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: **OMNOVA Solutions, Inc.**
Facility Address: **1001 Chambers Avenue Jeannette, Pennsylvania 15644**
Facility EPA ID #: **PAD004338000**

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).

Current Human Exposures Under Control
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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)?

	Yes	No	?	Rationale/Key Contaminants
Groundwater		X		Groundwater was not encountered during previous investigations.
Air (indoors)[2]		X		Evaluation concluded vapor intrusion pathway not a concern.
Surface Soil (e.g., <2 ft)		X		Releases have been remediated; however, some confirmation sampling was limited or absent.
Surface Water		X		No recent releases have been reported.
Sediment		X		No releases have been reported.
Subsurf. Soil (e.g., >2 ft)		X		Releases have been remediated; however, some confirmation sampling was limited or absent
Air (outdoors)		X		Facility operates under a Title V Permit.

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.

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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 and Reference(s):

Omnova Solutions, Inc. is the current owner/operator of the Facility located at 1001 Chambers Avenue in the town of Jeannette, Westmoreland County, Pennsylvania 15644. Omnova is operating under a hazardous waste large quantity generator permit, air permit, and stormwater permit. The Facility has over a hundred years of industrial history that began with the manufacture of rubber products and is currently used as a polyvinyl chloride (PVC) film/sheeting manufacturing facility for various applications. The Facility is located on approximately 28 acres of land and consists of 34 buildings.

Wastes produced at the facility included spent methyl ethyl ketone (also identified as 2-butanone) (MEK), polychlorinated biphenyls (PCBs)-containing oils, scrap printing ink, vinyl resin, and pigment mixture. Unused MEK was sent to their Toledo plant for distillation and reclamation. No hazardous wastes were generated from the production of PVC and off-spec plasticizers and solvents were sent back to suppliers.

Surface Soil: A spill of an ink/solvent/additive mixture occurred in May 1994. The spill was cleaned up; however, confirmation samples are not available to verify the cleanup. No releases were documented or observed during closure of the 400,000-gallon Fuel Oil Aboveground Storage Tank (AST) (AOC 5). Releases of phthalate contamination to surface soil at the Auxiliary Linear Phthalate Tanks (12 and 13) located at AOC 4 at the facility were removed with the underground storage tanks (USTs) in 1990.

Releases to soil have been remediated; however, some confirmation sampling was limited or absent.

Subsurface Soil: Subsurface releases within the Plasticizer UST Tank Farm (Tanks 01 to 08 - AOC 1) were remediated and concentrations of phthalates and esters remained in the range of 200 to 270 milligrams per kilogram (mg/kg) as measured as TPH. Subsurface releases within the Fuel Oil UST Tank Farm (Tanks 10 and 11 - AOC 2) were remediated and concentrations of TPH remained in the range of 82 to 170 mg/kg of TPH. The excavation and backfilling was conducted in coordination with PADEP in 1995. Analyzing for benzene, toluene, ethylbenzene, and xylenes (BTEX) were completed at the time of closure.

The former MEK UST (Tank 09) AOC 3 was emptied and cleaned in August 1987. Two samples were collected for petroleum constituents and were below regulatory limits, but no samples were collected for MEK (i.e., 2-butanone). Subsequent to cleaning, it was hydrostatically tested in September 1987 and found to have good integrity, therefore, subsurface soils are not expected to have been impacted.

Releases of VOCs to the subsurface soil were excavated and remediated at the former Gasoline UST (AOC 6) location, believed to have been in front of Building 17. Seven soil samples were collected and analyzed for PADEP's unleaded gasoline parameters subsequent to the remediation. Analytical results from these soil samples were reported to be below detection limits with the exception of one sample that contained benzene at a concentration of 0.064 mg/kg. The benzene concentration is well below the PADEP soil to groundwater, used aquifer, non-residential medium-specific concentrations (MSCs) (5 mg/kg) and the most conservative PADEP direct contact non-residential MSC (0-2 feet) (210 mg/kg).

Groundwater: Groundwater was not encountered during previous investigations or UST removals conducted at the facility. It is not suspected that subsurface releases reached the groundwater.

Surface Water: The facility discharges contact-cooling industrial wastewater to Brush Creek under a National Pollutant Discharge Elimination System (NPDES) permit to Outfall 001 and non-contact cooling industrial wastewater to Outfall 003. Wastewater undergoes pretreatment via oil/water separation only from the contact-cooling wastewater prior to being discharged to Outfall 001. The facility has violated permit limits in the past for cadmium, biological oxygen demand (BOD), and temperature. Corrective actions were taken. The most recent inspections in 2006 did not note any problems.

Air: The facility operates under a Title V air operating permit. Based on documented historical remediation efforts at the facility, it is not expected that vapor intrusion attributable to subsurface contamination at this facility is a potential concern assuming a nonresidential scenario.

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.

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):

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):

[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.

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):

X 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 **OMNOVA Solutions, Inc.** facility, EPA ID # **PAD004338000**, located at **1001 Chambers Avenue Jeannette, PA 15644** 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 (signature) _____ Date 9/13/16

(print) Kevin Bilash

(title) RPM

Supervisor (signature) _____ Date 9-16-16

(print) PAUL J. GOTTHOLD

(title) ASSOC. DIR

(EPA Region or State) _____

Locations where References may be found:

USEPA Region III
Waste and Chemical Mgmt. Division
1650 Arch Street
Philadelphia, PA 19103

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(signature) Kevin Bilash
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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.