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:		Brenntag Northeast, Inc.				
Facility Address:		1085 Allegheny Avenue, Oakmont, Pennsylvania 15139				
Facility EPA ID #:		PAD004318960				
1.	groundwater me	e relevant/significant information on known and reasonably suspected releases to the edia, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units [SWMU], [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 programto 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 nonhuman (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 groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., sitewide)).

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).

Page 2

2.	Is groundwater known or reasonably suspected to be "contaminated" 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 Brenntag Northeast, Inc. facility (Brenntag Northeast or facility) is located at 1085 Allegheny Avenue in Oakmont, Allegheny County, Pennsylvania. Brenntag Northeast is part of the Brenntag-Group, the global market leader in full-line chemical distribution. The Oakmont branch office is a full line distribution company, servicing western Pennsylvania, northeast Ohio, and northern West.

The facility was originally built in the late 1800s. It is believed that the facility was originally a foundry. Prior to 1926, the main area of the property was operated by Gifford-Wood Company, whose operations at the facility are unknown. On December 8, 1926, the Gifford-Wood Company transferred the property to Thompson & Company, which operated the facility as a paint manufacturing plant. In 1944, several smaller areas of land located to the southwest of the manufacturing area, which contained five small buildings including a lacquer building and four apparent residences, were deeded to Thompson & Company. Thompson & Company changed names to Technical Coatings Company (TCC) on August 30, 1966 and was subsequently purchased by Benjamin Moore & Co. (after the transfer of the facility to Textile Chemical). According to Benjamin Moore & Co. representatives, TCC ceased operations in at the facility in 1977 or 1978; other documentation indicates the facility was used to manufacture paint products until late October 1981, when TCC closed.

TCC filed a Notification of Hazardous Waste Activity form with the USEPA on July 18, 1980 and was issued USEPA Generator No. PAD004318960 on October 9, 1980. A Part A hazardous waste permit application for treatment, storage, or disposal (TSD) and generation was submitted to the USEPA on November 10, 1980.

In 1981, Stinnes Oil and Chemical (SOCO), a German parent company, purchased Textile Chemical which moved the Pittsburgh warehouse to this facility in Oakmont, Pennsylvania. The property was transferred from TCC to Textile Chemical (6.44 acres per Allegheny County tax records; Parcel 362-G-364]) on March 31, 1982. TCC retained a 1.53acre parcel (362-G-360), purchased on October 28, 1944, located in the southwest section of the original parcel. On June 29, 1983, Textile Chemical transferred the facility to Brenntag Northeast, Inc. In 1998, the parent company, SOCO, changed its name to Brenntag. In May 2001, Textile Chemical officially changed its name to Brenntag Northeast.

The 1.53-acre parcel is a subject site for the Pennsylvania Department of Environmental Protection's (PADEPs) Land Recycling Program (Act 2) remediation. Currently, the 1.53 acre parcel is owned by the Borough of Oakmont.

On February 22, 2006 (and again dated March 8, 2006), TCC submitted to PADEP a Notice of Intent to Remediate (NIR) soil contaminated with lead above the Pennsylvania Land Recycling Program's (Act 2) Statewide Health Standard direct contact residential and soil to groundwater used aquifer residential and nonresidential medium-specific concentrations (MSCs) and naphthalene above the soil to groundwater used aquifer residential and nonresidential MSCs

^{1 &}quot;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).

(seeking liability protection). Remnant 55-gallon drums and paint cans were found discarded within the Site (vicinity of a wooded ravine - 1.53 acres). Soil and debris removal in conjunction with follow-up sampling demonstrated that the Site would meet the nonresidential Statewide Health Standard. Subsurface groundwater sampling identified bis(2-ethylhexyl)phthalate in the downgradient monitoring well slightly exceeded the used aquifer (total dissolved solids [TDS] <2,500 milligrams per liter [mg/L]) residential and nonresidential MSCs. Groundwater at the Site is not used for any purpose.

A Final Report dated August 31, 2006 was prepared by ENVIRON International Corporation (ENVIRON), on behalf of TCC to present the results of the site investigation, remedial action, and groundwater monitoring activities performed at the Site.

Test pits were excavated in a wooded ravine in an area of suspect former waste disposal on the western portion of the Site in July 2005. Remnant 55-gallon drums, paint cans, and residual mineral spirits were identified to a maximum depth of approximately 6 feet bgs during the test pit activities. During June and July 2005, four soil borings were installed to evaluate soil quality. Three soil borings (MW-1R, MW-2, and MW-3) were completed as monitoring wells.

Groundwater samples were collected from the monitoring wells for five consecutive quarters. The analytical results indicate that concentrations of the analyzed compounds did not exceed applicable MSCs at the point of compliance (i.e., the downgradient property boundary). As such, ENVIRON believed that the requirements of Act 2 were satisfied and that no further action was needed or required with respect to soil quality at the Site. On behalf of TCC, ENVIRON requested a release of liability for the Site for the compounds evaluated during the described investigation and remediation activities. ENVIRON also requested approval to properly abandon the groundwater monitoring wells installed at the Site.

On November 9, 2006, PADEP approved the Final Report for the substances identified in the area (Site) remediated to the non-residential Statewide Health Standard (for lead [soil] and other organics [groundwater]). On January 8, 2009, TCC provided an environmental covenant to PADEP limiting the Site activity and use to nonresidential. The Site is registered with the Pennsylvania Activity and Use Limitations Registry.

Since the Act 2 program approved remedial efforts only on the 1.53-acre Borough property and only to non-residential Statewide Health Standards for groundwater, in June 2014, Michael Baker Jr., Inc. (Baker), under contract to the Pennsylvania Department of Environmental Protection (PADEP) through grant funding from the U.S. Environmental Protection Agency (USEPA) performed intrusive investigation sampling activities at the Facility to assess the quality of the soil and groundwater. All soil and groundwater sample results were below EPA's Industrial and Regional Screening Levels. Therefore, USEPA has determined that groundwater is notknown or reasonably suspected to be contaminated above appropriately protective risk-based levels from releases subject to RCRA Corrective Action anywhere at, or from, the Facility.

3.	Has the migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater' 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".					
	If no (contaminated groundwater is observed or expected to migrate beyond the designated location defining the "existing area of groundwater contamination" skip to #8 and enter "NO" status code after providing an explanation.					
	If unknown - skip to #8 and enter "IN" status code.					
Ration	ale and Reference(s):					
4	Doos "contominated" aroundwater discharge into gurface water hadiag?					
4.	Does "contaminated" groundwater discharge into surface water bodies?					
	If yes - continue after identifying potentially affected surface water bodies.					
	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,					
Ration	ale 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.

5.	Is the discharge of "contaminated" groundwater into surface water likely to be " insignificant " (i.e., the maximum concentration 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)?
	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 'turrently 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.
Rationa	ale 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 groundwatercontamination 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.				
Patio	nala and Deference(s).				

Rationale and Reference(s):

8.	Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Contro 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).						e and date on the EI
	Base deter Bren	d on a revi- mined that ntag Nort l	ration of Contaminew of the information of the "Migration of heast, Inc. 5 Allegheny Avenue.	on contained in the Contaminated Grant facility, EPA	this EI dete roundwater VID# <u>P</u> A	ermination, " is "Unde	it has been or Control" at the
	Spec contro within	ifically, thi ol, and that n the "exist	s determination ind monitoring will be	icates that the mi conducted to co inated groundwat	gration of 'nfirm that of ter". This of	'contamina contaminate leterminati	tted" groundwater is under ed groundwater remains on will be reevaluated when
	NO -	Unaccepta	ble migration of co	ntaminated grou	ndwater is	observed or	r expected.
	IN -	More info	rmation is needed t	o make a determi	ination.	~	1 .
	Completed	by:	(signature)			Date	8/25/14
			(print) Kevin Bilas	sh			
	Supervisor	:	(title) RPM (signature) (print) Paul Gottho	John		Date	8/26/14
		-	(title) Associate Di Pennsylvania Reme	rector, Office of			
		_	(EPA Region or Sta	nte) EPA Region	III		
Locatio	ns where Refe	erences may	y be found:				æ
Land & 1650 A	A Region III & Chemicals I Arch Street elphia, PA 19					500	
Contact	telephone and	d e-mail nu	mbers				
(name)		Kevin Bil					
(phone#		215-814-2					
(e-mail))	bilash.kev	/in@epa.gov				