

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: Clean Harbors Laurel
Facility Address: 3527 Whiskey Bottom Road, Laurel, MD 20724
Facility EPA ID #: MDD 980 554 653

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 Clean Harbors facility is located at 3527 Whiskey Bottom Road in Laurel, Maryland, approximately 15 miles southwest of Baltimore. The facility is located in a primarily residential area near the Baltimore/Washington International Airport. A small creek is located approximately one mile to the southwest of the site, and the nearest homes are located adjacent to the northeast and west property boundaries. I-295, I-95, and Route 1 are located within 2 miles of the site.

Waste transfer operations began at this facility in 1978. The site accepts waste from industrial clients and transfers it into trailers for shipping to treatment facilities. The site does not open or combine waste containers; the majority of containers handled are lab packs. Clients include hospitals, universities, manufacturing industries, and research and development facilities. The site has operated under the following names:

1978 – 1980: RAD Services, Inc.
1980 – 1985: Triangle Resource Industries
1985 – 1990: GSX Service, Inc.
1990 – 1998: Laidlaw Environmental Services (TS), Inc.
1998 – 2002: Safety-Kleen (TS), Inc.
2002 – Current: Clean Harbors

The site serves as a base for Clean Harbors drivers, as well as an equipment staging area for the field service group. However, there are currently no full time employees at the Clean Harbors Laurel site.

The Clean Harbors facility consists of a loading dock area, a block building, an office building, a supply storage shed, an infiltration basin, and paved areas for the operation and parking of the Clean Harbors trucks and trailers.

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 groundwater data exists as no monitoring wells have been installed at the site; however, no evidence of releases to groundwater was found in files reviewed.
Air (indoors) ²		X		No evidence of indoor air issues were found in files reviewed.
Surface Soil (e.g., <2 ft)		X		Some small spills have occurred, which were contained and cleaned up. No evidence was found in files reviewed indicating these releases reached soil.
Surface Water		X		The site has one outfall to this river for stormwater runoff from areas that do not handle hazardous waste. No evidence of releases to surface water was found in files reviewed.
Sediment		X		The site has one outfall to this river for stormwater runoff from areas that do not handle hazardous waste. No evidence of releases to surface water was found in files reviewed.
Subsurf. Soil (e.g., >2 ft)		X		Some small spills have occurred, which were contained and cleaned up. No evidence was found in files reviewed indicating these releases reached soil.
Air (outdoors)		X		Complaints were filed about noise until a sound wall was installed, no evidence of additional noise complaints was found in the files reviewed.

- 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 - No monitoring wells exist on the property, therefore groundwater quality is not known. No evidence of releases to groundwater was found in files reviewed. Wells within 2,000 feet of the facility serve residential users, commercial users, and public water supplies.

Indoor Air - No evidence of indoor air issues were found in files reviewed.

Outdoor Air - One documented air release occurred during a July 31, 1999 fire in a trailer on the site. The site does not operate any permitted air equipment and containers of waste remain sealed while on the site. Complaints were filed about noise until a sound wall was installed, no evidence of additional noise complaints was found in the files reviewed.

Surface Soil/Subsurface Soil - Some small spills have occurred, which were contained and cleaned up. No evidence was found in files reviewed indicating these releases reached soil.

Sediment/Surface Water - The site has one outfall to this river for stormwater runoff from areas that do not handle hazardous waste. No evidence of releases to surface water was found in files reviewed.

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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)

“Contaminated” Media	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):

