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: E.I. du Pont de Nemours and Company Edge Moor White Pigment Plant
Facility Address: 104 Hay Road, Edgemoor, Delaware
Facility EPA ID #: DED000800284

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 #8 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 groundwater" (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?

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

____ 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 DuPont Edge Moor White Pigment Plant (Site) is located at 104 Hay Road in Edgemoor, Delaware (see Figure 1). Site data, including subsurface lithology, groundwater analytical data, and the interaction between surface water and groundwater, have previously been provided to the Delaware Department of Natural Resources & Environmental Control (DNREC) in the following three documents:

- Phase I RFI Data Summary Report (DuPont, April 2009)
- Phase II RFI Data Summary Report (Parsons, March 2011)
- Post-Closure Care Plan – Addendum 1, Revised Monitoring and Maintenance Plan, Closed Surface Impoundments (Parsons, March 2010)

The Site produces titanium pigment by processing ilmenite ore rich in titanium dioxide. The ore contains other metal impurities that are removed during processing. Twenty-nine SWMUs have been identified at the site, of which 16 have "no further action" status. Metals are the primary constituents of potential concern in groundwater based on the Site's processing activities, although volatile and semivolatile organic compounds have also been detected.

As presented in the Phase II RFI Data Summary Report approved by DNREC on November 30, 2011, no continuous shallow groundwater was identified at the Site. Onsite groundwater is not used as either a potable or non-potable source; therefore, there are no appropriate risk-based levels for screening. No appropriate screening levels apply based on 1) groundwater at the site is not used for drinking water, and 2) the interior groundwater is not hydraulically connected to the surface water. However, as a conservative approach, screening was performed using the drinking water screening criteria for comparison and informal purposes. The interior groundwater screening results are summarized in Tables C-1 through C-3 of Appendix C of this EI. Table C-1 (a summary of all groundwater sampling events) shows that four metals (cobalt, iron, manganese, and thallium) exceeded the screening levels (MCLs or Tap Water RSLs when MCLs are not available). Table C-2 (summary of recent groundwater data since 2010) shows that only three metals (cobalt, iron, and manganese) still exceed the screening levels. Cobalt and iron only exceeded the screening levels in one well (MW-17S) once for both dissolved and total concentrations in May 2010. The August 2010 data (Table C-3) shows that only the total cobalt concentration slightly exceeds the screening level. Manganese was detected in MW-10 and MW-17S at concentrations exceeding the screening level. The dissolved manganese drinking water screening level was exceeded in MW-17S during the May and August groundwater sampling events. MW-17S is located in the southern portion near the property boundary of SWMU 4. The detections of cobalt, iron and manganese may be naturally occurring; however, no regional groundwater background information is available for these constituents.

As presented in the approved Phase II RFI Data Summary Report, groundwater in the perimeter wells (MW-1 through MW-7 and MW-18S through MW-22S) discharging to surface water (Delaware River) was identified as a potential complete exposure pathway for both human (by fish consumption) and aquatic receptors. The Site is located at river mile (R.M.) 72.7, within Zone 5 of the Delaware River that extends from R.M. 78.8 to R.M. 48.2 (Delaware River Basin Commission [DRBC] 2008). Zone 5 is not used as a

drinking water supply, but may be used for fishing and contact recreation. As presented in the approved Phase II RFI Data Summary Report, the 2010 DRBC stream quality objectives for Zone 5 were identified as the appropriate standards when available; otherwise, the following sources were used, in order of preference:

- Delaware Department of Natural Resources and Environmental Control [DNREC] surface water quality standards (July 11, 2004)
- DNREC 1999 Uniform Risk-Based Remediation Standards
- 2009 EPA National Recommended Water Quality Criteria
- EPA Region 3 Biological Technical Advisory Group (BTAG) recommended criteria (July 2006)
- Site-specific criteria

The standards and sources are provided in Table 1. Table 2 summarizes constituent concentrations that were detected above these criteria, including 15 metals and 18 organic compounds (as well as polychlorinated biphenyls [PCBs] and dioxins).

Footnotes:

[1]"Contamination" and "contaminated" describes media containing contaminants (in any form, non-aqueous phase liquids 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).

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)?

__X__ 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):

As presented in further detail below, on-site groundwater is present either in discontinuous units internal to the site, in discontinuous units below the bottom the river, or in a zone along the eastern Site perimeter that is hydraulically connected to the river. Based on the connection between perimeter groundwater and the river, the "existing area of contaminated groundwater" cannot grow any larger in a lateral downgradient direction (i.e., groundwater has reached its point of discharge). In addition, data from the deepest lithologic zone indicates there is no groundwater present; therefore, the vertical extent of constituent migration has also stabilized (i.e., groundwater and the constituents contained therein is not migrating vertically).

As presented in the DNREC-approved Phase I RFI Data Summary Report, ground surface varies between approximately 10 and 26 feet above mean sea level along the Delaware River shoreline, and subsurface lithology consists of:

- A Zone: fill material (zero to 20 feet thick, with top of zone at ground surface) and discontinuous marsh/overbank deposits (zero to 40 feet thick, with top of deposits at 14 – 20 feet below ground surface [ft bgs]). Where present, marsh deposits are present over depth intervals coincident with the B and C Zones. Groundwater is under unconfined conditions, with the water table between 2 and 18 ft bgs.
- B Zone (Scotts Corners Formation): discontinuous silty-sand to sand (0.5 to 25 feet thick, with top of deposits between 12 and 23 ft bgs; present only along the Delaware River and in a wedge in the central portion of the Site). Groundwater is under unconfined conditions, with the water table between 8 and 18 ft bgs.
- C Zone (Cretaceous age Potomac Formation): clay (zero to 70 feet thick, with top of deposits at 10 to 35 ft bgs) with discontinuous sand and silt lenses (5 to 12 feet net-sand thickness, with top of monitored deposits at 50 to 100 ft bgs). When saturated conditions were present, groundwater was typically under confined conditions resulting in depth-to-water in monitoring wells between 5 and 25 ft bgs.
- D Zone (Wissahickon Formation and Wilmington Complex): saprolite/highly weathered bedrock (encountered from 60 to 100 ft bgs and not fully penetrated). Saturated conditions were not detected in the D Zone.

The Phase I and Phase II RFI reports presented data that indicated there was no continuous shallow saturated groundwater-bearing unit beneath the entire site. Aquifer tests performed during the Phase I RFI indicated there was no hydraulic connection between the areas internal to the Site and the adjacent river; therefore, only the saturated portions of the A Zone and B Zone adjacent to the Delaware River were in hydraulic connection with the river. A tidal influence of up to three feet was measured in monitoring wells along the perimeter of the Site, indicating that saturated sediments adjacent to the river are connected (discharging) to the river. All of the monitored thin, laterally discontinuous sand to clayey-sand lenses of the C Zone adjacent to the river are stratigraphically located below the river bottom elevation of -30 to -45

feet mean sea level. As presented in the DNREC-approved Phase II RFI Data Summary Report, there is no complete pathway to Delaware River surface water for groundwater contained in these discontinuous units.

Based on the connection between perimeter groundwater and the river, the "existing area of contaminated groundwater" cannot grow any larger in a lateral downgradient direction (i.e., groundwater has reached its point of discharge). Data from the deepest saprolite/weathered bedrock subsurface zone (Zone D) indicates there is no groundwater present; therefore, the vertical extent of constituent migration has also stabilized (i.e., groundwater and the constituents contained therein is not migrating vertically).

[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?

__X__ 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.

Rationale and Reference(s):

The Delaware River is the only surface water body which can potentially be affected by groundwater at the perimeter of the site.. The Site is located adjacent to the river at river mile (R.M.) 72.7, within Zone 5 of the Delaware River that extends from R.M. 78.8 to R.M. 48.2 (DRBC 2008). Zone 5 is not used as a drinking water supply, but may be used for fishing and contact recreation.

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 judgment/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.

X 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):

Table 2 presents those constituents that exceed 10x of the lowest applicable standards and highlights those constituent concentrations that exceed 100x the screening level in the perimeter monitoring wells adjacent to the river.

For those constituent whose concentrations exceed 100x of the screening level, an estimate of the constituent mass loading to the Delaware River was calculated by multiplying the constituent concentration by the associated groundwater volumetric flux to the river. A conservative groundwater discharge rate to the Delaware River was calculated for the northern Site perimeter adjacent to the closed surface impoundments (i.e., the area monitored by wells MW-01 through MW-07), as detailed in the Post-Closure Care Plan – Addendum 1, Revised Monitoring and Maintenance Plan, Closed Surface Impoundments (Parsons 2010). However, the rate calculated was for the entire perimeter length between MW-01 and MW-07. To calculate mass loading to the Delaware River for individual constituents detected in wells, the site perimeter length associated with each well must be used (see Figure 2). The following equation was used to calculate groundwater flux to the river:

Groundwater discharge (Q_{GW}) equals hydraulic conductivity (K) times hydraulic gradient (i) times cross sectional area of saturated zone (A)

$$Q_{GW} = K*i*A$$

K = varies; previously determined through aquifer step-tests and monitoring well slug tests

i = Northern Site Perimeter = 0.019 feet per foot (ft/ft), based on the hydraulic head difference between the maximum head in upgradient wells MW-09 and MW-10 and the mean mid-tide Delaware River water level (as determined in the Post-Closure Care Plan – Addendum 1, Revised Monitoring and Maintenance Plan, Closed Surface Impoundments [Parsons 2010])

Southern Site Perimeter = varies between 0.024 and 0.294 ft/ft, calculated based on the difference between monitoring well groundwater elevations and river stage as measured in August 2007

A = varies between 113 and 14,628 square feet; equal to distance between adjacent wells (L) times the saturated net-sand thickness of the zone in which the well is completed (b)

Data analyses of slug tests performed subsequent to the Phase I RFI are included in Appendix A. The following table presents calculations for groundwater flux rates to the Delaware River along the Site perimeter.

Groundwater Discharge Rate to Delaware River

Well	K Hydraulic Conductivity (ft/day)	i Hydraulic Gradient (ft/ft)	L Distance (feet)	b Saturated Net-Thickness (feet)	Q_{GW} Groundwater Flux Rate (ft^3/day)	Q_{GW} Groundwater Flux Rate (cfs)[5]
MW-01	5.11 [1]	0.019	600	5.2	303	3.5E-03
MW-02	5.11	0.019	225	7.6	166	1.9E-03
MW-03	5.11 [1]	0.019	290	11	310	3.6E-03
MW-04	5.11 [1]	0.019	265	5.8	149	1.7E-03
MW-05	5.11 [1]	0.019	300	6.8	198	2.3E-03
MW-06	5.11 [1]	0.019	300	8.0	233	2.7E-03
MW-07	5.11 [1]	0.019	100	6.3	61	7.1E-04
MW-18S	4.45 [3]	0.061 [2]	226	0.5	31	3.6E-04
MW-19S	2.67	0.105 [2]	636	23	4101	4.7E-02
MW-20S	0.422	0.247 [2]	472	9.8	482	5.6E-03
MW-21S	4.45	0.030 [2]	375	18	901	1.0E-02
MW-22S	3.56 [4]	0.072 [2]	605	3.3	512	5.9E-03

(1) Equal to MW-02
(2) Based on difference between groundwater elevation and river stage as measured in August 2007
(3) Equal to MW-21S
(4) Equal to the average of MW-19S and MW-21S
(5) cfs – cubic feet per second
(6) ft^3/day – cubic feet per day

Total groundwater flux rate Q_{GW} to the Delaware River would then equal 0.085 cfs.

Table 3 presents the calculated mass loading rate to the Delaware River for those constitutes listed in Table 2 that exceed 100x their respective screening level. Mass was calculated using the most recent constituent concentration per well and was only calculated if the most recent constituent concentration (per well) was greater than 100x the screening level.

Those constituents that exceeded 100x the screening level were charted to determine whether there are increasing or decreasing trends in measured constituent concentrations. Appendix B contains charts for each perimeter monitoring well showing constituent concentration versus time (total metal concentrations were charted). Concentrations appear to be stable based on available data.

[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])?

__X__ 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 cannot 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):

Constituents whose concentrations were greater than 100x the screening criteria (as identified in Step 5) were further evaluated to determine whether their discharge to the Delaware River is currently acceptable (i.e., the resulting surface water concentration does not exceed appropriate risk-based screening levels for either human health or aquatic life). Those constituent concentrations less than 100x their screening level were not further evaluated in this step because they would not pose as great a potential concern. As demonstrated below, none of the resulting constituent concentrations in the river would exceed their respective screening levels. Overall, the data indicate the discharge of groundwater constituents into the Delaware River surface water is currently acceptable.

Using the total constituent mass loadings to the river from Table 3, potential concentrations in surface water were calculated by mixing the constituent mass into specified river flows. As shown in Table 4, none of the resulting constituent concentrations in the river would exceed their respective screening levels. The overall data indicates the discharge of groundwater constituents into the Delaware River surface water is currently acceptable.

River flows past the Site were obtained by summing the flow measured at the nearest upstream Delaware River U. S. Geological Survey (USGS) gage with the flow measured on the Schuylkill River (which enters the Delaware River upstream of the Site). Delaware surface water quality standards (DNREC 2004) identify critical flows to be used when developing adjusted screening levels, as detailed in the following table.

Appropriate Flow for Risk Category

Risk Category	Flow Rate Used
Human Health Carcinogens	Harmonic Mean Flow
Human Health Systemic Toxicants	30Q5: the lowest 30-day flow with a recurrence interval of five years
Chronic Toxicant Effects on Aquatic Life	7Q10: the lowest 7-day flow with a recurrence interval of 10 years

The following Delaware River flow rates past the Site were calculated based on the 30-year period of record from January 1, 1980, through December 31, 2009:

Delaware River Flow Rates past the Site

Type of Flow	Flow Adjacent to Site (cfs)
Harmonic Mean	8,275
30Q5	3,217
7Q10	2,500

The 7Q10 flow for water quality permitting in Zone 5 of the Delaware River is specified as 2,500 cfs in the DRBC guidance document (DRBC 2008).

The report titled Exposure and Risk Evaluation for Process Ponds (ENVIRON 2002) concluded that groundwater is mixed with the surface waters of the Delaware River prior to direct exposure to aquatic organisms, chemical uptake by fish, or recreational exposure. Table 4 presents the resulting river water constituent concentrations based on the mass loading values presented in Table 3 and the risk-based river flows for human health systemic toxicants and aquatic life (note; none of the constituents are carcinogenic, therefore, concentrations using the harmonic mean flow were not calculated). As shown, none of the resulting constituent concentrations in the river would exceed their respective screening levels. Overall, the data indicate the discharge of groundwater constituents into the Delaware River surface water is currently acceptable.

[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?"

__X__ 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):
Groundwater is currently monitored on a semi-annual basis and this is expected to continue in the future. This data will be used to verify that contaminated groundwater has remained within the "existing area of contaminated groundwater."

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 **E.I. du Pont de Nemours and Company Edge Moor White Pigment Plant** facility , EPA ID # **DED000800284**, located at **104 Hay Road, Edgemoor, Delaware.** 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: _____ Date 9/28/12
Douglas R. Zeiters
Project Officer

Approved by: _____ Date 9/28/12
Nancy C. Marker
Environmental Program Administrator

Documents where References may be found:
- Phase I RFI Data Summary Report (DuPont, April 2009)
- Phase II RFI Data Summary Report (Parsons, March 2011)
- Post-Closure Care Plan – Addendum 1, Revised Monitoring and Maintenance Plan, Closed
- Surface impoundments (Parsons, March 2010)
- Corrective Action Permit # HW-03A16 (DNREC, March 24, 2006)

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Final Note: The purpose of the Migration of Contaminated Groundwater EI is to verify that the groundwater plume is stable. A "YE" determination does not constitute a screening tool to end the corrective action process. The "YE" determination may be changed at any time as new information becomes available.