN
2-Butanone	< 100.	100.	mg/L	6/22/10 14:39	59249	XN
Benzene	< 0.25	0.25	mg/L	6/22/10 14:39	59249	XN
Carbon tetrachloride	< 0.25	0.25	mg/L	6/22/10 14:39	59249	XN
Chlorobenzene	< 50.	50.	mg/L	6/22/10 14:39	59249	XN

**Qualifiers:**

B - Analyte detected in the associated Method Blank

E - Estimated

H - Holding Time Exceeded

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits



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## Report of Laboratory Analysis

**CLIENT:** WGS Global

**Client Sample ID:** SAMPLE 2

**Lab Order:** 10060429

**Report Date:** 6/23/2010

**Project:** LWEC RailRoad Ties

**Collection Date:** 6/16/2010

**Lab ID:** 10060429-02

**Matrix:** Solid

Analyses	Result	EMT Reporting Limit	Units	Date Analyzed	Batch	Analyst
Chloroform	< 3.	3.	mg/L	6/22/10 14:39	59249	XN
Tetrachloroethene	< 0.35	0.35	mg/L	6/22/10 14:39	59249	XN
Trichloroethene	< 0.25	0.25	mg/L	6/22/10 14:39	59249	XN
Vinyl chloride	< 0.1	0.1	mg/L	6/22/10 14:39	59249	XN

**Qualifiers:**

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

E - Estimated

R - RPD outside accepted recovery limits

H - Holding Time Exceeded

J - Analyte detected below quantitation limits



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23-Jun-10

**Client:** Waste Mgmt. of Wisconsin  
**Project:** WMWI Waste Characterization

**DATES REPORT**

**Lab Order:** 10060429

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date	Batch ID
10060429-01A	SAMPLE 1	6/16/10 0:00	Solid	ICP Metals, TCLP extraction	6/18/10	6/21/10	6/22/10	59202
				Mercury (Hg), TCLP Extracted	6/18/10	6/21/10	6/21/10	59212
				Semivolatiles,TCLP	6/18/10	6/20/10	6/22/10	59186
				Volatiles by GC/MS, ZHE (TCLP) extracted	6/21/10	6/22/10	6/22/10	59249
10060429-02A	SAMPLE 2			ICP Metals, TCLP extraction	6/18/10	6/21/10	6/22/10	59202
				Mercury (Hg), TCLP Extracted	6/18/10	6/21/10	6/21/10	59212
				Semivolatiles,TCLP	6/18/10	6/20/10	6/22/10	59186
				Volatiles by GC/MS, ZHE (TCLP) extracted	6/21/10	6/22/10	6/22/10	59249



June 11, 2010

Service Request No: J1002562

JR Richardson  
L'Anse Warden Electric Co.,LLC  
157 S. Main Street  
L'Anse, MI 49862

**Laboratory Results for: L'Anse Warden Electric Comp./Crosstie Analysis**

Dear JR:

Enclosed are the results of the sample(s) submitted to our laboratory on June 2, 2010. For your reference, these analyses have been assigned our service request number **J1002562**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 4408. You may also contact me via email at [TKissinger@caslab.com](mailto:TKissinger@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Tom Kissinger  
Project Manager

Page 1 of 16

COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** L'Anse Warden Electric Co., LLC      **Service Request No.:** J1002562  
**Project:** Crosstie Analysis      **Date Received:** 6/2/10  
**Sample Matrix:** solid

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

**Sample Receipt**

One solid sample was received for analysis at Columbia Analytical Services on 6/2/10. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 4±2°C upon receipt at the lab.

**TCLP Volatiles by GC-MS**

Lab Control Sample Exceptions

The spike recovery of Carbon Tetrachloride for Laboratory Control Sample (LCS) JWG1002045-3 was outside the lower control criterion. The analyte in question was not detected in the associated field sample. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

**TCLP Semivolatiles by GC-MS**

No problems were observed with this delivery group.

Batch QC Notes and Discussion

Quality control samples for MS/DMS samples were performed using samples from another sample delivery group (SDG).

**TCLP Metals**

No problems were observed with this delivery group.

Approved by Tom D. Hession Date 6/11/10



## Data Qualifiers

### Inorganic Data

- \* The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimated amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- Z Too many colonies were present (TNFC). The numeric value represents the filtration volume.
- i The MRL/MDL has been elevated due to matrix interference.
- X See case narrative.

### Metals Data

- \* The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The result was determined by Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

### Organic Data

- \* The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- A The tentatively identified compound is a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria were exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

### Petroleum Hydrocarbon Specific

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:**  
**Project:** L'Anse Warden Electric Comp./Crosstie Analysis

**Service Request:** J1002562

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1002562-001	LWEC	5/28/10	10:45

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Results

**Client:** L'Anse Warden Electric Co., LLC  
**Project:** L'Anse Warden Electric Comp./Crosstie Analysis  
**Sample Matrix:** Solid

**Service Request:** J1002562  
**Date Collected:** 05/28/2010  
**Date Received:** 06/02/2010  
**Date Prepared:** 06/07/2010

**Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction  
 Volatile Organic Compounds by GC/MS**

**Sample Name:** LWEC  
**Lab Code:** J1002562-001  
**Preparation Method:** EPA 1311ZHE  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** mg/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	Regulatory Limit	Dilution Factor	Date Extracted	Date Analyzed	Note
Vinyl Chloride	ND	U	0.10	0.2	100	06/09/10	06/09/10	
1,1-Dichloroethene	ND	U	0.10	0.7	100	06/09/10	06/09/10	
2-Butanone (MEK)	ND	U	2.5	200	100	06/09/10	06/09/10	
Chloroform	ND	U	0.10	6	100	06/09/10	06/09/10	
Carbon Tetrachloride	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Benzene	ND	U	0.10	0.5	100	06/09/10	06/09/10	
1,2-Dichloroethane	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Trichloroethene (TCE)	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Tetrachloroethene (PCE)	ND	U	0.10	0.7	100	06/09/10	06/09/10	
Chlorobenzene	ND	U	0.10	100	100	06/09/10	06/09/10	
1,4-Dichlorobenzene	ND	U	0.10	7.5	100	06/09/10	06/09/10	

Surrogate Name	%Rec	Control Limits	Note
Dibromofluoromethane	93	82-116	Acceptable
1,2-Dichloroethane-d4	91	71-122	Acceptable
Toluene-d8	102	88-117	Acceptable
4-Bromofluorobenzene	112	79-120	Acceptable

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Results

**Client:** L'Anse Warden Electric Co., LLC  
**Project:** L'Anse Warden Electric Comp./Crosstie Analysis  
**Sample Matrix:** Solid

**Service Request:** J1002562  
**Date Collected:** NA  
**Date Received:** NA  
**Date Prepared:** 06/07/2010

**Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction  
 Volatile Organic Compounds by GC/MS**

**Sample Name:** Method Blank  
**Lab Code:** JWG1002045-4  
**Preparation Method:** EPA 1311ZHE  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** mg/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	Regulatory Limit	Dilution Factor	Date Extracted	Date Analyzed	Note
Vinyl Chloride	ND	U	0.10	0.2	100	06/09/10	06/09/10	
1,1-Dichloroethene	ND	U	0.10	0.7	100	06/09/10	06/09/10	
2-Butanone (MEK)	ND	U	2.5	200	100	06/09/10	06/09/10	
Chloroform	ND	U	0.10	6	100	06/09/10	06/09/10	
Carbon Tetrachloride	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Benzene	ND	U	0.10	0.5	100	06/09/10	06/09/10	
1,2-Dichloroethane	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Trichloroethene (TCE)	ND	U	0.10	0.5	100	06/09/10	06/09/10	
Tetrachloroethene (PCE)	ND	U	0.10	0.7	100	06/09/10	06/09/10	
Chlorobenzene	ND	U	0.10	100	100	06/09/10	06/09/10	
1,4-Dichlorobenzene	ND	U	0.10	7.5	100	06/09/10	06/09/10	

Surrogate Name	%Rec	Control Limits	Note
Dibromofluoromethane	90	82-116	Acceptable
1,2-Dichloroethane-d4	91	71-122	Acceptable
Toluene-d8	102	88-117	Acceptable
4-Bromofluorobenzene	114	79-120	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

Client: L'Anse Warden Electric Co., LLC  
 Project: L'Anse Warden Electric Comp./Crosstie Analysis  
 Sample Matrix: Solid

Service Request: J1002562  
 Date Collected: 05/28/2010  
 Date Received: 06/02/2010  
 Date Prepared: 06/03/2010

Toxicity Characteristic Leaching Procedure (TCLP)  
 Semi-Volatile Organic Compounds by GC/MS

Sample Name: LWEC  
 Lab Code: J1002562-001  
 Preparation Method: EPA 1311  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: mg/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pyridine	ND	U	0.20	1	06/09/10	06/09/10	JWG1002042	
2-Methylphenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
4-Methylphenol†	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachloroethane	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Nitrobenzene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachlorobutadiene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4,6-Trichlorophenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4,5-Trichlorophenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4-Dinitrotoluene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachlorobenzene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Pentachlorophenol	ND	U	0.20	1	06/09/10	06/09/10	JWG1002042	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	30	10-77	06/09/10	Acceptable
Phenol-d6	19	10-51	06/09/10	Acceptable
Nitrobenzene-d5	64	42-106	06/09/10	Acceptable
2-Fluorobiphenyl	60	43-99	06/09/10	Acceptable
2,4,6-Tribromophenol	62	30-122	06/09/10	Acceptable
Terphenyl-d14	70	23-165	06/09/10	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: L'Anse Warden Electric Co., LLC  
 Project: L'Anse Warden Electric Comp./Crosstie Analysis  
 Sample Matrix: Solid

Service Request: J1002562  
 Date Collected: NA  
 Date Received: NA  
 Date Prepared: 06/03/2010

Toxicity Characteristic Leaching Procedure (TCLP)  
 Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank  
 Lab Code: JWG1002042-5  
 Preparation Method: EPA 1311  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: mg/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pyridine	ND	U	0.20	1	06/09/10	06/09/10	JWG1002042	
2-Methylphenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
4-Methylphenol†	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachloroethane	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Nitrobenzene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachlorobutadiene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4,6-Trichlorophenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4,5-Trichlorophenol	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
2,4-Dinitrotoluene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Hexachlorobenzene	ND	U	0.050	1	06/09/10	06/09/10	JWG1002042	
Pentachlorophenol	ND	U	0.20	1	06/09/10	06/09/10	JWG1002042	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	33	10-77	06/09/10	Acceptable
Phenol-d6	20	10-51	06/09/10	Acceptable
Nitrobenzene-d5	66	42-106	06/09/10	Acceptable
2-Fluorobiphenyl	66	43-99	06/09/10	Acceptable
2,4,6-Tribromophenol	70	30-122	06/09/10	Acceptable
Terphenyl-d14	68	23-165	06/09/10	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** L'Anse Warden Electric Co.,LLC  
**Project Name:** L'Anse Warden Electric Comp.  
**Project Number:** Crosstie Analysis  
**Matrix:** TCLP

**Service Request:** J1002562  
**Date Collected:** 5/28/2010  
**Date Received:** 6/2/2010  
**Date TCLP Performed:** 6/3/2010

### Toxicity Characteristic Leaching Procedure (TCLP)

EPA Method 1311

Total Metals

Units: mg/L (ppm) in TCLP Extract

**Sample Name:** LWEC  
**Lab Code:** J1002562-001  
**Test Notes:**

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Barium	EPA 3010A	6010B	3.0	1.0	06/08/10	06/08/10	U	
Cadmium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Chromium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Lead	EPA 3010A	6010B	0.50	1.0	06/08/10	06/08/10	U	
Mercury	METHOD	7470A	0.00020	1.0	06/07/10	06/08/10	U	
Selenium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Silver	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** L'Anse Warden Electric Co.,LLC  
**Project Name:** L'Anse Warden Electric Comp.  
**Project Number:** Crosstie Analysis  
**Matrix:** WATER

**Service Request:** J1002562  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date TCLP Performed:** 6/3/2010

Toxicity Characteristic Leaching Procedure (TCLP)  
EPA Method 1311  
Total Metals  
Units: mg/L (ppm) in TCLP Extract

**Sample Name:** Method Blank  
**Lab Code:** MB1986 TCLP  
**Test Notes:**

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic	EPA 3010A	6010B	0.100	1.0	06/08/10	06/08/10	U	
Barium	EPA 3010A	6010B	3.000	1.0	06/08/10	06/08/10	U	
Cadmium	EPA 3010A	6010B	0.1000	1.0	06/08/10	06/08/10	U	
Chromium	EPA 3010A	6010B	0.100	1.0	06/08/10	06/08/10	U	
Lead	EPA 3010A	6010B	0.500	1.0	06/08/10	06/08/10	U	
Selenium	EPA 3010A	6010B	0.100	1.0	06/08/10	06/08/10	U	
Silver	EPA 3010A	6010B	0.100	1.0	06/08/10	06/08/10	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** L'Anse Warden Electric Co.,LLC  
**Project Name:** L'Anse Warden Electric Comp.  
**Project Number:** Crosstie Analysis  
**Matrix:** WATER

**Service Request:** J1002562  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date TCLP Performed:** 6/3/2010

### Toxicity Characteristic Leaching Procedure (TCLP)

EPA Method 1311

Total Metals

Units: mg/L (ppm) in TCLP Extract

**Sample Name:** Method Blank  
**Lab Code:** MB1961  
**Test Notes:**

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Mercury	METHOD	7470A	0.00020	1.0	06/07/10	06/08/10	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** L'Anse Warden Electric Co.,LLC  
**Project Name:** L'Anse Warden Electric Comp.  
**Project Number:** Crosstie Analysis  
**Matrix:** TCLP

**Service Request:** J1002562  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date TCLP Performed:** 6/3/2010

Toxicity Characteristic Leaching Procedure (TCLP)  
EPA Method 1311  
Total Metals  
Units: mg/L (ppm) in TCLP Extract

**Sample Name:** TCLP Blank  
**Lab Code:** TCLP Blank  
**Test Notes:**

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Barium	EPA 3010A	6010B	3.0	1.0	06/08/10	06/08/10	U	
Cadmium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Chromium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Lead	EPA 3010A	6010B	0.50	1.0	06/08/10	06/08/10	U	
Mercury	METHOD	7470A	0.00020	1.0	06/07/10	06/08/10	U	
Selenium	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	
Silver	EPA 3010A	6010B	0.10	1.0	06/08/10	06/08/10	U	



# Columbia Analytical Services, Inc.

## Cooler Receipt Form

Client: L'Anse Warden Electric Service Request #: 51002562  
 Project: \_\_\_\_\_  
 Cooler received on 6-2-10 and opened on 6-2-10 by SL  
 COURIER: CAS UPS FEDEX Client Other \_\_\_\_\_ Airbill # 12526F7ENY99733379

- |    |   |                                  |                                  |                                  |                                  |
|----|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1  | Were custody seals on outside of cooler?<br>If yes, how many and where?   | Yes                              | <input checked="" type="radio"/> | No                               |                                  |
| 2  | Were seals intact and signature and date correct?   | Yes                              | No                               | <input checked="" type="radio"/> | N/A                              |
| 3  | Were custody papers properly filled out?  | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 4  | Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C) <u>Room Temp</u>  | _____                            | _____                            | _____                            | _____                            |
| 5  | Thermometer ID _____  | _____                            | _____                            | _____                            | _____                            |
| 6  | Temperature Blank Present?  | Yes                              | <input checked="" type="radio"/> | No                               |                                  |
| 7  | Were Ice or Ice Packs present   | Ice                              |                                  | Ice Packs                        | <input checked="" type="radio"/> |
| 8  | Did all bottles arrive in good condition (unbroken, etc....)?   | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 9  | Type of packing material present _____  | _____                            | _____                            | _____                            | _____                            |
| 10 | Were all bottle labels complete (sample ID, preservation, etc....)?   | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 11 | Did all bottle labels and tags agree with custody papers?   | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 12 | Were the correct bottles used for the tests indicated?  | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 13 | Were all of the preserved bottles received with the appropriate preservative?<br>HNO3 pH<2   H2SO4 pH<2   ZnAc2/NaOH pH>9   NaOH pH>12   HCl pH<2<br>Preservative additions noted below _____ | Yes                              | No                               | <input checked="" type="radio"/> | N/A                              |
| 14 | Were all samples received within analysis holding times?  | <input checked="" type="radio"/> | No                               |                                  | N/A                              |
| 15 | Were VOA vials checked for absence of air bubbles? If present, note below _____   | Yes                              | No                               | <input checked="" type="radio"/> | N/A                              |
| 16 | Where did the bottles originate?  | CAS                              | <input checked="" type="radio"/> | Client                           |                                  |

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Client approval to run samples if discrepancies noted: \_\_\_\_\_ Date: 14





# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Phillips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011 PAGE OF

SR # 5002562  
CAS Contact

Project Name <b>L'Anse Warden Electric Comp.</b>		Project Number	
Project Manager <b>J.R. Richardson</b>		Email Address	
Company/Address <b>L'Anse Warden Electric Company LLC, 157 S. Main St L'Anse MI</b>		FAX#	
Phone # <b>906-895-7187</b>		Sampler's Printed Name <b>John Polkky</b>	
Sampler's Signature <i>John Polkky</i>		LAB ID	SAMPLING DATE
CLIENT SAMPLE ID			<b>5/28/10 10:45</b>
NUMBER OF CONTAINERS			<b>1</b>
PRESERVATIVE			<b>X</b>
ANALYSIS REQUESTED (Include Method Number and Preservative(s))			<b>X</b>
TEL P ORCAR Metals			<b>X</b>
TEL P VOC's			<b>X</b>
TEL P SVOC's			<b>X</b>
PRESERVATIVE (s)			
0. NONE			
1. HCL			
2. HNO <sub>3</sub>			
3. H <sub>2</sub> SO <sub>4</sub>			
4. NaOH			
5. Zn, Acetate			
6. MeOH			
7. NaHSO <sub>4</sub>			
8. Other			
REMARKS/ ALTERNATE DESCRIPTION			
SPECIAL INSTRUCTIONS/COMMENTS		TURNAROUND REQUIREMENTS	
<b>Analyze Per J.R. E - mail</b>		RUSH (SURCHARGES APPLY)	
		STANDARD	
		REQUESTED FAX DATE	
REPORT REQUIREMENTS		RECEIVED BY	
I. Results Only		Signature <i>Shawn Lightsey</i>	
II. Results + QC Summaries (LCS, DUP, MSMSD as required)		Printed Name <b>Shawn Lightsey</b>	
III. Results + QC and Calibration Summaries		Firm <b>CAS</b>	
IV. Data Validation Report with Raw Data		Date/Time <b>6/10 1250</b>	
V. Specialized Forms / Custom Report		Date/Time	
Edata Yes No		Date/Time	
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Firm <b>LWEC</b>		Firm <b>CAS</b>	
Date/Time <b>05/28/10/12:00</b>		Date/Time <b>6/10 1250</b>	
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Consumer Information Sheet

**PENTACHLOROPHENOL  
PRESSURE-TREATED WOOD**

CONSUMER INFORMATION

This wood has been preserved by pressure-treatment with an EPA-registered pesticide containing pentachlorophenol to protect it from insect attack and decay. Wood treated with pentachlorophenol should be used only where such protection is important. Pentachlorophenol penetrates deeply into and remains in the pressure-treated wood for a long time. Exposure to pentachlorophenol may present certain hazards. Therefore, the following precautions should be taken both when handling the treated wood and in determining where to use or dispose of the treated wood.

USE SITE PRECAUTIONS

Long treated with pentachlorophenol should not be used for log homes. Wood treated with pentachlorophenol should not be used where it will be in frequent or prolonged contact with bare skin (for example, chairs, and other outdoor furniture), unless an effective sealer has been applied. Pentachlorophenol-treated wood should not be used in residential, industrial, or commercial interiors except for laminated beams or for building components which are in ground contact and are subject to decay or insect infestation and where two coats of an appropriate sealer are applied. Sealers may be applied at the installation site.

Wood treated with pentachlorophenol should not be used in interiors of farm buildings where there may be direct contact with domestic animals or livestock which may crib (bite) or lick the wood. In interiors of farm buildings where domestic animals or livestock are unlikely to crib (bite) or lick the wood, pentachlorophenol-treated wood may be used for building components which are in ground contact and are subject to decay or insect infestation and where two coats of an appropriate sealer are applied. Sealers may be applied at the installation site.

Do not use pentachlorophenol-treated wood for farrowing or brooding facilities.

Do not use treated wood under circumstances where the preservatives may become a component of food or animal feed. Examples of such sites would be structures or containers for storing silage or food.

Do not use treated wood for cutting-boards or countertops. Only treated wood that is visibly clean and free of surface residue should be used for patios, decks and walkways.

Do not use treated wood for construction of those portions of beehives which may come into contact with the honey.

Pentachlorophenol-treated wood should not be used where it may come into direct or indirect contact with public drinking water, except for uses involving incidental contact such as docks and bridges.

#### HANDLING PRECAUTIONS

Dispose of treated wood by ordinary trash collection or burial. Treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g., construction sites) may be burned only in commercial or industrial incinerators or boilers rated at 20 million BTU/hour or greater heat input or its equivalent in accordance with state and Federal regulations.

Avoid frequent or prolonged inhalation of sawdust from treated wood. When sawing and machining treated wood, wear a dust mask. Whenever possible, these operations should be performed outdoors to avoid indoor accumulations of airborne sawdust from treated wood.

Avoid frequent or prolonged skin contact with pentachlorophenol-treated wood; when handling the treated wood, wear long-sleeved shirts and long pants and use gloves impervious to the chemicals (for example, gloves that are vinyl-coated).

When power-sawing and machining, wear goggles to protect eyes from flying particles. After working with the wood, and before eating, drinking, and use of tobacco products, wash exposed areas thoroughly.

If oily preservatives or sawdust accumulate on clothes, launder before reuse. Wash work clothes separately from other household clothing.

Urethane, shellac, latex epoxy enamel and varnish are acceptable sealers for pentachlorophenol-treated wood.

*Approved by the U.S. Environmental Protection Agency - 8/87*



Nevada Wood Preserving, Inc.  
P.O. Box 350, Silver Springs NV 89429

MATERIAL SAFETY DATA SHEET

**1. PRODUCT IDENTIFICATION**

Trade Name: Pentachlorophenol Treated Wood  
 Chemical Class: Treated Wood  
 Manufacturer: Nevada Wood Preserving, Inc.  
 Address: P.O. Box 350, Silver Springs NV 89429  
 Emergency Phone Number: CHEMTREC 1-800-424-9300  
 General Information: 775-577-2000  
 Date Prepared: March 1, 1996

	Hazard Rating	
	NFPA	HMS
Health	1	1
Flammability	2	1
Reactivity	0	0
Special	None	None

**2. COMPOSITION, INFORMATION ON INGREDIENTS**

Chemical Name	CAS #	% by Weight	Exposure Limits in Air					Other
			ACGIH		OSHA			
			TLV mg/3	STEL mg/m3	PEL mg/m3	STEL mg/m3	IDLH	
Pentachlorophenol	87-86-5	<0.01	0.5 Skin	NE	0.5 Skin	NE	NE	ACGIH BEI: 2 mg/g creatinine in urine; DFG MAK: 0.05 ppm
Fuel Oil	88476-34-6	<0.02	NE	NE	NE	NE	NE	NE
Wood	N/A	>99	1 (hard wood) 5 (soft wood)	10 (soft wood)	2.5 (Western Red Cedar) 5 (all other)	10 (all woods except Western Red Cedar)	NE	NE

NE = Not Established

C = Ceiling Level

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

This product consists of light tan to brown lumber or wood poles. It presents limited hazards in an emergency. Dusts from this product can be irritating to exposed tissue. It is a combustible material, which will decompose to produce acrid smoke and toxic gases (i.e., carbon monoxide and carbon dioxide).

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF EXPOSURE

- INHALATION:** Inhalation of finely divided dusts of this product may cause irritation of the nose, throat, and other tissues of the respiratory system.
- CONTACT WITH SKIN:** Prolonged and/or repeated skin contact can cause mild irritation that disappears after exposure ends. If irritation persists, contact a physician.
- EYE CONTACT:** Dusts which may contaminate the eyes can cause irritation and scratching of eye tissues.
- SKIN ABSORPTION:** One component of this product, pentachlorophenol, is known to be a skin absorbing compound. Symptoms of such exposure can include redness, irritation, changes in respiration, and dizziness.
- INGESTION:** Ingestion of this product can irritate the mouth, throat, stomach, and other tissues of the digestive system. Symptoms of ingestion may include nausea, vomiting, and irritation.
- INJECTION:** The only way injection of this material could occur is by wood splinters puncturing the skin. The main symptoms associated with such an exposure would be redness and irritation at the point of injection.

**Note:** If any signs or symptoms of exposure persists, seek medical help immediately

#### HEALTH EFFECTS OR RISKS FROM EXPOSURE

- ACUTE:** The main health hazard presented by this product would be irritation of contaminated tissues - especially the skin and eyes.
- CHRONIC:** The symptoms of long-term exposure would be similar to those for acute exposure, described above. Additionally, some individuals can become sensitized to wood dusts and develop allergy like symptoms upon repeat exposures.

Studies have been conducted focusing on employees who routinely work with wood products. The International Agency for Research on Cancer reports that there is sufficient evidence that exposure to wood dusts from hardwood species may lead to an increased risk of nasal/paranasal sinus cancer.

### 4. FIRST AID MEASURES

- SKIN EXPOSURE:** Immediately begin cleansing affected area with running water. Remove exposed or contaminated clothing, taking care not to irritate the eyes.
- EYE EXPOSURE:** Open victim's eyes while under gentle running water. Use sufficient force to open eye lids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Victims with wood splinters in the eye must receive medical attention.
- INHALATION:** Remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.
- INGESTION:** Call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting.

Victims of chemical exposure must seek medical attention if signs of irritation or other symptoms develop. Take a copy of the product label and MSDS to physician or health professional along with the victim.

**5. FIREFIGHTING MEASURES**

**FLASH POINT:** Not applicable  
**AUTO IGNITION TEMPERATURE:** 200 - 270 degrees C  
**FLAMMABLE LIMITS (In air by volume)** Lower: Not available Upper: Not available  
**FIRE EXTINGUISHING MATERIALS:**  
Water spray: yes Carbon dioxide: yes Foam: yes Dry chemical: yes Halon: no  
Other: Any other Class A fire extinguishing agent.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** This product is combustible. When involved in a fire, this material may decompose and produce irritating fumes and toxic gases (carbon monoxide and carbon dioxide).  
**EXPLOSION SENSITIVITY TO MECHANICAL IMPACT:** N/A  
**EXPLOSION SENSITIVITY TO STATIC DISCHARGE:** N/A  
**SPECIAL FIREFIGHTING PROCEDURES:** Incipient fire responders should wear eye protection. Structural firefighters must wear self-contained breathing apparatus and full protective equipment.

**6. ACCIDENTAL RELEASE MEASURES**

**SPILL AND LEAK RESPONSE:** This product cannot spill or leak because the chemicals are fixed in the wood. In the event of a release of dust or chips of this product, safety goggles, mechanically resistant gloves, and coveralls should be worn by cleanup personnel. In particularly dusty areas, use a MSHA/NIOSH approved dust mask. Sweep up or vacuum dust and chips. If necessary, rinse the area with soap and water.

**7. HANDLING AND STORAGE**

**WORK PRACTICES AND HYGIENE PRACTICES:** Avoid getting dusts on you or in you. Wash hands after handling this product. Do not eat or drink in areas where there are dusts of this material.  
**STORAGE AND HANDLING PRACTICES:** Keep in cool, dry place away from open flame. Avoid contaminating food, feed, and water with dusts of this product. Always use this product in areas where adequate ventilation is provided.  
**PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:**  
Follow the practices indicated in Section 6 - Accidental Release Measures.

**8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation. Use mechanical fan or vent area to outside.  
**RESPIRATORY PROTECTION:** If it is anticipated that the exposure limits for dust may be exceeded during work with this product, wear a MSHA/NIOSH approved dust mask.  
**EYE PROTECTION:** Splash goggles or safety goggles.  
**HAND PROTECTION:** Mechanically resistant gloves.  
**BODY PROTECTION:** Use body protection appropriate for task (i.e., coveralls).

9. PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY: N/A                      EVAPORATION RATE: N/A                      SPECIFIC GRAVITY: N/A  
MELTING POINT OR RANGE: N/A        SOLUBILITY IN WATER: Insoluble              BOILING POINT: N/A  
VAPOR PRESSURE (mm Hg @ 20 degrees C): N/A                      pH: N/A  
APPEARANCE AND COLOR: light tan to brown lumber or wood poles with a fuel-like odor.  
HOW TO DETECT THIS SUBSTANCE: There are no unusual warning properties associated with this product besides the fuel-like odor.

10. STABILITY AND REACTIVITY

STABILITY: Stable

DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Chlorinated Dibenzodioxins, dibenzofurans, and other toxic compounds will be released upon combustion of this product.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This material is incompatible with strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid contact with open flame and other sources of extreme high temperatures.  
Avoid contact with incompatible materials.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: There is currently no toxicological information available on this product or for components greater than 1 percent in concentration.

SUSPECTED CANCER AGENTS: This product's ingredients are not found on the following lists - Federal OSHA Z List, NTP, Cal/OSHA. Pentachlorophenol is on the IARC Cancer Review as having Human Limited Evidence and Animal Inadequate Evidence.

IRRITANCY OF PRODUCT: This product is slightly irritating to contaminated tissue.

REPRODUCTIVE TOXICITY INFORMATION

Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: While no data exists for the product, it is not expected to cause fetal toxicity problems related to mutagenicity. Animal studies show some experimental mutagenic effects for pentachlorophenol at relatively high doses.

Teratogenicity: While no data exists for the product, it is not expected to cause fetal toxicity problems related to teratogenicity. Animal studies show some experimental teratogenic effects for pentachlorophenol at relatively high doses.

Reproductive Toxicity: While no data exists for the product, it is not expected to affect the male or female reproductive system or to cause any fetal toxicity problems. Animal studies show some experimental reproductive effects for pentachlorophenol at relatively high doses.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Disorders involving the skin, eyes, liver, or respiratory tract may be aggravated by occupational exposures to dusts of this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms.

**12. ECOLOGICAL INFORMATION**

**ENVIRONMENTAL STABILITY:** This product is treated so it will not decompose. Pentachlorophenol will slowly be released into the environment and will slowly degrade into tetra- and trichlorophenol derivatives and carbon dioxide.

**EFFECT OF MATERIAL ON PLANTS AND ANIMALS:** Do not use treated wood under any circumstances where the preservatives may become a component of food or animal feed. Examples of such sites would be structures or containers for storing silage or food.

**EFFECT OF MATERIAL ON AQUATIC LIFE:** There is currently no information available on this product's effects on aquatic life; however, it is anticipated that if large enough quantity of product dusts contaminate a water system, exposed aquatic life may experience adverse health effects.

**13. DISPOSAL CONSIDERATIONS**

**PREPARING WASTES FOR DISPOSAL:** Waste disposal must be according to appropriate Federal, State, and local regulations.

**EPA WASTE NUMBER:** N/A

**14. TRANSPORTATION INFORMATION**

This material is not hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation.

**PROPER SHIPPING NAME:** N/A

**HAZARD CLASS NUMBER AND DESCRIPTION:** N/A

**UN IDENTIFICATION NUMBER:** N/A

**PACKAGING GROUP:** N/A

**DOT LABEL(S) REQUIRED:** N/A

**EMERGENCY RESPONSE GUIDE NUMBER:** N/A

**MARINE POLLUTANT:** The treated wood is not defined as a marine pollutant under 49 CFR 172.101, Appendix B.

**CTC DANGEROUS GOODS SHIPPING REGULATIONS:** N/A

**15. REGULATORY INFORMATION**

**NOTE:** The regulatory information is provided on this sheet for the pentachlorophenol component contained in the treated wood. Chemical components of the treated wood are fixed into the wood and are not reportable under SARA or CERCLA.

**SARA REPORTING REQUIREMENTS:** The treated wood is not required to be reported under SARA.

**TSCA INVENTORY STATUS:** The chemicals in this product are listed on the TSCA inventory.

**CERCLA REPORTABLE QUANTITY (RQ):** Pentachlorophenol = 10 pounds

15. REGULATORY INFORMATION (continued)

STATE REGULATORY INFORMATION:

Chemicals in this product are covered under specific state regulations as denoted below.

Alaska - Designated Toxic and Hazardous Substances: Pentachlorophenol  
California - Permissible Exposure Limits for Chemical Contaminants: Pentachlorophenol  
Florida - Substance List: Pentachlorophenol  
Illinois - Toxic Substances List: Pentachlorophenol  
Kansas - Section 302/303 List: Pentachlorophenol  
Massachusetts - Substance List: Pentachlorophenol  
Minnesota - List of Hazardous Substances: Pentachlorophenol  
Missouri - Employer Information/Toxic Substances List: Pentachlorophenol  
New Jersey - Right to Know Hazardous Substances List: Pentachlorophenol  
North Dakota - List of Hazardous Chemicals, Reportable Quantities: Pentachlorophenol  
Pennsylvania - Hazardous Substances List: None  
Rhode Island - Hazardous Substances List: Pentachlorophenol  
Texas - Hazardous Substances List: Pentachlorophenol  
West Virginia - Hazardous Substances List: Pentachlorophenol  
Wisconsin - Toxic and Hazardous Substances List: Pentachlorophenol

CALIFORNIA PROPOSITION 65:

Pentachlorophenol is on the California Proposition 65 list as a chemical known to the State of California to cause cancer.

LABELING (precautionary statements):

CAUTION! Dusts of this product can irritate the skin, eyes, nose, throat, and other tissues of the respiratory system. Dusts can also scratch the eyes, and splinters of this product can puncture the skin. Avoid contact with skin and eyes. Avoid breathing dust.

TARGET ORGANS:

(For dusts of product) Skin, Eyes, Respiratory System

WHIMS SYMBOL:

N/A

16. OTHER INFORMATION

PREPARED BY:

Nevada Wood Preserving, Inc.  
P.O. Box 350  
Silver Springs, NV 89429

775-577-2000

INFORMATION CONTAINED IN THIS MSDS REFERS ONLY TO THE SPECIFIC MATERIAL DESIGNED AND DOES NOT RELATE TO ANY PROCESS OR TO USE WITH OTHER MATERIALS. THIS INFORMATION IS FURNISHED FREE OF CHARGE AND IS BASED ON DATA BELIEVED TO BE RELIABLE AS OF THE DATE HEREOF. IT IS INTENDED FOR THE USE BY THE PERSONS POSSESSING TECHNICAL KNOWLEDGE AT THEIR OWN DISCRETION AND RISK. SINCE ACTUAL USE IS BEYOND OUR CONTROL, NO GUARANTEE, EXPRESSED OR IMPLIED, AND NO LIABILITY IS ASSUMED BY NEVADA WOOD PRESERVING, INC. IN CONJUNCTION WITH THE USE OF THIS INFORMATION. NOTHING HEREIN IS TO BE CONSTRUED AS RECOMMENDATION TO INFRINGE ON ANY PATENTS.

**ENVIRONMENTAL  
MONITORING AND  
TECHNOLOGIES, INC.**



8100 North Austin • Morton Grove, IL 60053-3203  
847.967.6666 • 800.248.0663 • fax: 847.967.6735 • www.emt.com

Ashley McMahon  
WGS Global  
6401 Taylor Drive  
Flint, MI 48507

June 23, 2010

RE LWEC RailRoad Ties

Lab Orders:  
10060429

Dear Ms. Ashley McMahon:

Enclosed are the analytical reports for the EMT Lab Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me at 847-967-6666.

Sincerely,

Joe Pavilonis  
Project Manager

Approved by,

Mitchell Ostrowski  
Laboratory Director

This Report Contains 8 pages

The Contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety.

State of Illinois Chemical Analysis in Drinking Water Accredited Lab. No. 100256  
State of Wisconsin Wastewater and Hazardous Waste No. 99988890

environmental laboratory and testing services  
| water | soil | air | product | waste |

**APPENDIX I**

**ANNUAL STORM WATER POLLUTION PREVENTION PLAN  
REVIEW REPORT FORM**



# ANNUAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REVIEW REPORT FORM

Facility Information		
Designated Name:	Certificate of Coverage No.:	
Facility Contact Information		
Name:	Telephone No.:	
Email Address:	Certification No.:	
Backup Facility Contact Information		
Name:	Telephone No.:	
Email Address:	Certification No.:	
Industrial Storm Water Certified Operator Information		
Name:	Telephone No.:	
Email Address:	Certification No.:	

### SWPPP Review Checklist

1	Facility general information is current and accurate	Yes	No	
2	Site map is current and accurate	Yes	No	
3	Significant material inventory is current and accurate	Yes	No	
4	New exposures, processes and related controls have been documented appropriately in the SWPPP	Yes	No	NA
5	Spills have been recorded and reported as appropriate	Yes	No	NA
6	Employee SWPPP training was conducted and documented	Yes	No	
7	Records of routine preventative maintenance and housekeeping inspections are available in the SWPPP file	Yes	No	
8	Comprehensive site inspections have been completed, certified and filed in the SWPPP file	Yes	No	
9	Corrective actions noted in the inspection reports have been completed	Yes	No	
10	SWPPP has been reviewed and signed by the Certified Storm Water Operator and the Permittee or designated representative	Yes	No	

Additional Comments:

I certify that the above information is correct	
Name:	Signature / Date:

SUBMIT THIS FORM TO THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, WATER  
RESOURCES DIVISION DISTRICT OFFICE IDENTIFIED ON YOUR CERTIFICATE OF COVERAGE  
ON OR BEFORE **JANUARY 10<sup>TH</sup>** OF EACH YEAR

**SWPPP ANNUAL REVIEW CHECKLIST  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER BUREAU**

Date:

By:

Facility Name:

Address:

County:

SIC Code:

Permit Number:

COC No.:

Expiration Date:

Permitee:

Certified Operator(s) Name/Number/Expiration:

[ Yes (Y), No (N) or Not Applicable (N/A) ]

**1. Source Identification**

To identify potential sources of significant materials that can pollute storm water and subsequently be discharged from the facility, the SWPPP shall, at a minimum, include the following items:

a. A site map identifying the following:

- |  |                          |
|--|--------------------------|
| 1) buildings and other permanent structures  | <input type="checkbox"/> |
| 2) storage or disposal areas for significant materials   | <input type="checkbox"/> |
| 3) secondary containment structures and what they contain  | <input type="checkbox"/> |
| 4) storm water discharge outfalls (numbered for reference)   | <input type="checkbox"/> |
| 5) location of storm water inlets contributing to each outfall   | <input type="checkbox"/> |
| 6) location of NPDES permitted discharges other than storm water   | <input type="checkbox"/> |
| 7) outlines of the drainage areas contributing to each outfall   | <input type="checkbox"/> |
| 8) structural runoff controls or storm water treatment facilities  | <input type="checkbox"/> |
| 9) areas of vegetation   | <input type="checkbox"/> |
| 10) areas of exposed and/or erodible soils   | <input type="checkbox"/> |
| 11) impervious surfaces (roof, asphalt, concrete)  | <input type="checkbox"/> |
| 12) name and location of receiving water(s)  | <input type="checkbox"/> |
| 13) areas of known or suspected impacts on surface waters designated under the Natural Resources and Environmental Protection Act, P.A. 451, Part 201, of 1994 (formerly Act 307). | <input type="checkbox"/> |

b. A list of all significant materials that could enter storm water.   
For each material listed, the plan shall include:

- |   |                          |
|---|--------------------------|
| 1) Ways in which each type of material has been or has reasonable potential to become exposed to storm water (e.g., spillage during handling; leaks from pipes, pumps, vessels; contact with storage piles; waste handling/disposal; deposits from dust or overspray, etc). | <input type="checkbox"/> |
|---|--------------------------|

- 2) An evaluation of the reasonable potential for contribution of significant materials to runoff from at least the following areas or activities:
  - a. loading, unloading, and other material handling operations
  - b. outdoor storage including secondary containment structures
  - c. outdoor manufacturing or processing activities
  - d. significant dust or particulate generating processes
  - e. discharge from rooftop vents, stacks and air emission controls
  - f. on-site waste disposal practices
  - g. maintenance and cleaning of vehicles, machines and equipment
  - h. areas of exposed and/or erodible soils
  - i. sites of environmental contamination listed under the Natural Resources and Environmental Protection Act, P.A. 451, part 201, of 1994 (formerly Act 307).
  - j. areas of significant material residues
  - k. areas where wild or domestic animals congregate and deposit waste
  - l. other areas where storm water may contact significant materials

3) Identification of the outfall or outfalls through which the material may be discharged if released.

c. A listing of oil and other polluting materials that have been spilled or leaked over the three years prior to the completion of the plan; the date, volume and exact location of release; and the action taken to clean up the material and /or prevent exposure to storm water runoff or contamination of surface waters of the state.

d. Is there a Total Daily Maximum Load (TMDL) for the receiving water? If yes, does the plan identify related controls

e. A summary of existing storm water discharge sampling data (if available) describing pollutants in storm water discharges associated with industrial activity at the facility. This summary shall be accompanied by a description of the suspected source(s) of the pollutants detected.

**2. Preventive Measures and Source Controls, Non-Structural**

To prevent significant materials from contacting storm water at the source, the plan shall include at a minimum:

a. A description of a program for routine preventive maintenance which includes requirements for inspection and maintenance of storm water management and control devices (e.g., cleaning of oil/water separators and catch basins) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. A log of the inspection and corrective actions shall be maintained on file by the permittee.

- b. A schedule for comprehensive inspection of equipment, plant areas, and structural pollution prevention and treatment controls to be performed semi-annually or quarterly depending on the permit requirements. The comprehensive inspection reports shall contain compliance certification.
- c. A description of good housekeeping procedures to maintain a clean, orderly facility.
- d. The plan shall specify material handling procedures and storage requirements for significant materials. Equipment and procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The procedures shall identify measures to prevent the spilled materials from being discharged into storm water. The plan may include reference to a PIPP or SPCC plan.
- e. Identification of areas which have a high potential for significant soil erosion. The plan shall also identify measures used to control soil erosion and sedimentation.
- f. A description of employee training programs which will be implemented to inform appropriate personnel at all levels of responsibility of the components and goals of the plan. The plan shall identify periodic dates for such training.
- g. Identifications of actions to comply with TMDL requirements.
- h. Identification of significant materials expected to be present in storm water discharges following implementation of non-structural preventative measures and source controls.

**3. Structural Controls for Prevention and Treatment**

If non-structural controls are not sufficient to prevent uncontaminated storm water from contacting or being contacted by significant materials or if preventive measures are not feasible or are inadequate to keep significant materials out of storm water, the plan provides a description of the location, function, and design criteria of structural controls for prevention and treatment.

**4. Keeping Plans Current**

Is the plan being reviewed annually and are written summaries of the reviews maintained?

**5. Certified Operator Update**

If the certified operator is new/changed, has the Department been notified?

**6. Signature and SWPPP Review**

Has the plan been signed by the certified operator and the permittee or a designated representative?

