

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action

Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: Former MarquipWard United Facility (Former Koppers Facility)
Facility Address: 5200 Glen Arm Road, Glen Arm, MD 21057
Facility EPA ID #: MDD 003 093 648

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

- If yes - check here and continue with #2 below.
- If no - re-evaluate existing data, or
- If data are not available, skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

The site is located at 5200 Glen Arm Road in Glen Arm, Baltimore County, Maryland. The site is located on the north side of Glen Arm Road, just west of the intersection with Long Green Pike. County property records list the property as consisting of eight separate parcels with the same mailing address. The facility occupies approximately 21.865 acres of land north of Glen Arm Road. The plant building, offices, and related buildings occupy approximately 208,000 square feet. Original construction of the building began in the early 1900's, with additions constructed between 1956 and 1970. The site is located in a rural area and land use in the vicinity is a combination of residential, agricultural commercial and industrial.

The facility consists of a main plant area, offices, and conference room. A large pond is situated north of the main plant area, which is only used for fire protection. There is a former residence on the northwest corner of the property.

The facility previously manufactured machinery used for the fabrication of corrugated cardboard boxes and containers. This included the manufacturing of gear wheels, rollers and other structural components of the machinery. In addition, surface treatment of the machine components was done at the facility which included degreasing, rust removal, rust treatment, and spray painting. Currently the facility is a multiple use property with approximately 8 lessees occupying approximately 60,000 square feet of the property. The facility is a Small Quantity Generator.

The facility maintains a Discharge Permit for discharge from the active Wastewater Treatment Plant (WWTP) through Outfall 001 to an unnamed tributary of Long Green Run. The Long Green run is a Use III waters, which is protected for growth and propagation of natural trout. The permit was effective November 1, 2007 and is due to expire October 31, 2012. The facility also maintains/maintained the following permits:

- State Discharge Permit for Wastewater Treatment Plant – State Discharge Permit 06-DP-0346A
- National Pollution Discharge Elimination System (NPDES) Permit MD0024635
- State Water Appropriations Permit # BA1956G003(07)
- RCRA small quantity generator's permit for hazardous waste disposal

- At one time, air quality permits for a paint spray booth and three boilers were maintained. Minimal information was found related to these permits.

August Mack Environmental, Inc. (August Mack) was contracted by MarquipWard to prepare a corrective action plan (CAP) and schedule of improvements for the WWTP at the facility. The purpose of the CAP was to identify necessary improvements to operate the WWTP to ensure consistent compliance with the discharge permit limits of the facility's NPDES Permit. Exceedances of effluent limitations in the Permit for ammonia, fecal coliform, biochemical oxygen demand (BOD), total suspended solids (TSS), and pH were recorded between 2002 and 2005. A Complaint and Consent Order was issued to the facility in 2007 for discharge of pollutants from the site to an unnamed tributary of Long Green Run in 2002 by MDE. Between 2007 and 2008 the sand filter was upgraded and the Consent Order was terminated.

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be “contaminated”¹ above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater		X		No evidence of releases to groundwater.
Air (indoors) ²		X		No evidence of complaints or violations.
Surface Soil (e.g., <2 ft)		X		The site is paved with asphalt, and no hazardous waste is currently handled. Some surface staining on pavement was observed during a previous site visit.
Surface Water		X		No evidence of releases to surface water was found in files reviewed.
Sediment		X		No evidence of releases to sediment was found in files reviewed.
Subsurf. Soil (e.g., >2 ft)		X		The site has one Area of Concern (AOC), AOC 1 - Former Waste Tank (a waste oil/solvent underground storage tank (UST)), which was removed in 1986 and replaced with an aboveground storage tank (AST).
Air (outdoors)		X		No evidence of complaints or violations.

- If no (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.
- If yes (for any media) - continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.
- If unknown (for any media) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

Groundwater - While groundwater is not known as no monitoring wells have been installed at the MarquipWard site, no evidence of releases to groundwater was found in files reviewed. The site has one AOC, AOC 1 - Former Waste Tank (a waste oil/solvent UST, which was removed in 1986 and replaced with an AST. No samples were collected from the excavation. Three onsite production wells used for drinking water are sampled regularly and have never reported contamination.

Indoor and Outdoor Air - The area surrounding the facility is a formerly rural area that now contains mixed residential, industrial, commercial, and agricultural properties. No documented air releases were found in files reviewed. The site does not currently operate any permitted air equipment.

Surface Soil - The site is paved with asphalt, and no hazardous waste is currently handled. However, obvious surface paving staining from the AST was observed during a previous site visit. It is unclear if this staining reached surface soil.

Sediment/Surface Water - The surface waters of the area runoff generally to the southeast and will eventually enter Gunpowder Falls by way of Long Green Creek or Cowen Run. No hazardous waste is handled on-site. Stormwater is discharged to the local sewer system and then to the publicly owned treatment works (POTW). No evidence of releases to surface water or sediment was found in files reviewed.

Subsurface soil - The site has one AOC, AOC 1 - Former Waste Tank (a waste oil/solvent UST, which was removed in 1986 and replaced with an AST).

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3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

<u>“Contaminated” Media</u>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food ³
Groundwater							
Air (indoors)							
Soil (surface, e.g., <2 ft)							
Surface Water							
Sediment							
Soil (subsurface e.g., >2 ft)							
Air (outdoors)							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors’ spaces for Media, which are not “contaminated” as identified in #2 above.
2. Enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“___”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.
- If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

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4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**⁴ (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?
- If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- If unknown (for any complete pathway) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

⁴ If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

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5. Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?
- If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).
 - If no - (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.
 - If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code.

Rationale and Reference(s):

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6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI (event code CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

- YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Former MarquipWard United Facility (Former Koppers Facility), EPA ID # MDD 003 093 648, located at 5200 Glen Arm Road, Glen Arm, MD 21057. Specifically, this determination indicates that the migration of "contaminated" groundwater is under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
- NO - "Current Human Exposures" are NOT "Under Control."
- IN - More information is needed to make a determination.

Completed by	<u>(signature)</u> <u>(print) Erich Weissbart</u> <u>(title) Project Manager</u>	Date	<u>10/19/10</u>
Supervisor	<u>(signature)</u> <u>(print) Luis Pizarro</u> <u>(title) Associate Director</u> <u>EPA Region III</u>	Date	<u>10/20/10</u>

Locations where References may be found:

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