DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION
Interim Final 2/5/99
RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: **Univar USA, Inc.**
Facility Address: **North Railroad St., Hummelstown, PA 17036**
Facility EPA ID #: **PAD014231005**

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, 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 "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated goundwater" (for all groundwater "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 "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

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. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

____ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

X If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):
The Univar USA, Inc. (Univar) facility is located at the intersection of North Railroad and Wall Streets in the Borough of Hummelstown, Dauphin County, Pennsylvania. The facility was initially operated by McKesson Chemical Company (MCC) from March 1963 through October 1986. Ownership prior to 1963 is unknown. In October 1986, the assets of MCC were purchased by DSW, Inc., a wholly-owned subsidiary of Univar located in Seattle, Washington. According to the Univar representative at the inspection, DSW was a holding company used during the MCC-Univar merger, and was dissolved shortly after the merger. Univar operated its chemical distribution branches under the name of Van Water & Rogers (VW&R). Accordingly, the Hummelstown facility operated under the VW&R name until 2001 when the facility submitted a notification of name change to Pennsylvania Department of Environmental Protection (PADEP) changing the facility's name to Vopak USA, Inc. The facility representative indicated that the company then changed its name to Univar USA, Inc. in 2007; however, it was no longer operating at this location. Univar currently rents the facility to Exhibits, Graphics, Interiors (EGI), a company that specializes in planning, designing, and installing custom signs and displays. A chain link fence still surrounds the facility. Access to the former operational area is through one of two gates. One gate is located on the north end of the property along Wall Street, and the other gate is located north of the former chemical repackaging building along North Railroad Street. There is no known generation or management of hazardous wastes currently occurring onsite.

The property currently consists of three separate tracts, which are all currently owned by Univar. The larger tract (Tract No. 1), on which the former operations were conducted, is approximately one acre. The facility also owns two additional tracts (Tract No. 2 and Tract No. 3) which are located across North Railroad Street to the east of the facility, along Swatara Creek. Tract No. 2 is approximately 0.5 acres and is partially wooded and partially asphalt covered. Tract No. 3 is approximately 0.3 acres and is asphalt covered. Both Tract No. 2 and Tract No. 3 were used by the facility for employee parking. Historically, the facility owned four parcels of land at the intersection of North Railroad and Wall Streets (Tract Nos. 1, 2, and 3 described above, and Tract No. 4, approximately 1 acre parcel, located directly west of Tract No. 1). After 2001, when all operations ceased at the facility due to reorganization, Univar sold 0.4 acres, the northern portion of Tract No. 4, to United Water of Pennsylvania (United Water) in October 2003. In August 2004, United Water purchased from Univar an additional 0.4-acre parcel, the southern portion of Track No. 4, located directly west of the former facility along the Norfolk Southern railroad tracks.

MCC, the chemical distribution division of Foremost-McKesson, Inc., operated a repackaging and distribution center for industrial chemicals, including chlorinated and non-chlorinated solvents at the North Railroad Street facility (Tract 1). MCC also received drummed waste materials from outside customers, which were temporarily stored at the onsite hazardous waste drum storage area until sufficient quantities were obtained to transport the waste materials to other McKesson facilities for recycling. In November 1985, MCC ceased storing waste solvents awaiting recycling due to strong public opposition and the low level of anticipated business. After November 1985, no waste materials were received at this location, but the facility continued with repackaging and distribution of industrial chemicals, including raw

[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 appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

solvents. The raw solvents were either received onsite via tankertrucks and pumped directly into the 6,000-gallon and 10,000-gallon aboveground storage tanks (ASTs) located directly north of the chemical repackaging building, or were received in 55-gallon drums that were stored onsite within the warehouse or the outside storage yard until they were distributed to customers. In October 1986, MCC was purchased by DSW (a wholly owned subsidiary of Univar). DSW continued to operate the facility as a distributor of industrial chemicals, including repackaging and distribution of raw solvents.

On August 14, 1980, MCC submitted to USEPA an initial Notification of Hazardous Waste Activity form as a hazardous waste generator and treatment facility. The application indicated that wastes classified under USEPA waste codes U002 (2-propanone), U154 (methanol), U159 (methyl ethyl ketone [MEK]), U220 (methylbenzene), U226 (1,1,1-trichloroethane [TCA]), U239 (xylene), and D002 (characteristically corrosive) would be generated/treated onsite. The facility subsequently was assigned USEPA ID No. PAD014231005.

Raw solvents, after being used by customers, became wastes. The facility offered its customers a service by arranging for recycling or disposal of these wastes, thereby brokering the wastes for its customers. This waste brokering service also managed damaged and off-specification materials (i.e., non-hazardous powders and liquids) other than waste solvents. In addition to customer wastes, the facility also managed self-generated wastes that resulted from product being damaged, product aging beyond its shelf life, or product residues resulting from the repackaging process. Wastes that were shipped by the facility to offsite permitted disposal facilities included D001 (flammable liquid, isopropyl alcohol, isopropanol/nonyl phenol ethoxylate, isopropanol/diethylene glycol, ethanol/methanol, and diesel fuel), D002 (cleaning liquid), and U226 (1,1,1- TCA and methylene chloride) wastes. The facility held only a hazardous waste permit (USEPA ID No. PAD014231005). No other permits (i.e., air quality or stormwater) were identified for this facility.

One RCRA-regulated SWMU, the former hazardous waste drum storage area, existed at the facility. The hazardous waste drum storage area consisted of a 400-square foot uncovered, concrete pad located adjacent to (west of) the AST farm. Fifty-five (55) gallon drums of waste solvents were periodically stored in this area for subsequent transport to other MCC facilities for recycling. According to a PADEP) internal memorandum dated July 28, 1986 and the facility's Closure Plan dated August 1986, a total of 43 drums containing methylene chloride and isopropanol were stored at the SWMU on three separate occasions between January 31, 1984 and January 17, 1985. No spills/releases were reported nor was evidence of spills/releases observed by PADEP during a pre-closure inspection performed in 1986. The October 6, 1986 report documented closure activities (the analytical results for samples of wash water generated while cleaning the concrete pad and subsurface soil samples collected from beneath the concrete pad in the vicinity of observed cracks) and indicated that the analyzed constituents (isopropanol and methylene chloride) were not detected at measurable concentrations. The certified closure of the hazardous waste drum storage area was approved by PADEP on November 20, 1986. After closure work was completed, the area was used for general yard storage and storage of palletized 55-gallon drums of virgin industrial solvents. Observations made during the April 2010 site visit indicate that the concrete pad for the hazardous waste drum storage area remains in place, but has been paved over with asphalt.

Based on storage tank registration and closure documents obtained from PADEP, the facility dismantled its AST farm in August 1996. The AST farm was located north of the repackaging building. The AST farm contained four 10,000-gallon ASTs and five 6,000-gallon ASTs into which raw solvents (i.e., acetone, 1,1,1-TCA, methanol, MEK, ethyl acetate, isopropyl acetate, and propylene glycol) were pumped directly from tanker trucks. After the AST farm was dismantled in 1996, the concrete secondary containment wall was removed. The concrete pad for the AST farm remained in place, and the area was paved. The elevation of the paved area was increased to match the height of the loading ramp adjacent to the north side of the repackaging building. A six-inch high asphalt berm was constructed along the eastern fence line.

Groundwater contamination at the site is not suspected nor has it been identified. Limited sampling of soils beneath the former hazardous waste drum storage area, as well as samples of wash water generated while cleaning the concrete pad during closure of this area, showed that the chemicals isopropanol and methylene chloride were below analytical detection limits

No evidence of spills or releases was noted during the April 2010 PADEP site inspection or the 1989 NUS site inspection. Univar has not operated at the facility since 2001. There have been no known or reported releases that occurred on the interior portion of the property that would indicate groundwater had been impacted; therefore, there have been no

groundwater investigations conducted at the facility, and groundwater contamination is not suspected.

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

_____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface waterbodies.

_____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR
2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

____ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):

[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

_____ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

_____ If no - enter "NO" status code in #8.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

__X__ YE Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the **Univar USA, Inc.** facility, EPA ID # **PAD014231005**, located at **North Railroad St., Hummelstown, PA 17036**. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater". This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

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

Completed by	(signature)		Date 1/24/13
	(print)	Grant Dufficy	1/24/2013
	(title)	RCRA Project Manager	
Supervisor	(signature)		Date 2/13/13
	(print)	Paul Gotthold	
	(title)	Assoc. Dir., PA Remediation, LCD	
	(EPA Region or State)	EPA Region III	

Locations where References may be found:

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

PADEP
South Central Regional Office
909 Elmerton Avenue
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