

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action Environmental Indicator (EI) RCRIS code (CA725) Current Human Exposures Under Control

Facility Name: Sentry Paint Technologies
Facility Address: 237 Mill Street, Darby, PA 19023
Facility EPA ID #: PAD002480002

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

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	
Air (indoors) ²			X	
Surface Soil (e.g., <2 ft)			X	
Surface Water			X	
Sediment			X	
Subsurf. Soil (e.g., >2 ft)			X	
Air (outdoors)			X	
☐	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:

The Property is comprised of 2.3 acres along the Darby Creek in Darby, Delaware County, PA. Sentry Paint Technologies, Inc. operated at the Property since March 20, 1963 manufacturing paint, primer, and industrial coatings. Raw materials used in manufacturing these products included resins, alkyd polyesters, epoxy, polyurethane resins, aromatic and aliphatic solvents. Sentry Paint Technologies, Inc. permanently shutdown operations at the Property on April 30, 2003. The assets of Sentry were purchased by the Sheboygan Paint Company, while the property remained an asset of Sentry. After this purchase, the Property was used as a distribution center by Sheboygan Paint Company until the sale of the property in September 2020 to Mill Creek Holdings II, LLC.

Prior to 2003, the Facility used raw materials in its manufacturing process that included resins, alkyd polyesters, epoxy, polyurethane resins, aromatic and aliphatic solvents. Only physical processes such as weighing, mixing, grinding, tinting, and packaging took place at the facility. The processes occurred at room temperature and no chemical reactions took place. Hazardous wastes generated at the facility from routine operations were primarily the result of cleaning of the mixing equipment and holding tanks. Toluene was the primary solvent used in cleaning, however, xylene, mineral spirits, and petroleum naphtha, and various other solvents were sometimes used. Other hazardous wastes included bad mixes and leftover product from special orders.

Numerous inspections between 1983 and 2003 found improper storage of hazardous materials, evidence of spillage/leakage, illegal drum disposal, and general poor maintenance and handling practices at the Facility. Sampling from illegally disposed drums in 1985 confirmed that paint sludges were disposed in this suspected disposal area, and sample results indicated high concentrations of

phenol, nitrobenzene, isophorone, and xylene which are all components of paints and coatings used in the manufacturing process at the Facility. Some remediation took place in this disposal area in 1986, and 12 drums were removed and the area was graded. However, accounts from community officials reported that as many as 100 drums may have been buried in this area.

A Solvent and Resin Tank Farm and Resin Fill Area were located at the rear of the facility. The Solvent Tank Farm consisted of six aboveground storage tanks (ASTs) ranging in size from 1,000-2,000 gallons and was located adjacent to the rear parking lot. These tanks stored volatile organic solvents. The Resin Tank Farm consisted of five 6,000 gallon ASTs to store resin and was located inside the rear of the Plant Area. The Resin Fill Area was used to fill the resin and solvent tanks and was located near the Solvent Tank Farm at the rear of the Plant Area; materials were transported to the fill area via tanker truck and then pumped into the appropriate tank. Inspections from 1983 to 1987 found numerous instances of spillage in the Solvent Tank Farm and Resin Fill Area. On February 5, 1987 a Remediation Plan for Soils in the Solvent Tank Farm and Resin Fill Area was prepared in response to PADEPs observations of spillage. In July 13, 1987, PADEP noted the Plan was deficient as it did not address groundwater recovery or treatment. Groundwater wells sampled during this time indicated both soil and groundwater contamination in the area of the tank farm. PADEP approved a proposal by Sentry's consultant to use vapor extraction to remediate soil and groundwater contamination at the site. During an interview with Sentry representatives in 2003, they stated that there is no soil vapor extraction system at the site and that no remediation had taken place in this area. Hurricane Floyd produced floodwaters in the Solvent Tank Farm area on September 16, 1999. All six ASTs from the Solvent Tank Farm were washed away in these floodwaters; the tanks were recovered, properly disposed of, and were not replaced.

A parcel of this property had historically been leased to PECO and operated as a manufactured gas plant (MGP). This parcel is currently undergoing remediation under oversight by PADEP's Act 2 program for contaminants related to PECO's operations on this parcel.

Based on this information, it is reasonably suspected that groundwater and soil may still be contaminated although it is not known whether the contamination may be above appropriate standards. It is recommended that further investigation is conducted to understand whether contamination is still present and to what extent.

Reference:

Environmental Indicator Inspection Report for Sentry Paint Technologies, Inc. October 2003. Tetra Tech FW, Inc.

Footnotes:

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

² Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

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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:

Reference:

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:

Reference:

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 (insert facility and EPA ID #), located at (insert address) 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

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