

**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:** Former Fruehauf Corporation (currently Briar Hill Steel)  
**Facility Address:** Route 119, Uniontown, PA 15401  
**Facility EPA ID #:** PAD 00 433 8646

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”**<sup>1</sup> 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) <sup>2</sup>		X		
Surface Soil (e.g., <2 ft)		X		
Surface Water		X		
Sediment		X		
Subsurf. Soil (e.g., >2 ft)		X		
Air (outdoors)		X		

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): See following pages for response to this question**

Footnotes:

<sup>1</sup> “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).

<sup>2</sup> 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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### **Response to Rational/Reference, Question 2**

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## **BACKGROUND**

The site has the former Fruehauf Corporation designation since this is the name that the facility used on the latest Part A and no subsequent Part As were submitted to notify USEPA of the name change. The Briar Hill Steel Corporation has owned the site since 1992.

The Fruehauf Corporation manufactured truck trailers in the form of tanks and hoppers at the site from 1961 until 1986, when operations began to include the manufacture of dump trailers and flatbed trailers (ceased in approximately 1992).

Three Tenants occupy space at the facility and include:

- Fayette Engineering (Briar Hill Steel's consultant) - office space
- EW Bowman (glass products manufacturer) - office space
- United Defense LP - removes interior equipment from tanks (armored personnel carriers), self-propelled guns, and Bradley fighting vehicles, shot blasts and refinishes gutted hulls, and paints the vehicles. As these vehicles enter the site, all fuel and oil is removed from them, and stored in ASTs. Once the refinishing process is complete, the vehicles are staged outside on the ground surface.

## **SURFACE AND SUBSURFACE SOIL**

Foster Wheeler found no evidence indicating that impacted surface or subsurface soil existed during the EO site inspection. Several significant former AOCs/SWMUs exist at the site and are discussed at the end of this section.

## **INDOOR AND OUTDOOR AIR**

An operating permit (permit number 26-00477) was issued on June 12, 1998 (to expire on September 30, 2002) to United Defense LP by PADEP for the operation of a spray painting booth, which has filters to capture airborne particulates. The permit limitation for Volatile Organic Compounds (VOCs) from the spray booth is 10.7 tons per year. A 1997 Phase I Environmental Site Assessment that air emission sources included blasting chambers, paint mixing, and paint booth, however, United Defense LP only maintains an air permit for the spray booth. No evidence of violations of the air permit was found in PADEP or USEPA files.

Foster Wheeler found no evidence indicating that impacted indoor or outdoor air existed during the EI site inspection.

## **GROUNDWATER**

Residents within the study rely on surface water and groundwater for potable water. The Pennsylvania-American Water Company and the North Fayette County Municipal Authority (provides potable water to the site) serve residents within the area of the site with water obtained from a surface intake on the Youghiogheny River (not downstream of the site). The NUS Corporation reported in 1990 in a Preliminary Assessment, that no public water was obtained from within the area of the site, however, 1,284 residents reportedly rely on private wells for potable water within the study area. The private wells were reported to be located east, west and north of the site, with the closed one located approximately 1,250 feet southwest of the site. Groundwater flows to the west-northwest and east-southeast according to a NUS Corporation Preliminary Assessment dated 1990.

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Groundwater samples collected in August 2001 contained no contaminants above minimum detection levels. Current groundwater conditions at the site are discussed at the end of this section under AOCs/SWMUs.

## **SURFACE WATER AND SEDIMENT**

Surface water drainage from the site was expected to flow towards the east into Gist Run, 100 yards south of the paint shop. Gist Run is an intermediate stream near the facility that becomes a perennial stream and flows northeastwardly for approximately 1.4 stream miles to the Dunbar Creek. The Dunbar Creek flows northeastwardly approximately 2.8 stream miles until it joins the Youghiogheny River at Connellsville, PA. The Gist Run and Dunbar Creek are protected for trout stocking, while the Youghiogheny River is classified as high-quality water protected for cold-water fish. No wetlands larger than 5 acres were located within three downstream miles of the site. A 1992 Environmental Site Assessment indicated that water is provided to the region from inlets on the Monongahela River and that no supply wells are located within a 1/2-mile radius of the site.

The Fruehauf Corporation maintained a National Pollution Discharge Elimination System (NPDES) permit (No. PA0024309) for discharge to the Gist Run for a waste effluent from an oil/water separator (received wastewater from a steam cleaning rack) and a former wastewater treatment plant from 1983 to 1989. United Defense currently maintains a NPDES permit (NO. IND000199653) for stormwater discharges to the North Union Township Municipal Authority sewage treatment plant.

Foster Wheeler found no evidence indicating that impacted surface water or sediment existed during the EI site inspection.

Remedial activities took place for the following AOCs/SWMUs

### **Former Surface Impoundment (Lagoon)**

From 1961 until 1983, the Fruehauf Corporation deposited residual wastes in a 0.5-acre unlined surface impoundment (lagoon) located in the southern corner of the site. The majority of the wastes were generated from the washing station where acid and alkaline cleaners were used to wash trailers prior to painting (heavy metals resulted from the trailers and mixed with the cleaners). The lagoon also received wastes from the dip tank, spent xylene, wastes from the overflow of the water spray filtering system in the paint booth, and water from the steam cleaning rack.

The lagoon was closed per a PADEP-approved closure plan, which involved the excavation of supernatant, sludge, and approximately 1 foot of soil under the sludge. The supernatant was disposed of at the North Union Municipal Sewer Authority, while 1,588 tons of sludge and soil were disposed of at the Kelly Run Landfill. The closure was certified on June 28, 1984.

The 1990 Preliminary Assessment indicated that the Fruehauf Corporation had also deposited paint residues directly onto the ground surface between Building 2 and the lagoon for an unknown duration (began in the early 1960s). No remediation was reported to have been performed in this area, however, Foster Wheeler observed no surface staining during the EI site inspection. This area may have been addressed during the remediation of the lagoon.

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Four monitoring wells were installed in 1981 to monitor the possible impacts to groundwater caused by the lagoon. The groundwater was sampled quarterly from 1981 to approximately 1990. A fifth monitoring well (MW-5) was installed in 1990 to further determine the extent of contamination and to replace MW-1, as PADEP determined that water samples from it were not representative of the aquifer. A letter from the Fruehauf Corporation to PADEP dated March 21, 1990 indicated that MW-5 would be installed no more than 5 feet from MW-1 and would be at least 20 feet deeper than MW-1.

In 1986, four evaporators were installed at monitoring well MW-1 in an attempt to reduce elevated levels of 1,1-dichloroethane and 1,1,1-trichloroethane (evaporated to the atmosphere), per PADEP's conditional approval provided in a letter to the Fruehauf Corporation dated April 22, 1986. In this letter, PADEP required the Fruehauf Corporation to bail MW-1 as frequently as possible (the water to be processed by the evaporator units) and that the monitoring wells be sampled quarterly (MW-1 did not have to be purged prior to sampling).

According to the Loss of Interim Status (LOIS) inspection on April 16, 1986, PADEP approved the Fruehauf Corporation's request to analyze groundwater samples for only 1,1,1-trichloroethane and 1,1-dichloroethane, and not a full analytical suite. At the time of the LOIS inspection, the Fruehauf Corporation did not believe that the waste placed in the lagoon was the source of the 1,1-dichloroethane and 1,1,1-trichloroethane contamination, nor was it significant, as it was below drinking water standards.

In a letter to the Fruehauf Corporation dated February 2, 1988, PADEP indicated that the four evaporators at MW-1 were not efficient and that the monitoring system was inadequate because MW-1 was the only downgradient monitoring well (MW-2 appeared to be upgradient and MW-3 and MW-4 appeared to be off-gradient), well screens were installed at different depths in the aquifer, making it impossible to collect groundwater level measurements. PADEP also indicated that the organic contamination may have migrated to the geologic strata beneath the site and the plume may extend in time, and because of this, higher concentrations of contaminants can be detected in MW-1, even though contaminated sludge was removed from the lagoon.

A Phase II Subsurface Investigation was performed in 1991 by Killam Associates to define and characterize the uppermost aquifer and determine the direction of groundwater flow and the vertical extent of contamination in the vicinity of MW-1. Killam Associates concluded that since concentrations of 1,1,1-trichloroethane did not exceed the maximum concentration limit of 200 ppb (there was no limit for 1,1-dichloroethane), groundwater remediation was not recommended and would not be effective. Recommendations included quarterly monitoring of MW-1 and MW-5, and annual monitoring of the other three monitoring wells.

Prior to the sale of the site to the Briar Hill Steel Corporation in July 1992, PADEP reduced the monitoring requirements to sampling MW-5 for 1,1,1-trichloroethane and 1,1-dichloroethane on an annual basis (Letter from PADEP to the South Trust Bank, care of the Fruehauf Corp., April 9, 1992; PADEP Internal Memo, October 2, 1992).

A groundwater sample was collected from MW-5 in August 2001 by Fayette Engineering (Briar Hill Steel's consultant) and analyzed for 1,1,1-trichloroethane and 1,1-dichloroethane to demonstrate current groundwater conditions in support of the anticipated EI site inspection. No compounds were detected above the minimum detection limit.

### Former 2,000-gallon Waste Oil UST and Oil/Water Separator

The Fruehauf Corporation began discharging water from the former steam cleaning rack to this oil/water separator in 1983 (1990 Preliminary Assessment).

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A United Defense LP Internal Memo, dated December 31, 1997 indicated that this UST and oil/water separator were removed in December 1997 in association with the installation of a new oil/water separator, located adjacent to the east side of Building 2. Contaminated soil was observed to exist by the removal contractor, Metros Evacuation. United Defense LP notified PADEP of the removal of the UST and the suspicion of contaminated soil by filing a Registration for the Removal of a Storage Tank on December 23, 1997. Fayette Engineering, Briar Hill Steel, and Metros Evacuation suspected that the contamination probably predated United Defense LP.

Fruehauf Corporation Uniontown, PA										
EPA ID # PAD 004228646										
Table 1 Historic Groundwater Sampling Results for the Former Lagoon										
Date	MW-1		MW-2		MW-3		MW-4		MW-5	
	1,1-DCA	1,1,1-TCA								
10/82	2	2	NR	NR	NR	NR	NR	NR	NR	NR
5/27/87	120	160	NR	NR	NR	NR	NR	NR	NR	NR
11/18/88	63	59	<5	<5	<5	<5	<4	<5	DNE	DNE
8/18/89	100	69	<5	<5	<5	<5	<4	<5	DNE	DNE
8/01	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND
7/15/82	5	5	NR	NR	NR	NR	NR	NR	DNE	DNE
10/15/82	2	2	NR	NR	NR	NR	NR	NR	DNE	DNE
1/17/83	<10	<10	<10	<10	<10	<10	<10	<10	DNE	DNE

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3/15/83	19	24	<10	<10	<10	<10	<10	<10	DNE	DNE
8/19/83	73	120	<5	<5	<5	<5	<5	<5	DNE	DNE
10/19/83	<5	<5	<5	<5	<5	<5	<5	<5	DNE	DNE
1/13/84	71	79	<5	<5	<5	<5	<5	<5	DNE	DNE
4/18/84	<5	<5	<5	<5	<5	<5	<5	<5	61	65
7/16/84	78	110	<5	<5	<5	<5	<5	<5	DNE	DNE

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Table 1  
Historic Groundwater Sampling Results for the Former Lagoon

Date	MW-1		MW-2		MW-3		MW-4		MW-5	
	1,1-DCA	1,1,1-TCA								
10/17/84	47	71	<5	<5	<5	<5	<5	<5	DNE	DNE
2/15/85	54	96	<5	<5	<5	<5	<5	<5	DNE	DNE
5/14/85	64	80	<5	<5	<5	<5	<5	<5	DNE	DNE
8/27/85	53	82	<5	<5	<5	<5	<5	<5	DNE	DNE
9/30/85	49	80	NR	NR	NR	NR	NR	NR	DNE	DNE
11/14/85	65	120	<5	<5	<5	<5	<5	<5	DNE	DNE
3/30/86	91	120	<5	<5	<5	<5	<5	<5	DNE	DNE
5/30/86	110	150	<5	<5	<5	<5	<5	<5	DNE	DNE

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9/5/86	110	140	<5	<5	<5	<5	<5	<5	DNE	DNE
11/20/86	96	130	<5	<5	<5	<5	<5	<5	DNE	DNE
2/20/87	120	180	<5	<5	<5	<5	<5	<5	DNE	DNE
5/27/87	120	160	<5	<5	<5	<5	<5	<5	DNE	DNE
8/25/87	68	57	<5	<5	<5	<5	<5	<5	DNE	DNE
11/20/87	68	81	<5	<5	<5	<5	<5	<5	DNE	DNE
Fruehauf Corporation Uniontown, PA  EPA ID # PAD 004228646  Table 1 Historic Groundwater Sampling Results for the Former Lagoon										
Date	MW-1		MW-2		MW-3		MW-4		MW-5	
	1,1-DCA	1,1,1-TCA								
2/26/88	53	56	<5	<5	<5	<5	<5	<5	DNE	DNE
5/27/88	70	70	<5	<5	<5	<5	<5	<5	DNE	DNE
2/17/89	52	55	<5	<5	<5	<5	<5	<5	DNE	DNE
6/1/89	89	58	<5	<5	<5	<5	<5	<5	DNE	DNE
11/9/90	31	47	3.4	3.8	NS	NS	NS	NS	ND	ND
1/13/92	110	15	<1	<1	<1	<1	<1	<1	<1	<1
8/01	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND

**Notes:**

Results are in ppb

DNE - Does not exist at this date, MW-5 was installed in 1990

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NR = Not reported

NS = Not sampled

ND = Not detected

#### **Sources:**

Phase II Subsurface Investigation, Killam Associates, January 1991

Letter from the Fruehauf Corporation to PADEP, January 27, 1992

Letter from the Fruehauf Corporation to PADEP, September 12, 1990

Letter from the Fruehauf Corporation to PADEP, December 21, 1988

Letter from PADEP to the Fruehauf Corporation, February 2, 1988

A PADEP Storage System Report Form dated December 23, 1997 indicated that the waste oil UST was in excellent condition when it was removed from the excavation, however, contamination was observed under Building 2 but not in the opposite side of the excavation.

Soil samples were collected and analyzed in December 1997. The analytical result report was expected in January 1998. Visual observation of the samples revealed "dry dirt-like and red paint-like substances." Apparent contamination was reported to be between the east wall of Building 2 and the storage tank. The excavated site, at the time of the United Defense LP Internal Memo indicated that Briar Hill Steel would assume the cost of disposal of contaminated soil and that the excavation has be approximately 80% filled with 2B gravel. The backfilling activity was to be completed once analytical results of post excavation samples were received.

The United Defense LP Facilities Manager indicated that the No Further Action determination was received from PADEP in 1997 for this UST. A copy of the soil sampling results and the No Further Action Determination has been requested from Briar Hill Steel and had not been received at the time of the submittal of these Draft EI Forms.

#### Former 2,000 -gallon Steel Unleaded Gasoline UST

A 2,000 gallon unleaded gasoline UST was installed in 1976 (undated PADEP Storage Tank Data System Facility Screen) adjacent to the loading dock at Building 1. A leak was discovered during a routine pressure test in the fall of 1989 (Letter from the Fruehauf Corporation to NUS Corporation, June 21, 1990); the UST was subsequently drained and taken out of service. The liquid level was lowered by pumping approximately five 55-gallon drums of gasoline from the UST, to bring the level of fuel below the apparent source of the leak, according to a letter from the Fruehauf Corporation to PADEP dated November 22, 1989. The free liquid was then contained with an absorbent, which along with contaminated soil, was subsequently packaged in 55-gallon drums, and disposed of off-site.

The Fruehauf Corporation filed a Notice of Intent to Close a Storage Tank with PADEP on November 9, 1989 and September 7, 1990. The UST was removed in September 1990 (Letter from Carlucci Construction Company to PADEP, February 5, 1991). According to a 1992 Environmental Site Assessment, approximately 100 tons of contaminated soil was disposed off site at the Erie Way facility in Bedford, Ohio, while one 55-gallon drum of contaminated water was to be disposed with other waste generated by the Fruehauf Corporation. The Fruehauf Corporation submitted a Storage Tank and Spill Prevention Act Notification of Contamination Report to PADEP on September 17, 1990 indicating that minor soil contamination and odors were discovered upon excavation of the UST.

A September 19, 1990 PADEP Storage System Report indicated that the UST contained several holes, contaminated soil could be observed at a depth of 16 feet in the excavation, and that excavation was stopped at bedrock (approximate depth of 20 feet). The excavation was located near the foundation of Building 1 and the Fruehauf

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Corporation chose not to continue the excavation around the perimeter of the tank to protect the structural integrity of Building 1. PADEP required the Fruehauf Corporation to collect four soil borings (one from each excavation wall) and instal four monitoring wells.

A PADEP Storage System Report, dated October 22, 1990 indicated that PADEP believed there was residual contamination in the tank excavation, however, did not expect it to affect groundwater quality and subsequently recommended that the excavation be backfilled. Since the groundwater in the area of the former lagoon was being monitored, PADEP allowed the Fruehauf Corporation to use that data as background conditions and required the installation of one monitoring well (MW-6) at the tank excavation. PADEP informed the Fruehauf Corporation that the installation of additional monitoring wells would be necessary if contamination related to the UST was discovered.

Four soil samples were collected; one each from the north, south, east and west walls of the UST excavation. These soil samples contained concentrations of:

- TPH concentrations ranged from non-detect to 80 ppm
- Benzene concentrations were non-detect
- Toluene concentrations ranged from non-detect to 38 ppm
- Ethylbenzene concentrations ranged from non-detect to 87 ppm
- Xylenes (Total) concentrations ranged from non-detect to 210 ppm.

A groundwater sample collected in February 1992 contained concentrations of less than 1 ppb of benzene, toluene, ethylbenzene, and xylene, and less than 0.2 ppb of TPH. It was not clear to Briar Hill Steel or United Defense LP representatives when the monitoring of this well discontinued. No additional information was found in PADEP or USEPA files.

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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)

<b><u>“Contaminated” Media</u></b>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>3</sup>
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): \_\_\_\_\_

<sup>3</sup> 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”**<sup>4</sup> (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): \_\_\_\_\_

<sup>4</sup> 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): \_\_\_\_\_

