

**DRAFT DOCUMENTATION OF ENVIRONMENTAL INDICATOR  
DETERMINATION**

**RCRA CORRECTIVE ACTION**

**ENVIRONMENTAL INDICATOR (EI) RCRIS CODE (CA 725)**

**Current Human Exposures Under Control**

**WR Grace & Company – Conn., Davison Chemical Division  
Curtis Bay Works Facility  
5500 Chemical Road  
Baltimore, Maryland 21226**

**Submitted to:**

United States Environmental Protection Agency  
Region III  
Waste and Chemicals Management Division  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

Docket No. RCRA 03-2002-0063

**Prepared by:**

MWH Americas, Inc.  
335 Phoenixville Pike  
Malvern, Pennsylvania 19355

And

GeoTrans, Inc.  
46010 Manekin Plaza, Suite 100  
Sterling, Virginia 20166

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# 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:** WR Grace & Co. – Conn. – Curtis Bay Works Facility  
**Facility Address:** 5500 Chemical Road, Baltimore, Maryland 21226-1698  
**Facility EPA ID #:** MDD001710227

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., report 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**”<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)?

Medium	Yes	No	?	Rationale/Key Contaminants
Groundwater	X			Metals, VOCs, SVOCs
Air (indoors)		X		Air Model for VOCs
Surface Soil (< 2 ft)	X			Metals, SVOCs, Pesticides
Surface Water		X		GeoTrans Groundwater/Surface Water Model
Sediment		X		GeoTrans Groundwater/Surface Water and Sediment Models
Subsurface Soil (> 2 ft)	X			Metals
Air (outdoors) <sup>2</sup>		X		Air Model for VOCs

\_\_\_\_\_ 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.

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.

√   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 data unknown (for any media) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

The W.R. Grace & Co. – Conn. (Grace) Davison Chemical Division Curtis Bay Works (Curtis Bay plant site) occupies approximately 110 acres located on the peninsula separating Curtis Bay and Curtis Creek, and on the adjacent land along the Curtis Bay shoreline. The site is located in southeastern Baltimore, Maryland and is a major inorganic chemical manufacturing center for silica-based adsorbents and related products, polyolefin catalysts used in plastics and packaging, and fluid cracking catalysts used in petroleum refining. (GeoTrans, February 2002). The facility is bordered to the south by a rail line, the Blue Circle Cement Company property, and by the Baltimore City Quarantine Road Landfill, to the east by the US Gypsum Company facility, and to the north and west by Curtis Bay and Curtis Creek (Figure 1).

Operations at the facility date back more than 90 years. Prior to 1901, the area was used as farmland. Currently, the property is divided into 2 approximately equal, 55-acre sections: the Manufacturing Area, including 12 production facilities, warehousing facilities, maintenance shops, administrative buildings, and a technical research center; and the Non-Manufacturing Area, including Herring Pond, Spoils Ponds 1 & 2, the Radioactive Waste Disposal Area (RWDA), the capped landfill, and the filter cake disposal cell. The facility layout is shown on Figure 2.

It should be noted that the RWDA is a former Department of Energy (DOE) area and is being addressed separately from the rest of the facility by the US Army Corps of Engineers (USACE). Investigation and corrective action for this area are being conducted separately from the rest of the facility activities under a different regulatory program (FUSRAP). Accordingly, this EI Determination does not include the RWDA.

In response to the USEPA request to WR Grace to submit a Draft EI Determination for the Curtis Bay Works facility, WR Grace conducted a groundwater, surface water and sediment investigation. The results of the investigation and a summary of previous investigation activities conducted at the facility are included in the *Historical Data Review and Report of Groundwater Investigations to Support Environmental Indicator Determination* (GeoTrans, February 2002). The information contained in this Draft EI Determination is based on the currently available information.

Groundwater - According to Section 8.2 of the GeoTrans Report, 23 constituents were detected at concentrations exceeding the groundwater USEPA Region III Risk-Based Concentrations (RBCs) and/or Federal Maximum Contaminant Levels (MCLs). Data

were collected from 45 sampling locations including monitoring wells and Geoprobe locations. Of the 23 constituents detected at concentrations exceeding the groundwater criteria used, 10 were metals, 4 were volatile organic compounds (VOCs), and 9 were semi-volatile organic compounds (SVOCs). Table 8.1 of the GeoTrans report (attached) summarizes the results and identifies the 23 constituents. It should be noted that for 8 of the 23 detected constituents, concentrations exceeded the groundwater criteria in only one location.

In addition, metals concentrations were detected in the groundwater during a Maryland Department of the Environment (MDE) Screening Site Inspection of the former Estech property conducted in 1988 (*A Site Inspection of Estech General Chemical Company, July 1989*). The Estech property is currently within the WR Grace property boundaries. Cadmium and lead were identified as constituents that exceeded MCLs for drinking water standards at one sampling location. The report recommended that no further remedial action be planned for the area.

Indoor and Outdoor Air – The facility is an inorganic chemical facility and groundwater VOC contamination is not a likely concern. Nevertheless, to evaluate potential for indoor air impacts from those few VOCs that were detected in the groundwater, a Johnson and Ettinger Vapor Intrusion Model was run for the four VOCs that were detected in groundwater above the criteria used for purposes of this evaluation. The model simulates the intrusion of volatilized constituents from groundwater into buildings. The results of the model indicate that volatilization of volatile constituents from the groundwater does not exceed a Cancer Risk criterion of  $1 \times 10^{-6}$  or a Hazard Index criterion of 1. Outdoor air is not reasonably expected to be impacted above the criteria used. Vapor intrusion into a closed building would offer less attenuation than if VOCs in soil volatilized to the outdoors. Therefore, since the assessment of indoor risks was below levels of concern, outdoor air risks would also be below appropriately protective, risk-based levels. Table 1 summarizes the results of the model calculations.

Surface Soil – There are no unremediated releases of RCRA hazardous constituents to surface soil known in any portion of the site. There is no evidence of impacted surface soil by visual observation in the Non-Manufacturing Area (Phase I Environmental Site Assessment, ENSR November 2000). The Manufacturing Area is almost entirely paved (with the exception of certain non-operational areas with ornamental landscaping and buffer vegetation or minimally used areas with crushed stone paving). Surface soil samples were collected by EA from the Non-Manufacturing Area in August 1999 (see EA Draft Sample Tables February 2000). Only those analytical results from sample locations outside the RWDA were used in this analysis. The results were compared to the USEPA Risk-Based Concentrations (RBCs) for soil under industrial land use. The constituents that exceeded the industrial soil RBC criteria included 3 metals (arsenic, chromium and lead) and 1 SVOC (benzo(a)pyrene). However, based on knowledge of the historical manufacturing operations at this facility, arsenic is not believed to be a process chemical used at the site. Table 2 summarizes the surface soil exceedances. Figure 3 shows the surface soil sample locations.

In addition, metals, SVOC, and pesticide concentrations were detected in the surface soil during a Maryland Department of the Environment (MDE) Screening Site Inspection of the former Estech property conducted in 1988 (*A Site Inspection of Estech General Chemical Company, July 1989*). The report recommended that no further remedial action be planned for the area.

Surface Water – There are no on-site natural surface water bodies at the facility except the adjacent Curtis Bay and Curtis Creek.

Based on the results of the groundwater investigation and the site conceptual groundwater flow model in the February 2002 GeoTrans Report, surface water is not reasonably expected to be contaminated from WR Grace operations, above levels of concern to impact human health. Further, arsenic was determined to be the most significant constituent of interest with regard to surface water impacts for human health. Table 3 shows the results from the collection of surface water samples from a height of one foot above the bottom of Curtis Creek and Curtis Bay adjacent to the site. Figure 4 shows the sampling locations; the samples were collected in August, 2004. As shown, all samples were non-detect for arsenic. Therefore, any releases of hazardous constituents that may occur from groundwater to Curtis Creek or Curtis Bay would not likely have an adverse human health impact.

Sediment – Impacted sediments are not known to be present at the site. Based on the groundwater investigation (GeoTrans, February 2002), constituents of potential concern that may be migrating from the groundwater to the sediments adjacent to the facility are not likely to be found in concentrations exceeding criteria employed to evaluate potential effects from any contaminated sediments. It is likely that the metals are precipitated in, or absorbed to, the deeper sediments and do not get transported to the surficial layer of sediment. Results of the sediment modeling indicated that any metals in the sediments and pore waters adjacent to the Curtis Bay site would be anticipated to be at low concentrations and not exceed human health criteria.

Subsurface Soil – There is no known unremediated release of RCRA hazardous constituents to subsurface soil in any portion of the site. Subsurface soil samples were collected by EA from the non-Manufacturing Area in August 1999. Analytical results from samples collected within the RWDA are not included in this EI Determination. Only those analytical results from sample locations outside the RWDA were used in this analysis. The results were compared to the same RBCs as surface soils. The constituents that exceeded the RBC criteria included 2 metals (arsenic and lead). Table 4 summarizes the subsurface soil exceedances. Figure 3 shows the subsurface soil sample locations.

To the eastern boundary of the RWDA, the Non-Manufacturing Area includes an Approximately two acre closed capped landfill which was used for a three year period from 1982 B 1985 to receive wastes generated during catalyst production. The wastes consisted mostly of silicon dioxide; one waste stream also contained chromium in its nontoxic tri-valent form. Groundwater is not impacted by landfill constituents, based on

over 10 years of semi-annual monitoring data from a monitoring well installed downgradient from the landfill.

The landfill is unlined and was closed with a RCRA-type cap, pursuant to a closure plan approved by the Maryland Department of the Environment. The low permeability cap prevents groundwater infiltration to the landfill. From the top down, the cap consists of a vegetated top cover, a middle drainage layer, an underlying 30-mil synthetic membrane, and a bottom two-foot thick compacted clay layer. The landfill construction includes a gas ventilating system to prevent the buildup of gases beneath the cap. Groundwater is approximately 15 ft below the base of the landfill thus cannot contact the waste. The Non-Manufacturing Area is fenced and the landfill is periodically inspected to ensure that the cap is in good condition.



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

Contaminated Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>1</sup>
Groundwater	No	No	No	<b>Yes</b>	No	No	No
Air (indoors)	No	No	No	No	No	No	No
Soil (surface, < 2 ft)	No	<b>Yes</b>	No	<b>Yes</b>	<b>Yes</b>	No	No
Surface Water	No	No	No	No	No	No	No
Sediment	No	No	No	No	No	No	No
Soil (subsurface > 2 ft)	No	No	No	<b>Yes</b>	No	No	No
Air (outdoors)	No	No	No	No	No	No	No

Instructions for Summary Exposure Pathway Evaluation Table:

2. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated” as identified in #2 above.
3. 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):

Residents – There are no residents located on the property. Groundwater from the shallow Patapsco aquifer is not extracted for residential use. Contaminants have not

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

migrated to residential areas. As discussed in Section 3.4 of the *Historical Data Review and Report of Groundwater Investigations to Support Environmental Indicator*

*Determination* (GeoTrans, February 2002), the Patapsco aquifer is not used as a potable water source and the City of Baltimore public water system provides potable water service to the facility and vicinity. All pathways associated with residents are considered incomplete.

Workers – The facility is divided into two major areas: the Manufacturing Area and the Non-Manufacturing Area. These two areas are considered separately in determining potentially complete exposure pathways. The Manufacturing Area is almost completely paved with asphalt and concrete, or covered with crushed stone. Therefore, in the Manufacturing Area the soil pathways are considered incomplete.

In the Non-Manufacturing Area, few areas are paved. Therefore, the surface soil exposure pathway is considered potentially complete in this area for workers who occasionally are required to conduct plant-related activities (transfer of Herring Pond dredge materials to the Spoils Ponds, transfer of Spoils Pond materials to the Filter Cake Disposal Cell, routine maintenance of the Non-Manufacturing Areas, etc.). Such potential exposures, however, have limited frequency and duration. In addition, as discussed further below, the wastes that are disposed of in the Non-Manufacturing Area (i.e. filter cake sludge and settled solids) would not be expected to pose a human health concern, even if released into surface soils. This material is partially hydrated and does not produce visible dust.

The facility is in the process of installing rip-rap along portions of the facility shoreline. The shoreline improvement project has begun but has not been completed. The placement of the rip-rap along shoreline areas will further minimize the potential for exposure of workers, if any.

Subsurface soil is covered by surface soil. Workers do not typically dig or excavate below the surface soil. Therefore, the pathway for subsurface soil is considered incomplete. Groundwater is not used for domestic or industrial purposes. Therefore, the pathway is considered incomplete.

Day-Care – There are no day-care facilities at or near the facility. All pathways associated with day-care are considered incomplete.

Construction Workers – No current major construction projects are on-going or planned at the facility. However, if construction workers were nonetheless required to conduct activities in and around future excavations, potentially complete exposure pathways may exist for surface and subsurface soil. If excavations are deeper than 10-12 feet below ground surface (bgs), there is the potential to encounter impacted groundwater. Therefore, a potentially complete pathway exists for groundwater. The frequency and duration of all such potential exposure pathways, however, is limited.

Trespassers – The facility maintains site security 24 hours a day, 7 days per week. The entire land-side property boundary is fenced. Signs warning against trespassing are posted at many locations in both the Manufacturing Area and the Non-Manufacturing Area. Trespassers have, however, been observed to penetrate the property boundary sometimes to fish in the waters adjacent to the site. On rare occasions, those engaged in boating activities may approach the facility for assistance (i.e. mechanical problems with boats, etc.). The exposure pathway for trespassers is potentially complete for surface soil. The frequency and duration of such a potential exposure pathway, however, is limited. Pathways for groundwater and subsurface soil are considered incomplete.

Recreation – Because the WR Grace Curtis Bay Works is located adjacent to Curtis Bay and Curtis Creek, occasionally those partaking in recreational boating and fishing activities come near the site. These activities are limited to incidental contact with Curtis Bay and Curtis Creek surface water, and preliminary surface water sampling suggests that surface water is not impacted above levels of concern for human exposures. No other recreational activities take place on or near the property.

Food – Food is not grown anywhere on the property. Fish are caught and potentially consumed from Curtis Bay and Curtis Creek. However, because surface water is likely not impacted above levels of concern for the ingestion of fish, all pathways for human exposure to hazardous constituents through ingestion of food are considered incomplete.

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):

For the reasons set forth in the lettered paragraphs below, none of the potentially complete pathways identified above in Question #3 could reasonably be expected to be significant.

- A. Worker – Surface Soil
- A. Trespasser – Surface Soil
- B. Construction – Groundwater
- B. Construction – Surface Soil
- B. Construction – Subsurface Soil

**A. Worker/Trespasser – Surface Soil:** The majority of workers at the facility conduct their work-related activities in the Manufacturing Area. Almost the entire area is paved with either asphalt or concrete thus minimizing the potential for any exposure, except in the small remaining patches of surface soil (primarily for ornamental plantings and buffer

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.

vegetation). In addition, as summarized in Table 2, the concentrations of most analytes were detected in surface soils below their RBCs. The potential for exposure to soils beneath pavement is very limited and the remaining exposed soil in the Manufacturing

Area would not be expected to pose a health concern because any potential exposure would be of limited frequency and short duration.

The Non-Manufacturing Area is not paved but is generally vegetated with grasses, shrubs, and trees. One section of the Non-Manufacturing Area, the Capped Landfill, has an engineered cap. The few workers who are required to perform activities in the Non-Manufacturing Area do so only for short durations on an infrequent basis. The most significant activities conducted in the Non-Manufacturing Area relate to the transportation of filter cake material and settled solids from the Water Reclamation Plant area to the Spoils Ponds and the Filter Cake Disposal Cell. The material is partially hydrated and does not produce visible dust. Even if there were some amounts of filter cake material in surface soils adjacent to the cells, the exposure would be limited and would not be considered significant. Furthermore, any such materials incidentally found in the surface soils would not be expected to pose a human health concern (see Table 5 for analysis of the deposited material from Herring Pond.) The only constituent detected above an industrial soil RBC in the Herring Pond or Spoils Pond settled solids or filter cake material is arsenic (in one sample, over 15 years ago), which is not known to be a process chemical. The limited exposure to these materials if in the surface soil would not be anticipated to pose a health concern to workers or to trespassers. In addition, workers would be operating under the requirements of a health and safety plan developed specifically for their duties at the site. They would also have received job-specific training and hazard communication briefings in advance of entering the area.

Site security, fencing, and warning signs minimize the incidence of trespassing at the facility. Trespassers who nonetheless gain access to the Manufacturing Area would not experience significant exposure to surface soils due to the paved surface. Trespassers who gain access to the Non-Manufacturing Area of the site would likely experience only infrequent and short-duration exposure to surface soils, even if such soils were impacted. The surface soil exposure scenario is not expected to be significant for trespassers.

*Therefore, the Worker/Trespasser – Surface Soil exposure scenarios are not expected to be significant.*

**B. Construction Worker – Groundwater/Surface Soil/Subsurface Soil:** Significant excavations are not planned at the facility in either the Manufacturing Area or the Non-Manufacturing Area. Therefore, no current or near-term exposures are expected. Even if some excavation were to occur, groundwater is likely to be encountered at a depth of 10-12 feet below ground surface (bgs). Most construction projects would not include excavations to this depth, and so groundwater would not likely be encountered. The primary constituents in the groundwater are inorganic in nature and would not be expected to pose a health concern due to dermal contact with the groundwater. As to the soil exposure pathways, during excavations construction workers could encounter

impacted soils. Based on current knowledge, however, the duration of exposure that construction workers would be anticipated to experience (i.e., approximately 1 year) is much less than the duration used to develop the industrial RBCs (i.e., 25 years). In addition, workers would be operating under the requirements of a health and safety plan developed specifically for their duties at the site. They would also have received job-specific training and hazard communication briefings in advance of entering the area.

*Therefore, the Construction Worker – Groundwater/Surface Soil/Subsurface Soil exposure scenarios are not expected to be significant.*

1. Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?

None were identified in #4; skip to #6.

\_\_\_\_\_ If yes (all “significant” exposures have been shown to be within acceptable limits) continue and enter “YE,” status code 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):

2. 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 WR Grace & Co. – Conn. – Curtis Bay Works Facility facility, EPA ID # MDD001710227, located at 5500 Chemical Road, Baltimore, MD 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: \_\_\_\_\_ /s/ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date 9/1/04

Supervisor \_\_\_\_\_ /s/ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date 9/1/04

Locations where References may be found:

The following documents are on file with the USEPA Region III:

- *Draft Sample Tables* (EA Consultants, February 2000).
- *Phase I Environmental Site Assessment* (ENSR International, November 2000).
- *Historical Data Review and Report of Groundwater Investigations to Support Environmental Indicator Determination* (GeoTrans, February 2002).
- *A Site Inspection of Estech General Chemical Company* (MDE, July 1989).
- *Evaluation of Concentrations of Arsenic, Lead, and Cadmium in Sediments Offshore of the W.R. Grace & Co. – Conn. Davison Chemical Division Curtis Bay Works, Baltimore, Maryland* (GeoTrans, May 2002).

Contact telephone and e-mail numbers

Kenneth P. Katafiasz  
410-354-8924  
Kenneth.Katafiasz@grace.com

**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.**