

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRAInfo code (CA725)

Current Human Exposures Under Control

Facility Name: Clean Harbors LaPorte LP
Facility Address: 500 Battleground Road; LaPorte, TX 77571
Facility EPA ID #: TXD982290140

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, GPRRA). 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 RCRAInfo national database ONLY as long as they remain true (i.e., RCRAInfo 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		See Rationale Below
Air (indoors) ²		X		See Rationale Below
Surface Soil (e.g., <2 ft)		X		See Rationale Below
Surface Water		X		See Rationale Below
Sediment		X		See Rationale Below
Subsurf. Soil (e.g., >2 ft)		X		See Rationale Below
Air (outdoors)		X		See Rationale Below

- 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 and Reference(s):

FACILITY DESCRIPTION

The Clean Harbors, LaPorte LP Facility is permitted as a treatment and storage facility and also operates as a large quantity generator (LQG) and transporter of hazardous wastes. The facility occupies approximately 15 acres in a heavy industry and manufacturing area.

The site formerly operated as Safety-Kleen LaPorte and LaidLaw Environmental Services, Inc. Clean Harbors Environmental Services bought the facility on September 6, 2002 from Safety-Kleen (Reference 3)

The permitted units at the site include three container storage areas. There are 19 tanks which have been authorized

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) suggests 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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by the permit however, only a few of these units have been built. Since the majority of the units were not built within the timeframe specified in the permit, it is necessary that the facility obtain modifications to the permit. Tanks units which have been built include a cylinder release unit, and one chemical reactor vessel. A May 1, 2005 permit modification indicates plans include the addition of 17 tank units, which include storage tanks, processing tanks, solids shredder and compactor, a drum washer and an additional cylinder release unit. Wastes managed in permitted units at the site include the following: inorganic aqueous liquids, organic liquids, inorganic sludges, organic sludges, inorganic solids, organic solids, containerized gases, water-based sludge and contaminated soil (References 4 and 6). Specific EPA waste codes were not indicated in the file material.

The hazardous waste management units and ancillary facilities that are permitted, and which are planned under the May and September permit modifications, are contained totally within an enclosed building. This location precludes collection of precipitation and prevents run-on to the containment areas. In addition, secondary containment of tanks and containers will prevent surface waters from the possibility of contamination. Runoff remains outside of the container storage areas so it does not come in contact with the wastes (Reference 4). A concrete floor in each of the container storage areas releases to the soil. Air releases are minimized by pressure release valves, and gas scrubber systems associated with the tank systems. (Reference 4)

The facility operates under the following permits:

Texas Solid Waste Disposal Act: HW-50225-001
Texas Clean Air Act: 55530
Hazardous Waste Management Program: HW-50225-002
(Reference 5)

HISTORY

The Facility Site Inspection Checklist (Reference 1) indicates that a 55-gallon drum of acrylate monomers, hexane and petroleum naphtha underwent a polymerization reaction. The report indicates that no reportable quantities of material in the drum were released to the environment (Reference 1).

The Summary of Regional File Information, dated February 5, 1998 states that no prior or pending groundwater issues were noted during the review (Reference 2).

Communication with the TCEQ Project Manager, Michael Graeber, on May 17, 2006 indicated that there was no known contamination at the Clean Harbors LaPorte, LP facility (Reference 7).

RATIONALE

According to the TCEQ Project Manager, there is no known contamination at this site. Storage areas provide secondary containment, and permitted units are located within an enclosed building, minimizing the potential for release. Tanks systems are equipped with emission control systems. There is no evidence in available file material of any releases to any environmental media.

REFERENCES

1. Facility Site Inspection Checklist, dated July 1997.
2. Summary of Regional File Information, prepared by Paul Gibbins, TNRCC, dated February 5, 1998.
3. Correspondence from Chantal Snell of Clean Harbors to Margaret Hoffman, TCEQ. RE: Annual Report of Hazardous Waste Exports for 2002, dated February 27, 2003.

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4. Class 1 Modification Request for Clean Harbors LaPorte, LP, dated May 10, 2005.
5. Correspondence from Michael Graeber of TCEQ to John Martin of Clean Harbors. RE: Transmittal of Class 1 Permit Modification, dated July 6, 2005.
6. Class 1 Modification Request for Clean Harbors La Porte, LP, dated September 14, 2005.
7. Communication Log, Telephone Conversation, Michael Graeber, TCEQ, and Elisa Durum, TechLaw; dated May 17, 2006.

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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):

