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:	Reese Products, Inc. (now Stateline Properties LLC)
Facility Address:	51671 State Route 19, Elkhart, Indiana 46514
Facility EPA ID #:	IND 064 701 949

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?

X 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).

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)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater		X		see CA750YE
Air (indoors)[2]		X		no VOCs known to be present
Surface Soil (e.g., <2 ft)	X			PCBs in soil >1 ppm, oil stains in building concrete slab
Surface Water		X		no water bodies at site
Sediment		X		no water bodies at site
Subsrf. Soil (e.g., >2 ft)		X		no contaminants identified
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.

X 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.

References:

Final Preliminary Assessment/Visual Site Inspection Report, TechLaw, Inc., October 20, 2009.
Site Characterization Letter Report, Booz Allen Hamilton, February 28, 2011.
Internal EPA e-mail from Bhooma Sundar to Christine McConaghy, April 7, 2011.
Phase I Environmental Site Assessment, Solar Testing Laboratories, Inc., January 31, 2003
Phase II Environmental Site Assessment, Solar Testing Laboratories, Inc., June 23, 2003
PCB Delineation and Remediation, Solar Testing Laboratories, Inc., August 15, 2003.
IDEM Public Water Supply Well Monitoring Reports (various).

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[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.

Rationale:

Background - Reese Products manufactured trailer hitches for the RV industry. Operations were discontinued and the facility dismantled in 2003. D.J. Realty leased the property for use as a warehouse and subsequently transferred the property to Stateline Properties LLC in February 2006. One parcel was sold to Fred's Transmission and space is leased to several tenants, including a small operation for molded polyurethane (faux wood products), tooling operations, and warehousing. Some space remains unused. The property is expected to remain industrial/commercial.

The PA/VSI report provides the facility history and the release potential at each former SWMU and AOC. Ten SWMUs and five AOCs from Reese operations were identified and evaluated. The report identifies only two SWMUs with documented releases of hazardous constituents. These are the container storage area and the scrap metal storage area .The release potential for other SWMUs and AOCs identified in the PA/VSI was determined to be low to moderate, with no additional investigations recommended. Most of the SWMUs and AOCs have been removed or are no longer used.

Soil - The container storage area was a regulated hazardous waste management unit subject to closure. Hazardous constituents stored in the area include VOCs, barium, and chromium. The unit went through RCRA closure in accordance with the workplan approved by IDEM in 1997. Stained soil was removed and the concrete pad was decontaminated. No VOCs were detected above laboratory detection limits in remaining soil and barium and chromium were below site-specific cleanup levels. All releases to the environment were addressed in the RCRA closure and a Certification Report for the Container Storage Area (Heritage Environmental Services, 1/15/98) was submitted to IDEM. The unit was certified closed by IDEM on April 1, 1998.

The scrap metal storage area had PCB-contaminated surface soil that was removed in 1986 with further removal in 2003. Surface soil sampling after cleanup showed detectable PCB levels in 50% of the 35 samples. Nine sample locations had PCB levels greater than the screening level of 1 ppm. Neither the container storage area or scrap metal storage area had documented releases to groundwater.

Groundwater - The facility is underlain by the St. Joseph Aquifer System. The aquifer is composed of fine to medium sand with zones of coarse sand and gravel. Numerous high capacity industrial, municipal, and irrigation wells obtain water from this aquifer with pumping capabilities of 100 to 1500 gpm. Groundwater samples were taken from the five on-site supply wells in June 2003. The five wells were used by Reese Products for potable, non-potable, and fire-protection purposes. Water samples were taken from the kitchenette, restroom, fire hydrant, and an interior pipe. No VOCs, petroleum hydrocarbons, or PCBs were detected above quantitation limits. Only trace levels of barium (0.03 mg/l) and lead (0.002 mg/l) were found and were below EPA MCLs.

The onsite public water supply system is subject to the IDEM Standardized Monitoring Framework II monitoring schedule for public water supplies (#2200943). IDEM required the testing because VOCs were used at the site and the well system is vulnerable to VOC contamination. Routine annual testing of VOCs in drinking water was performed at the facility drinking water well in 10/2/95, 11/30/98, 12/1/99, 12/30/00, and 2/5/03. No VOCs were detected (<0.5 ug/l) during the annual testing. Historically, lead and copper were found in drinking water exceeding action levels but corrective action was taken and exceedances were resolved. These metals are associated with piping corrosion. Lead and copper levels were confirmed to be acceptable in 2001 and 2002. In 2003, the public water supply ID number was deactivated due to facility closure.

Based on the information and data provided above, groundwater at the facility is not known or suspected to be contaminated above protection levels.

Building Concrete, Sumps, and Drains - The Site Characterization Letter Report does recommend to verify the integrity of sumps and drains within the building identified as SWMU 8 (a to h) and AOCs A and D. Oil stains in concrete were also noted at AOCs A, D, and E. Because of the presence of oily spills and PCBs present at the outside scrap metal storage area, oil stains noted to be present in the building concrete, sumps, and drains should be tested for PCBs. The Phase I Environmental Site Assessment noted oil staining and oil in the press pit and sump (AOC D), a second press pit, and at hydraulic lifts, and recommended pits and sumps be cleaned and concrete surfaces inspected for integrity .

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)~~							
Surface Soil (e.g., <2 ft)	No	**Yes**	No	**Yes**	No	No	No
Bldg Concrete Slab/Sumps	No	**Yes**	No	**Yes**	No	No	No
~~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).

X 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.

References:

Final Preliminary Assessment/Visual Site Inspection Report, TechLaw, Inc., October 20, 2009.
Site Characterization Letter Report, Booz Allen Hamilton, February 28, 2011.
Phase I Environmental Site Assessment, Solar Testing Laboratories, Inc., January 31, 2003

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

Phase II Environmental Site Assessment, Solar Testing Laboratories, Inc., June 23, 2003
PCB Delineation and Remediation, Solar Testing Laboratories, Inc., August 15, 2003.

Rationale:

The scrap waste storage area was used to manage scrap metal wastes as well as waste oils, paint waste, and spent rinsates. The unit is located outdoors along the west side of the industrial building. Roll-off containers were initially staged for storing in an area of unpaved soil. However, after releases to soil were noted, a three-sided metal building was constructed in the early 1990s so the roll-off containers could be stored in a covered area with a cement floor. Oil spillage noted in 1986 was cleaned up with the removal of 200 cubic yards of contaminated soil. In response to the Phase II ESA, additional soil (20+ cubic yards) was removed along the southwest wall of building. Nine of thirty-five confirmation samples have PCB levels above the conservative screening level of 1 ppm.

Since oil spilled at the scrap waste storage area was contaminated with PCB as evident in PCB levels in contaminated soil, the hydraulic oils used within the industrial building likely contained PCBs. Oil stains have been noted in certain areas of the industrial building cement slab but no sampling has been performed to determine if the porous concrete in these areas may be contaminated with unacceptable levels of PCB (>1 ppm). Historical records document soil stained concrete, sumps, and drains at the open press pit/sump and adjacent machine press area, at floor hydraulic lifts in the industrial and service building, in the industrial building sump, and at the hydraulic pump machine area. It appears that some areas, like the open press pit have filled in with concrete since the oil stains were documented.

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."

__X__ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

References:

Site Characterization Letter Report, Booz Allen Hamilton, February 28, 2011
Internal EPA e-mail from Bhooma Sundar to Christine McConaghy, April 7, 2011.
Phase I Environmental Site Assessment, Solar Testing Laboratories, Inc., January 31, 2003
Phase II Environmental Site Assessment, Solar Testing Laboratories, Inc., June 23, 2003

Rationale:

The EPA risk assessor conducted a statistical analysis of the residual PCB levels remaining in surface soil at the scrap metal storage area after the 2003 cleanup. A 95% upper confidence level (UCL) was calculated using the proUCL software. Based on the data distribution, non-parametric statistics were conducted and the 95% UCL was calculated to be 2.59 ppm. This concentration was selected to be the exposure point concentration for the area.

The industrial worker exposure assumptions include soil exposure for 250 days per year for 25 years. An excessive cancer risk for industrial worker exposure was calculated to be 0.55 E-5 and 0.16 E-5 for the constructor worker scenario. The non cancer risk for both receptors is estimated to be less than a hazard quotient of 1. Based on the risk characterization of the residual contamination in soil, EPA concludes that the cancer and non cancer risk for PCB in soil at the scrap metal storage area is within acceptable levels, exposures are not "significant", and no further action is required.

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[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.

PCBs may be present within the industrial building concrete slab, sump, and drains from historical oil spills. Whether any exposures from these complete pathways are significant can not be determined at this time because investigative sampling has not been performed.

EPA recommends that all potential spill areas of possible PCB-contaminated oil currently observable within the industrial building be investigated. This can be performed under the self-implementing regulations under TSCA found at 40 CFR 761.61(a). Additionally, all remaining indoor sumps and floor drains within the industrial building that are still accessible should be cleaned and inspected for integrity. If any contain cracks or pathways for potential releases, limited soil sampling for PCBs and metals is recommended to confirm that action levels are not exceeded that may pose an unacceptable risk to human health.

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):

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 (and 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 _____ _____facility, EPA ID # _____, located at _____ 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."

__X__ IN - More information is needed to make a determination.

Completed by (signature) Kenneth S. Bardo Date 4/23/13
(print) Kenneth S. Bardo
(title) Environmental Scientist

Supervisor (signature) [signature] Date 5/16/13
(print) Tammy Moore
(title) Section Chief
(EPA Region or State) EPA Region 5

Locations where References may be found:

RCRA 7th Floor File Room, EPA Region 5

Contact telephone and e-mail numbers

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FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.