Hazardous Waste Section

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ENVIRONMENTAL INDICATOR DETERMINATION REPORT MIGRATION OF CONTAMINATED GROUNDWATER UNDER CONTROL (CA750)

DUPONT KINSTON PLANT
KINSTON, NORTH CAROLINA

Prepared for:

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ACRONYMS

Acronym	Definition / Description
AOC	Area of concern
CA	Corrective action
CMS	Corrective measures study
cm/sec	Centimeter(s) per second
CRG	(DuPont) Corporate Remediation Group
CS	Confirmatory sampling
DAF	Dilution attenuation factor
DERS	DuPont Environmental Remediation Services
DMT	Dimethyl terephthalate
DuPont	E. I. du Pont de Nemours and Company
EI	Environmental indicator
ft/ft	Feet per foot
GPRA	Government Performance Results Act
MSL	Mean sea level
NC2B	NCAC 15A-2B (aquatic life)
NC2L	NCAC 15A-2L (groundwater)
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environmental and Natural Resources
NFA	No Further Action (status)
NRWQC	National Recommended Water Quality Criteria
PRB	Permeable reactive barrier
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RSL	Risk Screening Level
SWMU	Solid waste management unit
TCE	Trichloroethene
TPA	Terephthalic acid
USEPA	United States Environmental Protection Agency

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EXECUTIVE SUMMARY

E.I. du Pont de Nemours and Company (DuPont) has conducted an evaluation of the resource conservation and recovery information system environmental indicator (RCRIS EI) code for corrective action pertaining to “migration of contaminated groundwater under control” (CA750) for the Kinston Plant located in Kinston, North Carolina (the site, see Figure 1). The EI determination evaluation was completed in accordance with the guidance established by the United States Environmental Protection Agency (USEPA; 1999) and is summarized in the score sheet beginning on the following page.

The EI determination process concluded that migration of contaminated groundwater is under control and that groundwater releasing to the Neuse River or its tributaries adjacent to the Kinston Plant is not significantly impacting the surface water. Additionally, DuPont will continue to monitor groundwater to verify the EI status. These factors result in a positive EI determination for EI CA750.

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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: DuPont Kinston Plant
Facility Address: Highway 11 N, Kinston, NC 28501
Facility EPA ID #: NCD 00 3190386

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?

   __√__ 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) 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).

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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.

_____ 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):

Shallow groundwater is not used for drinking water on or near the site; therefore, there are no appropriate risk-based levels for screening. However, groundwater from the deeper PeeDee Aquifer has been used in the past to obtain potable water for the facility and potentially for residential drinking water in homes southwest of the site. As a result, constituents detected in groundwater were compared to the North Carolina Groundwater Quality Standard (NC2L), the North Carolina Interim Maximum Allowable Concentration (IMAC), or USEPA Region IV Risk Screening Levels (RSLs) for Tap Water, where NC2Ls were unavailable.

For the purpose of the evaluation, groundwater was evaluated by groundwater flow components (Manufacturing Area and South Disposal Area) rather than by solid waste management unit (SWMU) or area of concern (AOC) (Figures 2 and 3). Figure 4 is a site-wide potentiometric map that shows all permanent shallow monitoring wells on site along with the temporary wells that were installed during Stage II of the Phase III RFI.

Tables 1 and 2 detail the groundwater evaluation for the two flow component areas. Listed constituents have concentrations that exceed the NC2L standard (or IMAC or RSL where the NC2L was unavailable) and were retained for further evaluation.

Seventeen organic compounds and 11 metals exceeded screening criteria in the Manufacturing Area (Table 1). Twenty-one organic compounds, eight metals, and one other inorganic constituent exceeded screening criteria in the South Disposal Area (Table 2).

References:

DuPont Corporate Remediation Group (CRG), 2001b. *RCRA Facility Investigation Phase I Report, Kinston Plant*. August 2000, revised March 2001.

DuPont CRG, 2003. *Phase II RCRA Facility Investigation Report, Kinston Plant*. April 2003, revised October 2003.

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[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).

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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):

Vertical and lateral extent of key constituents has been demonstrated at the site as depicted in isoconcentration maps in the Phase I RFI Report (DuPont CRG 2001b) and confirmed during the recent Phase III groundwater monitoring. With the exception of trichloroethene (TCE), TCE degradation products, and diphenyl ether, the number of constituents that exceeded screening criteria is higher in the South Disposal Area than the Manufacturing Area.

Groundwater flow in the South Disposal Area is toward the Neuse River. As concluded in the Phase I RFI Report, noticeable decreases in these constituent concentrations, presence of degradation products, presence of microbially produced dissolved gases, and geochemical changes in groundwater indicative of microbial processes indicate that biodegradation of many of these constituents in groundwater is occurring prior to discharge. Analytical data from the recent Phase III groundwater investigation confirmed the stable extent of 1,4-dioxane affected groundwater (see Figure B-1 in Appendix B), while analytical data from perimeter monitoring well locations indicate 1,4-dioxane concentrations have stabilized (Figure 5).

In the Manufacturing Area, groundwater flow is toward Beaverdam Branch. Recent analytical data also support the conclusion that natural attenuation, most notably for TCE, is occurring. In addition, active remediation of the TCE plume has resulted in decreasing TCE concentrations (DuPont CRG 2002). The diphenyl ether affected groundwater extent was delineated during the recent Phase III groundwater investigation (as shown in Figure B-2, included in Appendix B), as was the vinyl chloride affected groundwater extent (see Figure B-3 in Appendix B).

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[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.

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References:

DuPont CRG, 2001b. *RCRA Facility Investigation Phase I Report, Kinston Plant*. August 2000, revised March 2001.

DuPont CRG, 2002. *TCE Corrective Action Plan Modification Report, DuPont Kinston Plant*. June 2002

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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.

Rationale and Reference(s):

Groundwater from the Manufacturing Area flows northwest discharging into Beaverdam Branch (Figure 4). Beaverdam Branch discharges to the Neuse River approximately one mile east of the site (DuPont CRG 2001b). Groundwater from the South Disposal Area flows south discharging into the Neuse River or lowlands adjacent to the river, where it infiltrates into the subsurface or is subject to evapotranspiration (Figure 4) (DuPont CRG 2003). Groundwater may also discharge to on-site drainage channels that discharge to the lowlands adjacent to the river.

The Neuse River, on-site unnamed tributaries to the Neuse River (such as the drainage channels), and Beaverdam Branch are designated as Class C waters by the State of North Carolina. As Class C waters, waters from creeks and the river are designated for aquatic life propagation and maintenance, wildlife, secondary recreation, and agriculture. They are not used for primary recreation or as a drinking water supply source.

The Neuse River has a supplemental classification of nutrient sensitive waters (NSW), a supplemental classification intended for waters needing additional nutrient management because they are subject to excessive growth of microscopic or macroscopic vegetation. Similarly, Beaverdam Branch has a supplemental classification of swamp waters (Sw), which are waters that have low velocity and other natural characteristics that are different from adjacent streams.

References:

DuPont CRG, 2001b. *RCRA Facility Investigation Phase I Report, Kinston Plant*. August 2000, revised March 2001.

DuPont CRG, 2003. *Phase II RCRA Facility Investigation Report, Kinston Plant*. April 2003 revised October 2003.

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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.

√ 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):

For this evaluation, maximum detected groundwater concentrations wells located in perimeter monitoring wells were compared to appropriate groundwater criteria (i.e., NC2L, IMAC, or RSL) with an applied conservative dilution attenuation factor (DAF) of 10 to account for groundwater and surface water interaction. The use of a conservative DAF is consistent with current USEPA RCRA Environmental Indicator guidance and the 1996 Advanced Notice of Proposed Rule Making regarding establishing point of compliance for surface water discharges. The following perimeter wells were identified:

- Manufacturing Area: MW-36, MW-38, MW-57 (for potential discharge to Beaverdam Branch)
- South Disposal Area: MW-02, MW-14, MW-19, MW-20, MW-22, MW-23A, MW-56 (for potential discharge to lowlands adjacent to river); MW-15 (for potential discharge to on-site Channel 3, which discharges to the lowlands); MW-10, MW-11 (for potential discharge to on-site Channel 24, which discharges to the lowlands); MW-70, MW-71, MW-72 (for potential discharge to the southwest perimeter ditch)

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

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Those constituents whose maximum detected concentration in each area exceeded 10 times the screening criteria were retained for evaluation in Step Six. The results of these two screening steps indicate that no constituent concentrations were present in excess of 10 times the screening criteria in the Manufacturing Area groundwater (Table 3). Concentrations of seven organic compounds and four metals were present in excess of 10 times the screening criteria in the South Disposal Area groundwater (Table 4).

References:

DuPont CRG, 2003. *Phase II RCRA Facility Investigation Report, Kinston Plant*. April 2003 revised October 2003.

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6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be **"currently acceptabl**e" (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 cannot be shown to be **"currently acceptabl**e") - 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):

Step six of the EI process addresses the acceptability of discharge of contaminated groundwater to surface waters. For this step, only constituents whose maximum detected groundwater concentration exceeded 10 times the screening standard, as identified in Step Five, were retained for the evaluation.

An evaluation of groundwater discharge to the Neuse River was performed to determine whether constituent concentrations in perimeter groundwater are likely to result in exceedances of relevant surface water quality criteria. The surface water quality criteria used in the evaluation was based on the lower of the 15A NCAC 2B values for protection of freshwater organisms (chronic) and protection of human health (fish consumption). If no NCAC 2B value was available, the USEPA National Recommended Water Quality Criteria (NRWQC) was used or, alternatively, a value from the USEPA Ecotoxicology Database if there was no NRWQC value, or a suitable surrogate value. The groundwater flux was calculated using the conservative assumptions and site-specific hydraulic information described on the following page.

[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.

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- Groundwater flux was calculated using a simple mass balance equation as adapted from USEPA's *Exposure Assessment Methods Handbook* (1989) and USEPA's *NPDES Permit Writer's Manual* (1996).
- Maximum detected constituent concentrations were those observed in South Disposal Area perimeter monitoring wells (MW-02, MW-10, MW-11, MW-14, MW-15, MW-19, MW-20, MW-22, MW-23A, MW-56, MW-70, MW-71, and MW-72) sampled in 2013 and 2014.

  Note: There is no surface water quality screening criteria for vanadium.
- Site-specific hydraulic gradient and conductivity values were calculated using the Phase I RFI data.
- The Neuse River flow was estimated using the lowest 7-day average flow that occurs (on average) once every 10 years (7Q10), which is protective of both human and ecological receptors. More than 99% of the time, normal flow in the Neuse River is greater than the 7Q10 flow used in this evaluation. Therefore, mixing will be greater under most flow conditions, and resulting concentrations in the surface water of the river will be lower than those estimated.
- A mixing fraction of 0.5 (i.e., half the width of the river) was used for groundwater interaction with surface water. This fraction was used because it is considered to be appropriate for evaluating a groundwater release that occurs through a porous medium over a large portion of the riverbank and river bottom.

Table 5 details the groundwater to surface water calculations. As shown in the table, groundwater concentrations, when modeled to surface water, do not exceed surface water screening criteria. Over time, while attenuation and degradation of constituents takes place, current concentrations measured in groundwater will diminish, further reducing modeled discharge concentrations. In addition, surface water from the Neuse River historically has been sampled and analyzed for metals, total organic halogens, and other inorganics. Only six metals exceeded screening criteria (copper, iron, mercury, selenium, silver, and zinc), and only iron is a potential COC at the Site (the concentration calculated in Table 5 is three orders of magnitude below the screening criteria). This further reinforces the EI determination that groundwater discharging to the Neuse River is currently acceptable.

References:

DuPont CRG, 2003. *Phase II RCRA Facility Investigation Report, Kinston Plant*. April 2003 revised October 2003.

USEPA, 1989. Exposure Assessment Methods Handbook. EPA/600. September.

USEPA, 1996. NPDES Permit Writer's Manual. EPA/833/B-96/003. December.

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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 - 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):

Continued monitoring is planned as part of the Final Remedy for the Site. Currently, groundwater is sampled annually for 1,4-dioxane, TCE and its degradation products, and site-specific metals and indicator parameters to monitor previous waste management activities. Once corrective action has progressed through the investigation phase to the corrective measures phase, specific perimeter wells will periodically be monitored for site-specific constituents.

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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).

√ 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 **DuPont Kinston Plant**, EPA ID # **NCD 00 3190386**, located at **Kinston, NC**. 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

_____
(print)

_____
(title)

Supervisor _____ _____
(signature) Date

_____
(print)

_____
(title)

_____
(EPA Region or State)

Location where References may be found:

Attn: Scott Ross
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1.0 INTRODUCTION

This Environmental Indicator (EI) Corrective Action (CA) 750 report is being submitted for the E. I. du Pont de Nemours and Company (DuPont) Kinston Plant (the Site) located in Kinston, North Carolina (see Figure 1). The Site's Hazardous Waste Management Permit Number NCD-003-190-386 (the Permit) was renewed on July 21, 2010.

The EI determination was conducted to determine whether migration of contaminated groundwater (for all "contamination" subject to RCRA corrective action at or from the facility) is under control. This EI was completed in accordance with the guidance established by the United States Environmental Protection Agency (USEPA 1999).

1.1 Report Purpose and Contents

The objective of this report is to provide the results of the EI CA750 determination completed for the Kinston Plant. The EI CA725 determination has been completed and will be provided in a separate report. The EI CA725 concluded that current human exposures are under control.

This report includes the following:

- Site history and background (Section 2)
- Overview of EI determination process (Section 3)
- Step One: Data review and usability (Section 4)
- Step Two: Risk-based screening (Section 5)
- Step Three: Plume migration and stability (Section 6)
- Step Four: Surface water bodies (Section 7)
- Step Five: Surface water impact (Section 8)
- Step Six: Significance of impact (Section 9)
- Step Seven: Monitoring program (Section 10)
- Step Eight: EI determination conclusion (Section 11)
- References used in this report (Section 12)

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2.0 SITE HISTORY AND BACKGROUND

The following sections briefly summarize the Kinston Plant history. Information contained in this section is primarily based on information from the revised *Phase II RCRA Facility Investigation Work Plan*, submitted to the North Carolina Department of Environment and Natural Resources (NCDENR) on September 21, 2001, with updated information collected during the Phase III RFI.

2.1 Site Location

The Site is located northeast of Kinston, North Carolina, on North Carolina Highway 11. It occupies approximately 650 acres and is bounded by the Neuse River on the south and southeast; North Carolina Highway 11 on the north and northwest; and farmland on the north, northeast, and southwest (Figure 1). A map denoting property lines is provided in Appendix A of the 1997 *Confirmatory Sampling (CS) Report* (DuPont Environmental Remediation Services [DERS] 1997). A map showing all utilities, paved roads, buildings, and easements (gas and power) was provided in Appendix B of the CS Report.

2.2 Plant Operational History

The DuPont Kinston Plant began operations in 1953 and continues to this date. The plant formerly manufactured Dacron® polyester resin and fibers. The Site currently manufactures Sorona® (a bio-based polymer). The Site consists of several buildings that contribute to the manufacturing process. The former Dacron® polyester production was accomplished using either dimethyl terephthalate (DMT) and ethylene glycol or terephthalic acid (TPA) and ethylene glycol. Water was produced as a byproduct from the TPA process, while methanol was a byproduct of the DMT process.

2.3 Regulatory History

The Site is regulated as a hazardous waste facility under RCRA. The Site's Hazardous Waste Management Permit (number NCD-003-190-386) (the Permit) was renewed on July 21, 2010.

The original RCRA Part A permit application and an amendment were submitted in November 1980 and May 1983, respectively. On August 25, 1983, the NCDENR issued the Site a RCRA Part B permit for the operation of a hazardous waste container storage area. This permit was reissued on July 31, 1995, and was replaced by the current permit. The permit includes 91 regulated solid waste management units (SWMUs) and 7 regulated areas of concern (AOCs). There are currently 14 units requiring corrective measures studies (CMS), 15 units that require RCRA Facility Investigations (RFIs), and one with an engineered remediation system specified in the Site's RCRA Permit. The remaining units require no further action (NFA) at this time.

The Kinston Plant discharges water to the Neuse River, as regulated by National Pollutant Discharge Elimination System (NPDES) permit No. NC0003760. The USEPA initially issued DuPont a NPDES permit in December 1978, which was reissued by the USEPA in May 1985 and expired in April 1990. A renewal application was submitted to NCDENR in October 1989, but the permit was not reissued until December 4, 1994. The plant is currently operating under this permit.

The Kinston Plant currently has 37 state-permitted air emissions sources, and all are combined under one permit (No. 3878R11).

2.4 Environmental Setting

The Site's environmental setting is described in detail in the *RCRA Facility Assessment* (RFA) (DERS 1993), the *CS Work Plan* (DERS 1996), and the *CS Report* (DERS 1997). The following sections briefly summarize the information contained in these sources.

2.4.1 Site Topography and Geology

The Site is bounded on the south and southeast by the Neuse River. The Manufacturing Area is situated on a level terrace about 65 feet above mean sea level (MSL). The land drops approximately 30 feet in all directions around the perimeter of the Manufacturing Area. In general, surface water drains radially away from the Manufacturing Area via manmade drainage channels and culverts. Surface water from the east, west, and south portions of the Site flows into the Neuse River or its wetlands. Drainage from the northwest portion of the Manufacturing Area discharges to Beaverdam Branch, north of the plant. Beaverdam Branch discharges to the Neuse River approximately one mile east of the plant. The Neuse River discharges into Pamlico Sound, 60 miles east of the Site. Figure 1 shows the site topography and the surrounding waterways.

The majority of the SWMUs are located in the eastern portion of the Site. Some SWMUs are located on the top of the terrace, with the remaining SWMUs are located on the Neuse River floodplain. Land surface drops by 20 to 30 vertical feet over a horizontal distance of as little as 50 feet. Land surface decreases an additional 25 feet across the floodplain down to the Neuse River, which is at an elevation of approximately 13 feet above MSL.

A drainage channel allows surface water to drain from the top of the terrace eastward past the wastewater treatment plant. Another drainage channel allows surface water to drain from the top of the terrace to the southwest. Additional, shorter drainage channels direct surface runoff and groundwater discharge away from the bottom of the terrace eastward to the river. Surface runoff eventually drains into the Neuse River or the lowlands adjacent to the river. The uppermost geologic unit at the Site is composed of 5 to 35 feet of orange-brown, grading to dark gray, clayey sand and sandy clay that contains localized lenses of clean, medium-to coarse-grained, poorly-sorted sand with fine pebbles. The thicker sequence of sediments is located at the top of the terrace. This surficial unit is underlain by 15 to 25 feet of gray, semi-consolidated siliceous mudstone with some chert, siltstone, and sandstone that represent the Jericho Run Member of the Beaufort Formation. The Beaufort Formation is underlain by the PeeDee Formation, composed of an upper 20 to 30 feet of olive gray, clayey and sandy silt or sandy clay that contains some pebbles and locally abundant shell fragments, and approximately 90 to 100 feet of a lower olive to dark gray, fine- to medium-grained sand (DERS 1992 and Brown et al. 1977).

2.4.2 Hydrology

Groundwater in the Kinston vicinity is contained within the Cape Fear, Black Creek, and PeeDee hydrologic units. These units have been grouped into an unconfined surficial aquifer, composed of recent sediments that overlie the semi-consolidated Beaufort Formation, and a confined Lower Aquifer, composed of the more permeable zones within each unit beneath the Beaufort Formation. The uppermost saturated zone ranges

from 2 to 10 feet below grade and tends to mimic site topography. The predominant groundwater flow direction is toward the southeast in the direction of the Neuse River, although groundwater flows north toward Beaverdam Branch in portions of the Manufacturing Area. The hydraulic gradient in the Manufacturing Area is 0.0047 feet per foot (ft/ft). Hydraulic conductivities estimated by slug tests in wells screened in the surficial aquifer range from 3.4E-4 centimeters per second (cm/sec) to 1.2E-3 cm/sec (DERS 1992).

The mudstone and clayey silt below the surficial aquifer are believed to be semi-confining to confining units because there are considerable differences in hydraulic head between well pairs screened in the surficial and deeper aquifers (DERS 1992). The first major confined water-bearing unit beneath them occurs at depths of 120 to 150 feet below grade and corresponds to the sands of the lower portion of the PeeDee Formation. The lower portion of the PeeDee Formation is typically composed of 70 to 80 percent sand, with an overall average hydraulic conductivity of 1.2E-2 cm/sec (Winner and Coble 1989). Hydraulic conductivities for the upper portion of the PeeDee Formation have not been published.

Shallow groundwater at the Site (affected by constituents) historically has not been used for any purpose. Deeper groundwater (from the PeeDee Formation) has been used in the past as a source of process water and drinking water at the plant and potentially for residential drinking water in homes southwest of the Site. Facility process water has been pumped from depths as shallow as 60 feet, but present-day production wells at the Site have multiple screen zones between 300 to 500 feet below grade. Drinking water at the Facility (and at the homes southwest of the Site) is currently obtained from the North Lenoir Water Corporation.

2.4.3 Climate

Summary climatic data observed in Kinston are presented in the United States Department of Agriculture, Soil Conservation Service, Soil Survey of Lenoir County, North Carolina (Barnhill 1977). The average length of the growing season is about 225 days, lasting from late March to early November. The minimum temperature recorded during the period between 1900 and 1977 was approximately 0°F, and the maximum temperature recorded was approximately 106°F. Temperatures reach 90°F or higher on more than half the days in June, July, and August each year. The average annual precipitation is approximately 47.9 inches, ranging from about 2.6 inches in October to about 7.1 inches in July. Precipitation during the growing season is somewhat variable locally, arising largely from thunderstorms and occasional summer or autumn tropical storms. Precipitation during the remainder of the year is associated with large low-pressure systems and is generally less variable. The average annual relative humidity is near 85 percent at sunrise and decreases to near 50 percent by mid-afternoon. Surface winds are variable in direction, but generally blow from the southwest and, in autumn, also from the northeast. Winds usually range from nearly calm in the early morning to about 14 miles per hour in the early afternoon, averaging approximately 8 miles per hour throughout a typical day. Destructive winds from tropical storms and tornadoes are rare.

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3.0 EI DETERMINATION PROCESS

In 1999, the USEPA developed guidance to assist in the EI determination process (USEPA 1999). The guidance document provides the EI evaluator with a score sheet to document EI determinations. This score sheet is completed in the following stepped approach:

- Step 1 – Has all available relevant/significant information on known and reasonably suspected releases… subject to RCRA Corrective Action… been considered in this EI determination?
- Step 2 – Is groundwater known or reasonably suspected to be “contaminated” above appropriately protective “levels”…from releases subject to RCRA Corrective Action?
- Step 3 – Has migration of contaminated groundwater stabilized…as defined by the monitoring locations designated at the time of this determination?
- Step 4 – Does “contaminated” groundwater discharge into surface water bodies?
- Step 5 – Is the discharge of “contaminated” groundwater likely to be insignificant?
- Step 6 – Can the discharge of “contaminated” groundwater into surface water be shown to be “currently acceptable?”
- Step 7 – Will groundwater monitoring/measurement data …be collected in the future to verify that contaminated groundwater has remained within the … dimensions of the “existing area of contaminated groundwater?”
- Step 8 – EI Determination Conclusion

A more detailed description of each step of these eight steps completed for this process is included in the following sections of this report.

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4.0 STEP ONE – DATA REVIEW

Step one in the EI determination process asks the following question:

> *Has all available relevant/significant information on known and reasonably suspected releases… subject to RCRA Corrective Action… been considered in this EI determination?*

This section therefore presents a review of applicable investigations conducted at the site.

4.1 Summary of Investigations

The Kinston Plant is subject to a variety of federal and state environmental regulations. Remedial activities at the Site have been conducted in accordance with a Hazardous Waste Management Permit (No. NCD003190386) issued to DuPont by the NCDENR on July 31, 1995. Ninety-one regulated SWMUs and seven regulated AOCs have been identified at the Site. There are currently 14 units requiring CMS, 15 units that require RFIs, and one with an engineered remediation system specified in the Site's RCRA Permit. The remaining units are designated NFA at this time (Figures 2 and 3).

DuPont submitted the *Phase I RFI Work Plan* in August 1998. The *Phase I RFI Work Plan* was built upon the conclusions presented in the *Confirmatory Sampling (CS) Report* submitted to NCDENR in June 1997 (DERS). DuPont submitted a revised *Phase I RFI Work Plan* in November 1999 in response to NCDENR comments. DuPont implemented the Phase I RFI in April 2000. The purpose of the Phase I RFI was to further characterize potential releases to the environment from the 16 SWMUs and one AOC determined in the *Phase I RFI Work Plan* as having high or unknown priority exposure pathways. The *Phase I RFI Report* (DuPont CRG 2001b) recommended the following activities for the Phase II RFI:

- Complete a focused groundwater-to-surface water evaluation to determine more positively if non-point discharges meet protective levels for ecological receptors;
- Conduct additional sampling events on the perimeter monitoring wells to expand the database for use in the focused groundwater-to-surface water evaluation and to strengthen the Conceptual Site Model; and
- Conduct additional sampling events at the far downgradient edge of the trichloroethene (TCE) groundwater plume at AOC 86 to expand the database and strengthen the Conceptual Site Model.

NCDENR approved the revised *Phase I RFI Report* in a letter to DuPont dated April 19, 2001.

DuPont submitted the *Phase II RFI Work Plan* in July 2001 and a revised work plan in September 2001. The *Phase II RFI Work Plan* was built upon the conclusions and recommendations of Phase I RFI and subsequent discussions with NCDENR. DuPont implemented the Phase II RFI over the twelve-month period from October 2001 through September 2002. The Phase II RFI consisted of collection of groundwater and surface water samples, measurement of groundwater and surface water elevations, measurement of storm flow, and collection of hydrogeological data.

DuPont submitted a revised *Phase II RFI Report* in October 2003 in response to NCDENR comments. Following submittal of the Phase II RFI Report, two interim remedial measures were conducted as described in Section 4.2 below.

A *Phase III RFI Work Plan* (Stage I) was submitted to the NCDENR in July 2011. The work plan was subsequently revised in August 2011 based on comments from the NCDENR and the revised work plan was approved by NCDENR in a letter to DuPont dated August 10, 2011. Parsons completed the field activities in accordance with the work plan from October to December 2011. The objective of the Phase III (Stage I) investigation was to investigate the entrance area and former ball park area of the plant where there were little to no historical data. The investigation determined that site activities had not resulted in significant impacts to these areas of the Site. The report was approved by NCDENR in a letter to DuPont dated February 22, 2013.

A *Phase III RFI Work Plan* (Stage II) was submitted to NCDENR on December 5, 2011. Based on comments received from NCDENR, a revised Work Plan was submitted on October 31, 2012. The revised Stage II work Plan was approved by NCDENR in a letter to DuPont dated February 27, 2013. The objective of the Phase III (Stage II) investigation was primarily to investigate the 14 units identified in the permit as needing either an RFI or CS. These units are mostly located inside the Site's Manufacturing Area. An addendum to the Phase III RFI Work Plan (Stage II) was subsequently submitted on June 25, 2013, and approved by NCDENR in a letter to DuPont dated July 9, 2013. A second Addendum to the Phase III RFI Work Plan (Stage II) was submitted to NCDENR on April 17, 2014, and approved by NCDENR on April 29, 2014. This investigation is currently ongoing.

4.2 Interim Remedial Measures

4.2.1 AOC 86 – TCE Release Area

Previous investigations conducted at the Site have identified TCE-impacted groundwater in the area of monitoring well MW-30A near the Site's chemical tank storage area (Figure 4). TCE levels vary vertically in this area, with the highest concentration found near the base of shallow sandy soils, which comprise the uppermost water-bearing horizon. The most impacted zone is a relatively thin and poorly permeable interval of dark silty sand directly overlying the mudstone confining layer at a depth of about 15 to 18 feet. The water table lies at about 5 feet below ground surface (DuPont CRG 1998a).

TCE trapped in this horizon diffuses into flowing groundwater in the overlying permeable sands creating an approximately 350-foot wide plume that extends approximately 800 feet in the downgradient (northwest) direction (Parsons 2013). Average linear groundwater velocity is estimated to be 0.05 to 0.1 feet/day. There is no evidence of TCE migration into the underlying mudstone (DuPont CRG 1998a).

A groundwater recovery and treatment system was installed at the Kinston Plant as an interim remedial measure to intercept TCE-impacted groundwater in the Manufacturing Area. The design and operation of this system were previously described in a Corrective Action Plan approved by the NCDENR in a letter to DuPont dated April 18, 1995.

In June 1998, DuPont recommended that zero valent iron be used to treat source zone soils and contaminated groundwater (DuPont CRG 1998b). With NCDENR's approval, DuPont installed the source treatment pilot and the permeable reactive barrier (PRB) wall in the summer of 1999.

Based on soil and groundwater data collected after the PRB wall installation, the zero valent iron treatment system was considered an effective treatment (DuPont CRG 2002). TCE concentrations in downgradient monitoring well locations (MW-29, MW-35, MW-37, and MW-45) of the PRB wall have continued to decline or remain below detection limits.

As a result, the pump-and-treat system is no longer operational, and the system has been removed.

4.2.2 SWMU 90 – Drum Discovery Area

The drum discovery area is an open, grassy field southwest of SWMU 9 in the southwest portion of the Site (see Figure 2). The area was previously used as a construction parking lot, which was removed approximately 20 years ago. During a 2004 excavation for soil to cap the nearby ash landfill, one 55-gallon drum was discovered at a depth of approximately 4 feet below grade. Testing of the contents revealed the presence of TCE. A surface geophysical survey was completed in May 2004 to detect and determine the number of any additional buried drums. The survey indicated the presence of additional drums. An excavation was performed in 2006 across the anomalies observed in the geophysical survey. Excavations completed in locations T2 and T3 in 2010 revealed crushed drums, laboratory waste, and soil impacted with Dowtherm®. The largest impacts were at T3 where eight empty drums, broken and intact amber bottles, clear glass (e.g., pipettes, beakers), nylon rubber, drum rings, concrete, plastic, rebar, and wood were uncovered. A total of 753 tons of Dowtherm® impacted soil was removed for disposal. No constituents were detected above screening criteria in the confirmatory sampling conducted at excavation T2. However, confirmatory samples at excavation T3 revealed that one metal and two organic constituents (arsenic, tetrachloroethylene, and the Dowtherm® constituent 1,1-biphenyl) were still present in the soil at levels exceeding screening criteria (Parsons 2010a).

4.2.3 SWMU 65 – No. 6 Oil Dewatering Area

The two SWMU 65 ASTs are stationed across a gravel road from a former concrete bin containing coal. In the past, water mixed with No. 6 fuel oil was decanted from the two ASTs and then drained onto the coal inside the bin. The coal, which absorbs the water mixed with fuel oil, was eventually burned in the power house (Parsons 2010b).

Six soil samples were collected adjacent to the coal storage bin during the 1997 Confirmatory Sampling (CS) Investigation. The samples were collected above the water table (at depths of 0 to 3.5 feet) and were analyzed for polycyclic aromatic hydrocarbons (PAHs). The analytical results did not indicate the presence of PAHs in any of the soil samples.

On August 6, 2005, a fuel oil spill occurred at SWMU 65. In an effort to re-direct a sump drainage line following the spill, free-phase fuel oil was discovered in the surface soil. To remediate the soil and re-direct the drainage line, soil was excavated to approximately 3 feet below ground surface. Contaminated soil from excavation activities was transported offsite and disposed of at an approved nonhazardous waste landfill. The area of excavation was backfilled and graded (no confirmation samples were collected). During remediation activities, it was determined that there had been previous spills or leaks of unknown volume and unknown lateral extent.

On April 17, 2006, a work plan was submitted to NCDENR to conduct an investigation regarding the previous spills noted at SWMU 65 in 2005. NCDENR approved the work plan on January 22, 2007. A report was submitted to NCDENR on September 28, 2007 (SWMU 65 Fuel Oil Delineation Report) detailing the activities of the investigation, which included collecting soil and groundwater samples at the unit. The report proposed further investigation to further delineate the lateral extent of contamination, remove impacted soils, and evaluate potential exposure to the onsite construction worker.

On March 21, 2008, a SWMU 65 Remedial Action Plan (RAP) was submitted to NCDENR for review. The work plan was revised on August 5, 2008, based on comments provided by NCDENR, and approved on February 2, 2009.

The remedial action (excavation) occurred immediately adjacent to and beneath railroad tracks. The observed presence of a clay layer beneath the railroad tracks (at approximately 2.5 feet below grade) appears to have prevented any vertical migration. During the remedial action, a total of 289 tons of contaminated soil and rock were removed from SWMU 65 and transported to a nonhazardous waste landfill for disposal. Twenty one (21) confirmation soil samples were collected from the excavation and analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs) and extractable petroleum hydrocarbons (EPHs).

4.3 Data Set for EI Determination

The following environmental quality data were used in the EI determination:

- Manufacturing Area – Groundwater samples collected in 2013 and 2014 from 30 monitoring wells and 23 temporary wells (associated with specific SWMUs or AOCs) to be representative of “currently existing” conditions (see Figure 4 for well locations)
- South Disposal Area - Groundwater samples collected in 2013 and 2014 from 28 monitoring wells and 14 temporary wells (associated with specific SWMUs or AOCs) to be representative of “currently existing” conditions (see Figure 4 for well locations)

Analytical data results are tabulated in Appendix A.

5.0 STEP TWO – IS GROUNDWATER CONTAMINATED?

Step two of the EI determination process asks the following question:

> *Is groundwater known or reasonably suspected to be "contaminated" above appropriately protective "levels"…from releases subject to RCRA Corrective Action?*

This section therefore presents the risk-based screening levels appropriate for current land- and groundwater-use at the Kinston Plant.

5.1 Sources of Screening Criteria

Shallow groundwater is not used for drinking water on or near the Site; therefore, there are no appropriate risk-based levels for screening. However, groundwater from the deeper PeeDee Aquifer has been used in the past to obtain potable water for the Site and potentially for residential drinking water in homes to the southwest. As a result, constituents detected in groundwater were compared to the North Carolina Groundwater Quality Standard (NC2L), the North Carolina Interim Maximum Allowable Concentration (IMAC), or USEPA Region IV Risk Screening Levels (RSLs) for Tap Water if NC2Ls were unavailable. When a screening value was not available from either source, the screening value from a structurally similar chemical was used.

5.2 Screening Evaluation

For the purpose of the evaluation, groundwater was evaluated by groundwater flow components (Manufacturing Area and South Disposal Area) rather than by SWMU or AOC (Figures 2 and 3). Tables 1 and 2 detail the groundwater evaluation for the two flow component areas. Monitoring well locations are depicted in Figure 4. Listed constituents have concentrations that exceed the NC2L standard (or IMAC or RSL where the NC2L was unavailable) and were retained for further evaluation.

5.2.1 Manufacturing Area

Organic Compounds

1,2-dichloroethane	Bis(2-ethylhexyl) phthalate
1,2-diphenylhydrazine	Cis-1,2-dichloroethene
1,4-dioxane	Diphenyl ether
4-chloroaniline	Naphthalene
Acetaldehyde	Phenol
Benzo(a)anthracene	Tetrachloroethene
Benzo(b)fluoanthene	Trichloroethene
Benzo(a)pyrene	Vinyl chloride
Biphenyl	

Metals/Inorganics

Antimony	Lead
Arsenic	Nickel
Beryllium	Thallium
Cadmium	Vanadium
Chromium (total)	Zinc
Cobalt	

5.2.2 South Disposal Area

Organic Compounds

1,1-dichloroethane	Chloroform
1,1-dichloroethene	Cis-1,2-dichloroethene
1,2-dichloropropane	Diphenyl ether
1,4-dioxane	Ethylene glycol
2-methylnaphthalene	Isobutyl alcohol
2-methylphenol	Methylene chloride
4-methylphenol	Phenol
acetaldehyde	Pyridine
Acrolein	Terephthalic acid
Benzene	Vinyl chloride
Biphenyl	

Metals/Inorganics

Antimony	Iron
Arsenic	Lead
Chromium (total)	Manganese
Cobalt	Vanadium
Fluoride	

6.0 STEP THREE – HAS MIGRATION STABILIZED?

Step three of the EI determination process asks the following question:

> *Has migration of contaminated groundwater stabilized…as defined by the monitoring locations designated at the time of this determination?*

The vertical and lateral extents of key constituents have been defined at the Site, as depicted in isoconcentration maps in the *Phase I RFI Report* (DuPont CRG 2001b), and confirmed during the Phase III groundwater monitoring. With the exception of TCE, TCE degradation products, and diphenyl ether, the majority of groundwater constituents are located in the South Disposal Area.

Groundwater flow in the South Disposal Area is towards the Neuse River (Figure 4). As concluded in the Phase I RFI Report, noticeable decreases in these constituent concentrations, presence of degradation products, presence of microbially produced dissolved gases, and geochemical changes in groundwater indicative of microbial processes indicate that biodegradation of many of these constituents in groundwater is occurring prior to discharge. Analytical data from the recent Phase III groundwater investigation confirmed the stable extent of 1,4-dioxane affected groundwater (see Figure B-1 in Appendix B), while analytical data from perimeter monitoring well locations indicate 1,4-dioxane concentrations have stabilized (Figure 5).

Groundwater flow in the Manufacturing Area is toward Beaverdam Branch (Figure 4). Recent analytical data also support the conclusion that natural attenuation, most notably for TCE, is occurring. In addition, active remediation of the TCE plume has resulted in decreasing TCE concentrations (DuPont CRG 2002). The diphenyl ether affected groundwater extent was delineated during the recent Phase III groundwater investigation (as shown in Figure B-2, included in Appendix B), as was the vinyl chloride affected groundwater extent (see Figure B-3 in Appendix B).

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7.0 STEP FOUR – DOES CONTAMINATED GROUNDWATER DISCHARGE INTO SURFACE WATER?

Step four of the EI determination process asks the following question:

Does "contaminated" groundwater discharge into surface water bodies?

Groundwater from the Manufacturing Area flows northwest discharging into Beaverdam Branch (Figure 4). Beaverdam Branch discharges to the Neuse River approximately one mile east of the Site (DuPont CRG 2001b). Groundwater from the South Disposal Area flows south discharging into the Neuse River or lowlands adjacent to the river, where it infiltrates into the subsurface or is subject to evapotranspiration (Figure 4) (DuPont CRG 2003). Groundwater may also discharge to on-site drainage channels that discharge to the lowlands adjacent to the river.

The Neuse River, on-site unnamed tributaries to the Neuse River (such as the drainage channels), and Beaverdam Branch are designated as Class C waters by the State of North Carolina. As Class C waters, waters from the creeks and the river are designated for aquatic life propagation and maintenance, wildlife, secondary recreation, and agriculture. They are not used for primary recreation or as a drinking water supply source.

The Neuse River has a supplemental classification of nutrient sensitive waters (a supplemental classification intended for waters needing additional nutrient management because they are subject to excessive growth of microscopic or macroscopic vegetation). Similarly, Beaverdam Branch has a supplemental classification of swamp waters (Sw), which are waters that have low velocity and other natural characteristics that are different from adjacent streams.

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8.0 STEP FIVE – IS THIS DISCHARGE INSIGNIFICANT?

Step five of the EI determination process asks the following question:

Is the discharge of "contaminated" groundwater likely to be insignificant?

For this evaluation, maximum detected groundwater concentrations in wells located in perimeter monitoring wells were compared to appropriate groundwater criteria (i.e., NC2L, IMAC, or RSL) with an applied conservative dilution attenuation factor (DAF) of 10 to account for groundwater and surface water interaction. The use of a conservative DAF is consistent with current USEPA RCRA Environmental Indicator guidance and the 1996 Advanced Notice of Proposed Rule Making regarding establishing point of compliance for surface water discharges. The following perimeter wells were identified:

- Manufacturing Area: MW-36, MW-38, MW-57 (for potential discharge to Beaverdam Branch)
- South Disposal Area: MW-02, MW-14, MW-19, MW-20, MW-22, MW-23A, MW-56 (for potential discharge to lowlands adjacent to river); MW-15 (for potential discharge to on-site Channel 3, which discharges to the lowlands); MW-10, MW-11 (for potential discharge to on-site Channel 24, which discharges to the lowlands); MW-70, MW-71, MW-72 (for potential discharge to the southwest perimeter ditch)

Those constituents whose maximum detected concentration in each area exceeded 10 times the screening criteria were retained for evaluation in Step Six. The results of these two screening steps indicate that no constituent concentrations were present in excess of 10 times the screening criteria in the Manufacturing Area groundwater (Table 3). Concentrations of seven organic compounds and four metals in South Disposal Area groundwater (Table 4) were present in excess of 10 times the screening criteria.

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9.0 STEP SIX – IS THIS DISCHARGE ACCEPTABLE?

Step six of the EI determination process asks the following question:

> *Can the discharge of "contaminated" groundwater into surface water be shown to be "currently acceptable?"*

Step six of the EI process addresses the acceptability of discharge of contaminated groundwater to surface waters. For this step, only constituents whose maximum detected groundwater concentration was in exceedance of 10 times the screening standard, as identified in Step Five, were retained for the evaluation.

An evaluation of groundwater discharge to the Neuse River was performed to determine whether constituent concentrations in perimeter groundwater are likely to result in exceedances of relevant surface water quality criteria. The surface water quality criteria used in the evaluation was based on the lower of the 15A NCAC[6] 2B values for protection of freshwater organisms (chronic) and protection of human health (fish consumption). If a NCAC 2B was unavailable, then the NCAC 2B standard for a surrogate compound, or the USEPA National Recommended Water Quality Criteria (NRWQC) or the value from the USEPA Ecotoxicology Database was utilized. Specifically, the NRWQC was utilized for antimony, a value from the USEPA Ecotoxicology Database was utilized for cobalt and the NCAC 2B value for biphenyl was utilized as a surrogate value for diphenyl ether. DuPont conducted a detailed review of the literature to find potentially suitable surrogates/analogues for diphenyl ether for both human and ecological endpoints. As a result of this search, DuPont identified several potential surrogates; however, limited toxicity information was found in the literature for these surrogates. Due to this lack of specific toxicity information, DuPont believes that using the NC2B standard for biphenyl is appropriate as a conservative surrogate value for diphenyl ether since the compounds are both found in Dowtherm, the parent material that was used at the site, and as such, diphenyl ether has typically been detected wherever biphenyl has been detected. Although the mode of toxicity differs for biphenyl and diphenyl ether, the values for biphenyl would be conservative alternates and, hence, protective for diphenyl ether as biphenyl is expected to exhibit greater toxicity. Note that no suitable surface water quality screening value or surrogate could be found for vanadium.

The groundwater flux was calculated using the following conservative assumptions and site-specific hydraulic information.

- Groundwater flux was calculated using a simple mass balance equation as adapted from the USEPA *Exposure Assessment Methods Handbook* (1989) and the USEPA *NPDES*[7] *Permit Writer's Manual* (1996).
- Maximum detected constituent concentrations were those observed in South Disposal Area perimeter monitoring wells (MW-02, MW-10, MW-11, MW-14, MW-15, MW-19, MW-20, MW-22, MW-23A, MW-56, MW-70, MW-71, and MW-72) sampled in 2013 and 2014.

  Note: There is no surface water quality screening criteria for vanadium.
- Site-specific hydraulic gradient and conductivity values were calculated from Phase I RFI data.

[6] NCAC - North Carolina Administrative Code
[7] NPDES – National Pollution Discharge Elimination System

- The Neuse River flow was estimated using the lowest 7-day average flow that occurs (on average) once every 10 years (7Q10), which is protective of both human and ecological receptors. More than 99% of the time, normal flow in the Neuse River is greater than the 7Q10 flow used in this evaluation. Therefore, mixing will be greater under most flow conditions, and resulting concentrations in the surface water of the river will be lower than those estimated.
- A mixing fraction of 0.5 (half the width of the river) was used for groundwater interaction with surface water. This fraction was used because it is considered to be appropriate for evaluating a groundwater release that occurs through a porous medium over a large portion of the riverbank and river bottom.

Table 5 details the groundwater to surface water calculations. As shown in the table, groundwater concentrations, when modeled to surface water, do not exceed surface water screening criteria. As a result, the groundwater discharge to surface water is considered acceptable. Over time, while attenuation and degradation of constituents takes place, current concentrations measured in groundwater will diminish, further reducing modeled discharge concentrations. In addition, surface water from the Neuse River historically has been sampled and analyzed for metals, total organic halogens, and other inorganics. Only six metals exceeded screening criteria (copper, iron, mercury, selenium, silver, and zinc), and only iron is a potential COC at the Site (the concentration calculated in Table 5 is three orders of magnitude below the screening criteria). This further reinforces the EI determination that groundwater discharging to the Neuse River is currently acceptable.

10.0 STEP SEVEN – FUTURE MONITORING

Step seven of the EI determination process asks the following question:

> *Will groundwater monitoring/measurement data … be collected in the future to verify that contaminated groundwater has remained within the … dimensions of the "existing area of contaminated groundwater?"*

Continued monitoring is planned as part of the Final Remedy for the Site. Currently, groundwater is sampled annually for 1,4-dioxane, TCE and its degradation products, and site-specific metals and indicator parameters to monitor previous waste management activities. Once corrective action has progressed through the investigation phase to the corrective measures phase, specific perimeter wells will periodically be monitored for site-specific constituents.

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11.0 STEP EIGHT – EI DETERMINATION

The evaluation completed in steps one through five of the EI determination process results in one of three potential responses:

- “YE” (yes, “migration of contaminated groundwater under control” has been verified),
- “NO” (“migration of contaminated groundwater” is not “under control”), or
- “IN” (more information is needed to make a determination.)

A positive CA750 EI determination (YE) was achieved for the Kinston Plant as summarized in the USEPA score sheet included in the Executive Summary of this report and depicted in the flowchart (Figure 6). 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 CA at or from the identified facility [i.e., sitewide]) (USEPA 1999).

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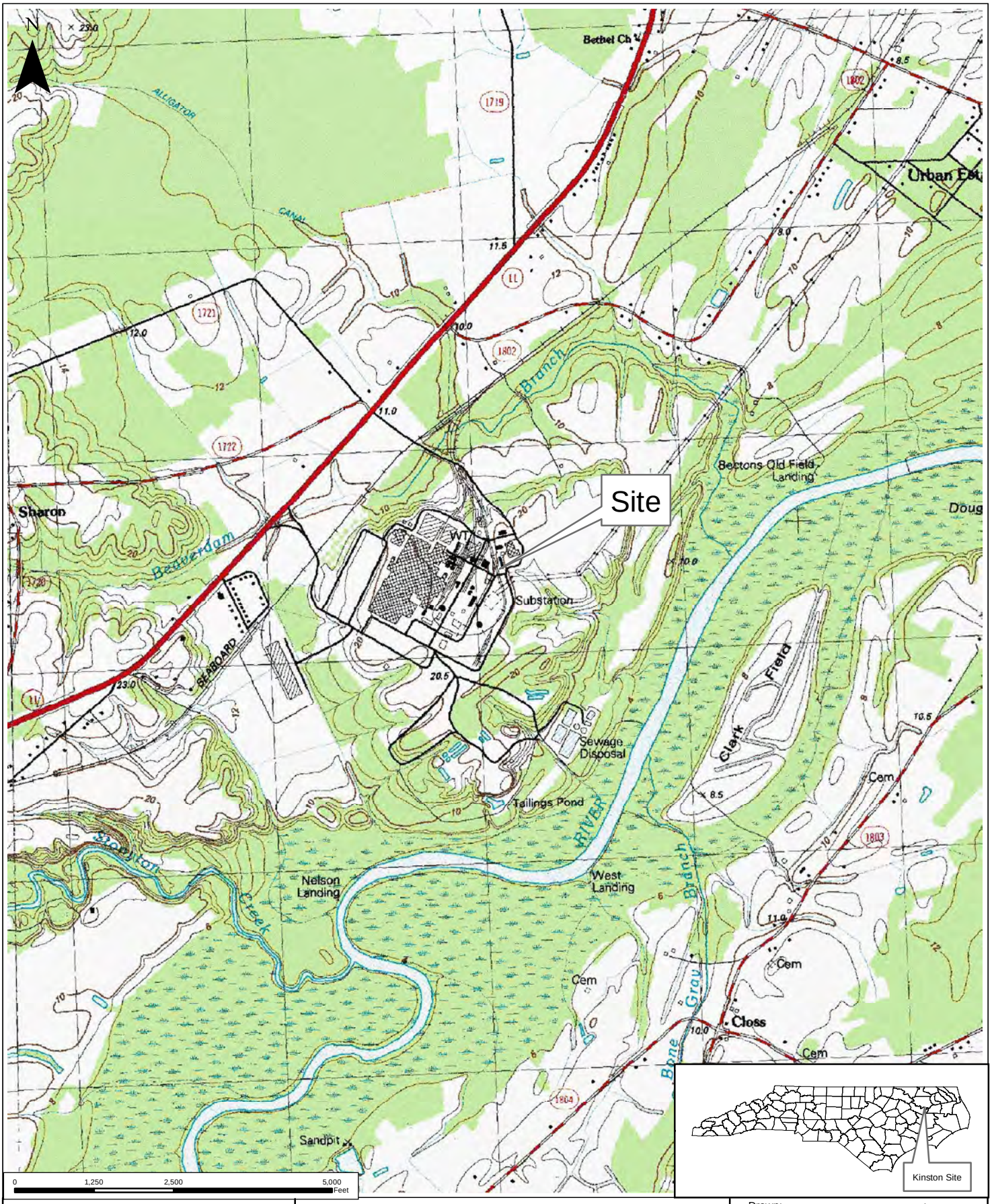
FIGURES



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PARSONS

PE&I

4701 Hedgemore Dr.
Charlotte, NC 28209

Topographic Site Location Map
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 4/13/2014	Parsons Project No.: 446664.01000
Revision: MH	Figure No.: 1
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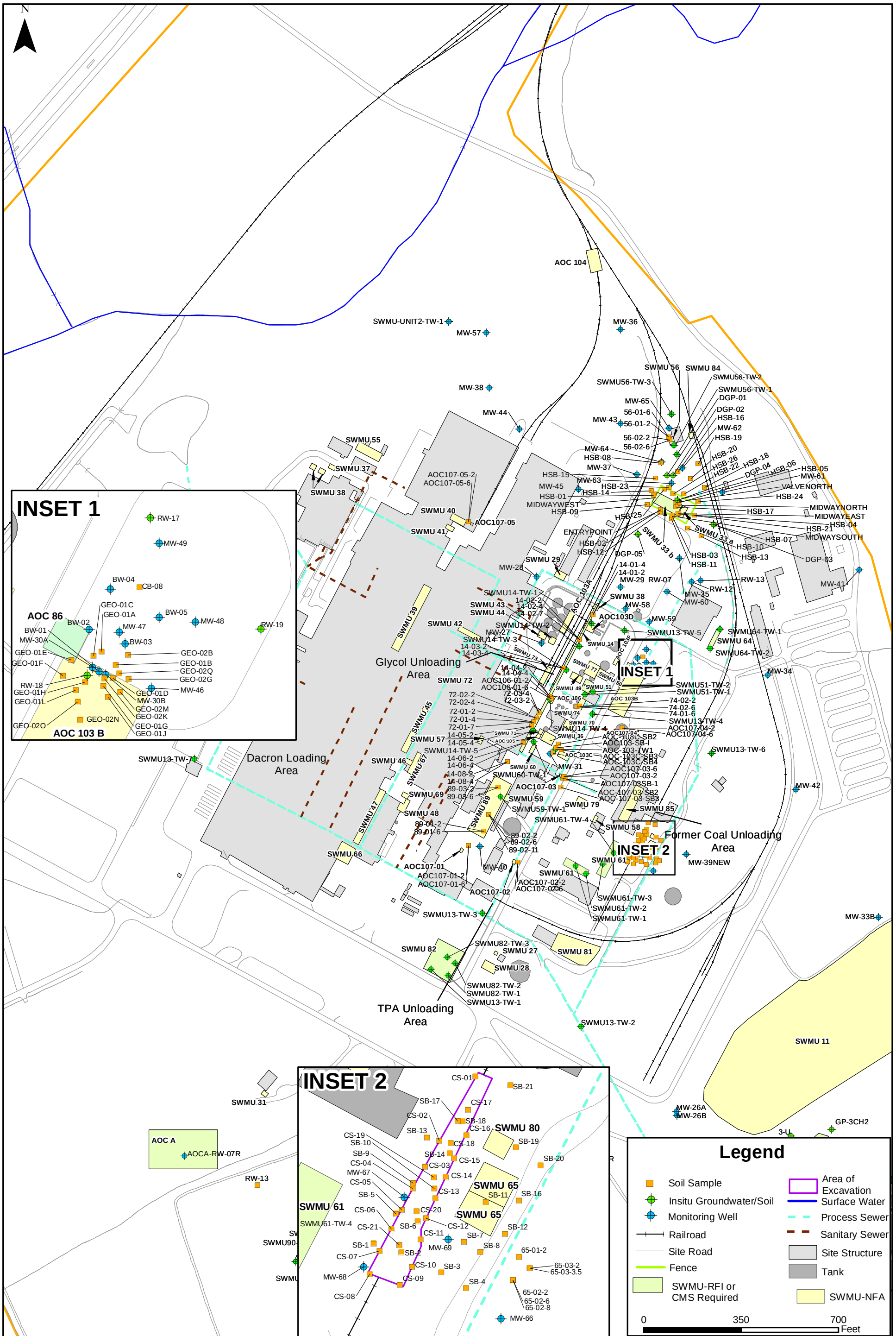

PARSONS

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4701 Hedgemore Dr.
Charlotte, NC 28209

SWMU and AOC Location Map - Manufacturing Area
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 8/12/2014	Parsons Project No.: 446664.01000
Revision: MH	Figure No.: 2
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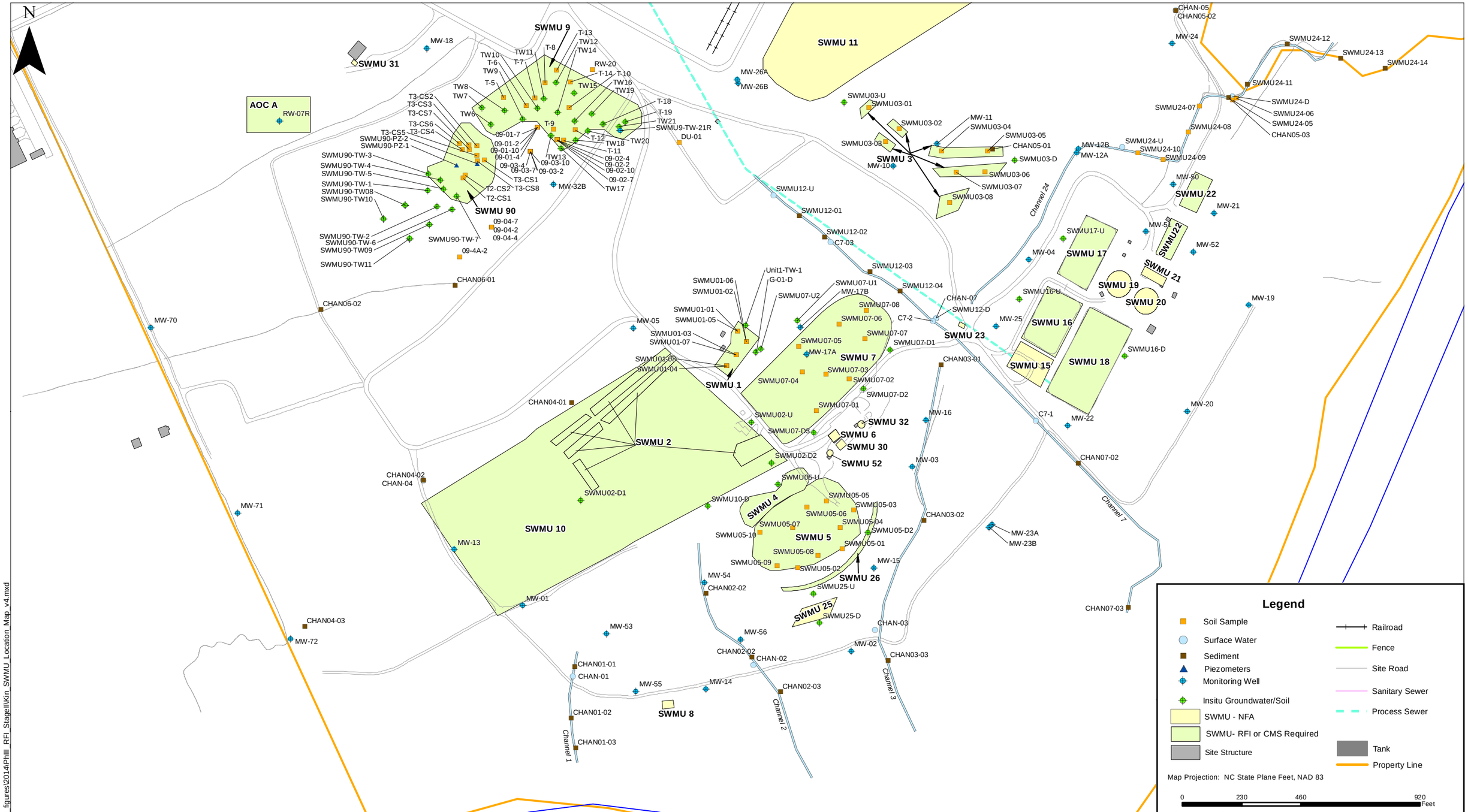

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Charlotte, NC 28209

SWMU and AOC Location Map - South Disposal Area
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 8/1/2014	Parsons Project No.: 446664.01000
Revision:	Figure No.: 3
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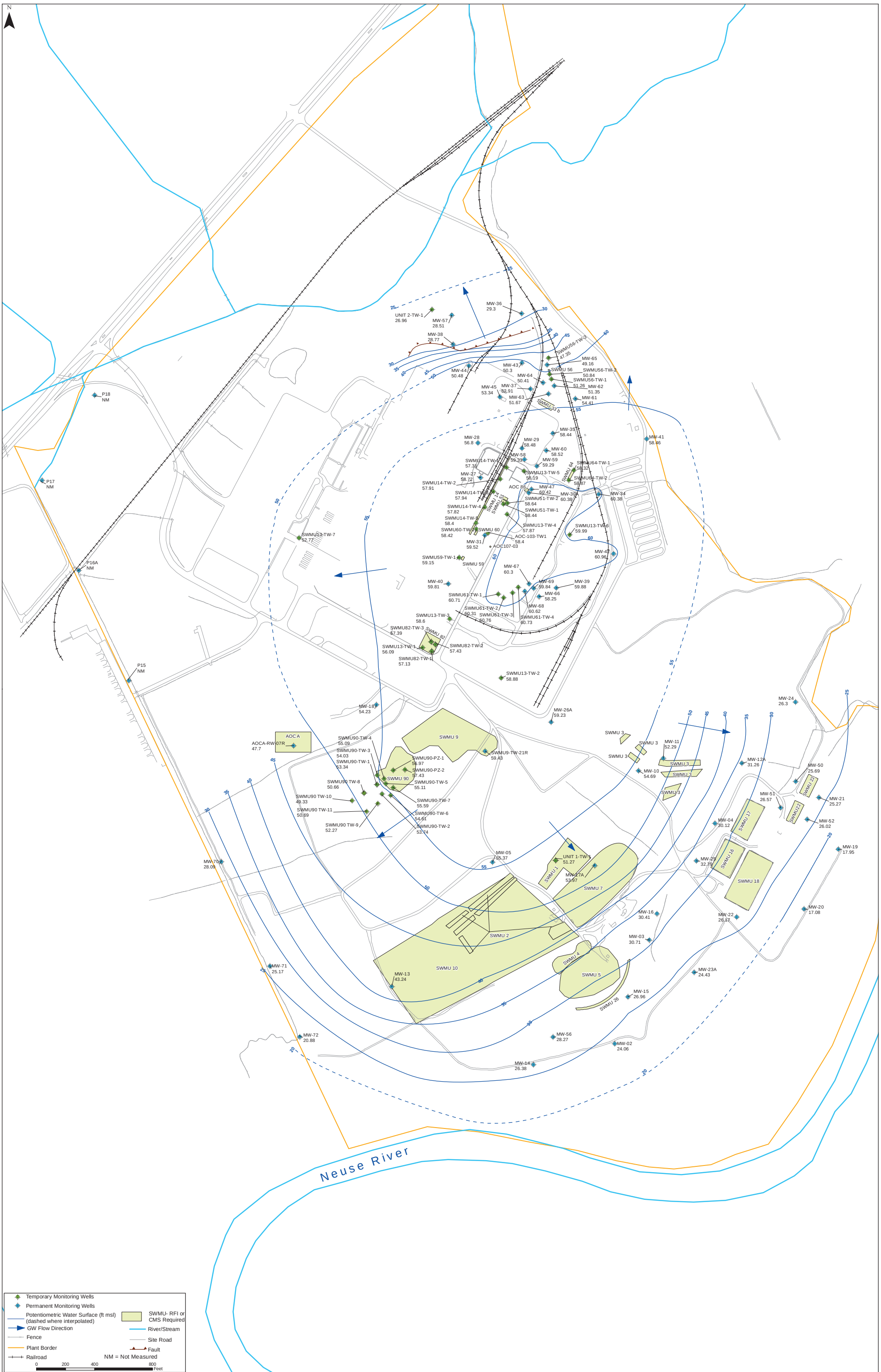

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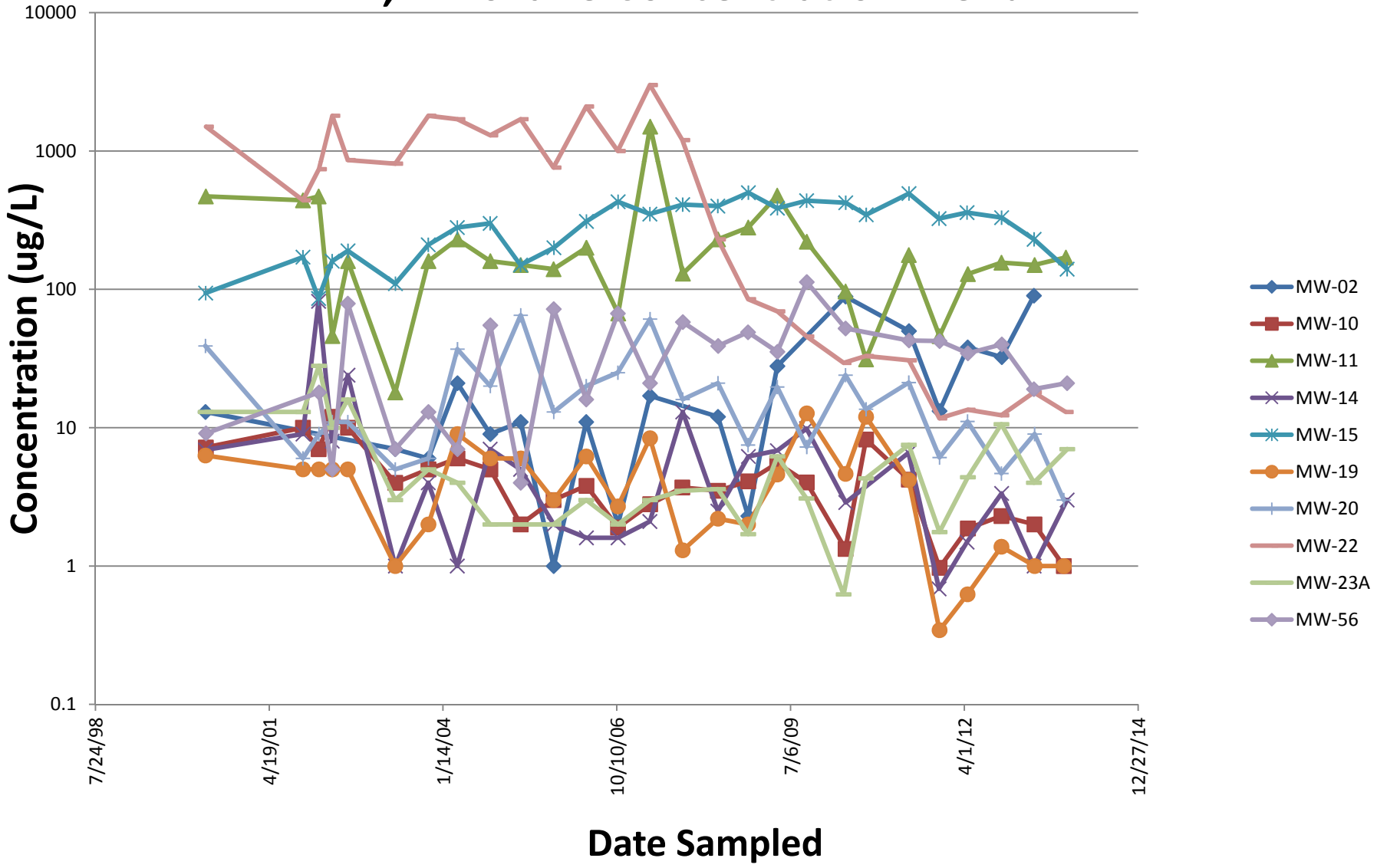
4701 Hedgemore Dr.
Charlotte, NC 28209

Sitewide Potentiometric Surface Map - December 2013
Kinston EI 750
DuPont Kinston Plant
Kinston, North Carolina

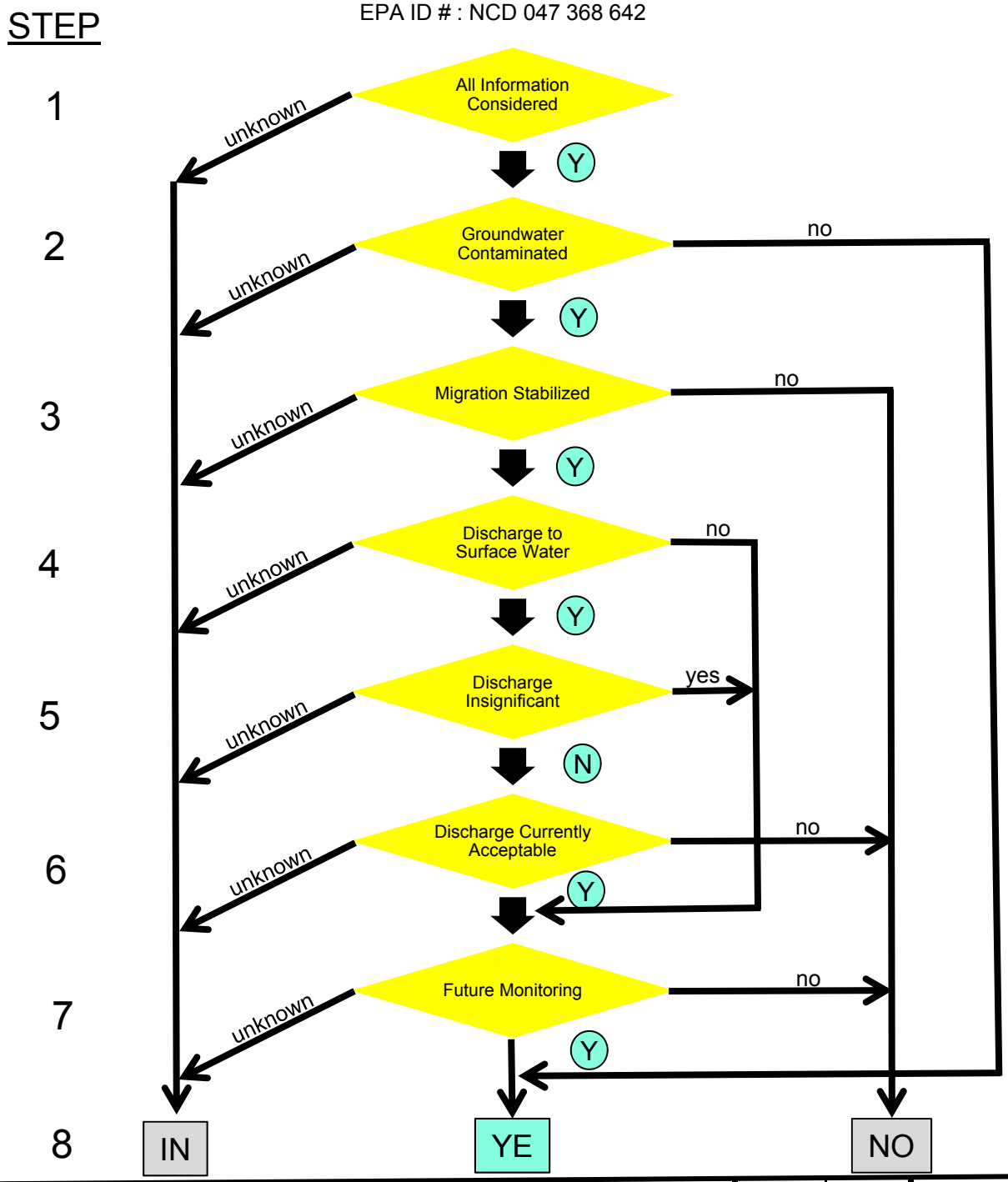
Created: C. Oneal	DuPont Project Number: 504482
Date: 11/18/2014	Parsons Project Number: 448859.01050
Revision: 0	Figure Number: 4
File Name: KIN_SiteWidePotentiometricMapD_PORT_EI750	

Figure 5
1,4-Dioxane Concentration Trend



Migration of Contaminated Groundwater Under Control

Facility Name: DuPont Fluoroproducts Fayetteville Works
City/State: Fayetteville, North Carolina
EPA ID # : NCD 047 368 642



PARSONS Parsons – Environment and Infrastructure 4701 Hedgemore Dr. Charlotte, NC 28209	TITLE: EI CA750 Flow Chart CA750 Environmental Indicator Determination Report DuPont Kinston Plant	DWN:	DES.:	Project No.: 448859
		CHKD:	APPD:	FIGURE NO.:
		DATE: 07/29/14	REV.:	6

TABLES

Table 1
Constituents of Potential Concern in Groundwater
Manufacturing Area
DuPont Kinston Plant

Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	Maximum Detected Value	Location of Maximum Detection
1,2-Dichloroethane	UG/L	-	0.4	-	[2J]	MW-67
1,2-Diphenylhydrazine	UG/L	0.067	-	-	[4J]	SWMU14-TW-5
1,4-Dioxane	UG/L	-	3	-	[160]	MW-28
4-Chloroaniline	UG/L	0.32	-	-	[0.6J]	SWMU14-TW-4 & 5, MW-27
Acetaldehyde	UG/L	2.2	-	-	[71J]	UNIT2-TW-1
Antimony	UG/L	-	-	1	[17.7J]	MW-31
Arsenic	UG/L	-	10	-	[34.8]	MW-40
Benzo(A)Anthracene	UG/L	-	0.05	-	[0.2J]	SWMU56-TW-1
Benzo(B)Fluoranthene	UG/L	-	0.05	-	[0.3J]	SWMU56-TW-1
Benzo(A)Pyrene	UG/L	-	0.005	-	[0.1J]	SWMU56-TW-1
Beryllium	UG/L	-	-	4	[16.2]	MW-30A
Biphenyl	UG/L	-	400	-	[1600]	SWMU60-TW-1
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	[5J]	MW-40
Cadmium	UG/L	-	2	-	[2.9J]	SWMU56-TW-1
Chromium	UG/L	-	10	-	[64.2]	SWMU56-TW-1
cis-1,2 Dichloroethene	UG/L	-	70	-	[470]	BW-01
Cobalt	UG/L	-	-	1	[59.2]	MW-58
Diphenyl Ether	UG/L	-	-	100	[6800]	SWMU60-TW-1
Lead	UG/L	-	15	-	[26.1]	SWMU56-TW-1
Naphthalene	UG/L	-	6	-	[12]	SWMU14-TW-5
Nickel	UG/L	-	100	-	[529]	MW-30A
Phenol	UG/L	-	30	-	[39J]	SWMU14-TW-1
Tetrachloroethene	UG/L	-	0.7	-	[4J]	SWMU14-TW-5
Thallium	UG/L	-	-	0.2	[0.21J]	MW-30A
Trichloroethene	UG/L	-	3	-	[2100]	MW-30A
Vanadium	UG/L	-	-	0.3	[116]	MW-31
Vinyl Chloride	UG/L	-	0.03	-	[4.3]	MW-30A
Zinc	MG/L	-	1	-	[1.57]	MW-30A

NOTES:
UG/L = micrograms per liter ; MG/L = milligrams per liter
NC_2L_2013 = North Carolina 2L Drinking Water Standard 15A NCAC 2L (last updated April 1, 2013)
NC_IMAC_2013 = North Carolina Interim Maximum Allowable Concentration (last updated April 1, 2013)
EPA_SL_Tap_11/2013 = EPA Region IV Regional Screening Level - Tap Water (updated November 2013)

Table 2
Constituents of Potential Concern in Groundwater
South Disposal Area
DuPont Kinston Plant

Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	Maximum Detected Value	Location of Maximum Detection
1,1-Dichloroethane	UG/L	-	6	-	[150]	UNIT1-TW-1
1,1-Dichloroethene	UG/L	-	7	-	[21]	MW-17A
1,2-Dichloropropane	UG/L	-	0.6	-	[1J]	MW-17A
1,4-Dioxane	UG/L	-	3	-	[280]	MW-12A
2-Methylnaphthalene	UG/L	-	30	-	[44J]	MW-11
2-Methylphenol (O-Cresol)	UG/L	-	-	400	[540]	MW-11
4-Methylphenol (P-Cresol)	UG/L	-	40	-	[52]	MW-17A
Acetaldehyde	UG/L	2.2	-	-	[540J]	MW-17A
Acrolein	UG/L	-	-	4	[8.3J]	MW-22
Antimony	UG/L	-	-	1	[30.2J]	MW-52
Arsenic	UG/L	-	10	-	[138]	SWMU90-TW-1
Benzene	UG/L	-	1	-	[130J]	MW-11
Biphenyl	UG/L	-	400	-	[660]	MW-22
Chloroform	UG/L	-	70	-	[600]	MW-11
Chromium	UG/L	-	10	-	[93.1]	SWMU90-TW-4
cis-1,2 Dichloroethene	UG/L	-	70	-	[660]	MW-17A
Cobalt	UG/L	-	-	1	[45.1]	SWMU90-TW-8
Diphenyl Ether	UG/L	-	-	100	[5800]	MW-22
Ethylene Glycol	MG/L	-	10	-	[17]	MW-11
Fluoride	MG/L	-	2	-	[12.0]	MW-17A
Iron	UG/L	-	300	-	[153000]	MW-17A
Isobutyl Alcohol	UG/L	4600	-	-	[30000]	MW-11
Lead	UG/L	-	15	-	[37.4]	MW-17A
Manganese	UG/L	-	50	-	[311]	MW-17A
Methylene Chloride	UG/L	-	5	-	[2600B]	MW-11
Phenol	UG/L	-	30	-	[56]	MW-22
Pyridine	UG/L	15	-	-	[47J]	MW-11
Terephthalic Acid	UG/L	15000	-	-	[260000]	MW-11
Vanadium	UG/L	-	-	0.3	[28.6]	SWMU90-TW-4
Vinyl Chloride	UG/L	-	0.03	-	[37]	SWMU90-TW-4

NOTES:
UG/L = micrograms per liter ; MG/L = milligrams per liter
NC_2L_2013 = North Carolina 2L Drinking Water Standard 15A NCAC 2L (last updated April 1, 2013)
NC_IMAC_2013 = North Carolina Interim Maximum Allowable Concentration (last updated April 1, 2013)
EPA_SL_Tap_11/2013 = EPA Region IV Regional Screening Level - Tap Water (updated November 2013)

Table 3
Groundwater to Surface Water Interaction
Manufacturing Area
DuPont Kinston Plant

Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	Maximum Detected Value	10x Screening Level
Cobalt	UG/L	-	-	1	[2.6J]	10
Trichloroethene	UG/L	-	3	-	[3]	30

NOTES:
UG/L = micrograms per liter ; MG/L = milligrams per liter
NC_2L_2013 = North Carolina 2L Drinking Water Standard 15A NCAC 2L (last updated April 1, 2013)
NC_IMAC_2013 = North Carolina Interim Maximum Allowable Concentration (last updated April 1, 2013)
EPA_SL_Tap_11/2013 = EPA Region IV Regional Screening Level - Tap Water (updated November 2013)

Table 4
Groundwater to Surface Water Interaction
South Disposal Area
DuPont Kinston Plant

Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	Maximum Detected Value	10x Screening Level
1,4-Dioxane	UG/L	-	3	-	**[230]**	30
2-Methylnaphthalene	UG/L	-	30	-	[44J]	300
2-Methylphenol (O-Cresol)	UG/L	-	-	400	[540]	4000
Acetaldehyde	UG/L	2.2	-	-	**[250J]**	22
Acrolein	UG/L	-	-	4	[8.3J]	40
Antimony	UG/L	-	-	1	**[25.4J]**	10
Arsenic	UG/L	-	10	-	[38.1]	100
Benzene	UG/L	-	1	-	**[130J]**	10
Biphenyl	UG/L	-	400	-	[660]	4000
Chloroform	UG/L	-	70	-	[600]	700
Cobalt	UG/L	-	-	1	**[10.5]**	10
Diphenyl Ether	UG/L	-	-	100	**[5800]**	1000
Ethylene Glycol	MG/L	-	10	-	[17]	100
Iron	UG/L	-	300	-	**[79800]**	3000
Isobutyl Alcohol	UG/L	4600	-	-	[30000]	46000
Manganese	UG/L	-	50	-	[292]	500
Methylene Chloride	UG/L	-	5	-	**[2600B]**	50
Phenol	UG/L	-	30	-	[56]	300
Pyridine	UG/L	15	-	-	[47J]	150
Terephthalic Acid	UG/L	15000	-	-	**[260000]**	150000
Total Dissolved Solids	MG/L	-	500	-	[886]	5000
Vanadium	UG/L	-	-	0.3	**[21.3]**	3
Vinyl Chloride	UG/L	-	0.03	-	**[0.60B]**	0.3

NOTES:
UG/L = micrograms per liter ; MG/L = milligrams per liter
NC_2L_2013 = North Carolina 2L Drinking Water Standard 15A NCAC 2L (last updated April 1, 2013)
NC_IMAC_2013 = North Carolina Interim Maximum Allowable Concentration (last updated April 1, 2013)
EPA_SL_Tap_11/2013 = EPA Region IV Regional Screening Level - Tap Water (updated November 2013)
Bold/highlighted value exceeds 10x screening level

Table 5
Groundwater Discharge to Neuse River
Comparison to Water Quality Screening Levels
DuPont Kinston Plant

Csw = Cgw x Qa / (Qr x F x 60 sec/min)
Qa = K x I x A

where	Parameter	Value	Reference
Csw =	Concentration in surface water (Neuse River), ug/L	calculated	USEPA, 1989 (Equation 3-37) and USEPA, 1996 (Exhibit 6-2) - as modified.
Cgw =	Concentration in groundwater, ug/L	chemical-specific	Maximum concentration from perimeter wells (MW-02, MW-10, MW-11, MW-14, MW-15, MW-19, MW-20, MW-22, MW-23A, MW-53, and MW-56)
Qa =	Flow in aquifer or aquifer zone, cf/min	calculated	
K	Hydraulic conductivity (ft/min)	2.36E-03	DuPont, 2000 Phase I RFI Report page 44
I	Gradient (ft/ft)	2.70E-02	DuPont, 2000 Phase I RFI Report page 44
A	Aquifer cross section (ft^2)	3000	600 feet wide x 5 feet thick
Qr =	Flow in river (at USGS station 02089500), cfs		
	Harmonic mean flow (for carcinogens)	2554	USGS 02089500 station data 1931-2000, waterdata.usgs.gov
	7Q10 (for noncarcinogenic substances and for protection of aquatic life)	283	DuPont, 2000 Phase I RFI Report
F =	Mixing fraction of river	0.5	One-half of river cross section.

		Cgw	Qr	Qa	Csw	WQSL		
		Maximum Detected Value	Neuse River Flow [1]	Flow = KiA	Modeled Conc in Neuse River [2]	Water Quality Screening Level [3]		Csw > WQSL?
Constituent		ug/L	cfs	cf/min	ug/L	ug/L	Source	
1,4-Dioxane	c	2.30E+02	2.83E+02	1.91E-01	5.18E-03	8.00E+01	2B_ORG	No
Acetaldehyde	c	2.50E+02	2.83E+02	1.91E-01	5.63E-03	9.70E+02	2B_AQ	No
Antimony	n	2.54E+01	2.83E+02	1.91E-01	5.72E-04	6.40E+02	NRWQC	No
Benzene	c	1.30E+02	2.83E+02	1.91E-01	2.93E-03	5.10E+01	2B_ORG	No
Cobalt	n	1.05E+01	2.83E+02	1.91E-01	2.36E-04	4.00E+00	ECOTOX	No
Diphenyl Ether [4]	n	5.80E+03	2.83E+02	1.91E-01	1.31E-01	1.80E+01	2B_AQ	No
Iron	n	7.98E+04	2.83E+02	1.91E-01	1.80E+00	1.00E+03	2B_AQ	No
Methylene Chloride	c	2.60E+03	2.83E+02	1.91E-01	5.85E-02	5.90E+02	2B_ORG	No
Vanadium	n	2.13E+01	2.83E+02	1.91E-01	4.80E-04	na	na	---
Vinyl Chloride	c	6.00E-01	2.83E+02	1.91E-01	1.35E-05	2.40E+00	2B_ORG	No

Notes:
c - cancer-linked compound.
n - noncarcinogen.
WQSL - Water Quality Screening Level.
na - not available

Footnotes:
1 = The lower 7Q10 Neuse River flow was used when modeling river concentration to be conservative when comparing against screening levels
2 = Neuse River classified as Class C waters in 15A NCAC 2B

3 = Lower of the 15A NCAC 2B values for protection of freshwater organisms (chronic) (2B_AQ) and protection of human health (fish consumption) (2B_ORG) - [current as of 5/15/2013], or the EPA's National Recommended Water Quality Criteria (NRWQC; 2009) if no NCAC 2B value, or US EPA Ecotoxicology Database System (ECOTOX) if no NRWQC value.
4 = Biphenyl Water Quality Screening Level used for Diphenyl Ether

References:
DuPont, 2000 - RCRA Facility Investigation Phase I Report Volume 1 of 2. August 2000 with March 2001 revisions.
USEPA, 1989. Exposure Assessment Methods Handbook. EPA/600. September.
USEPA, 1996. NPDES Permit Writer's Manual. EPA/833/B-96/003. December

APPENDIX A
GROUNDWATER ANALYTICAL RESULTS

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	AOCA-RW-07R	MW-02	MW-2	MW-03	MW-4	MW-5	MW-10
				Sample Date	10/24/2013	05/06/2013	11/13/2013	11/11/2013	11/11/2013	11/08/2013	05/09/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1			<1U	<1U	<1U	<1U	
1,1,1-Trichloroethane	UG/L	-	200	-			<0.8U	<0.8U	<0.8U	<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-			<1U	<1U	<1U	<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6			<0.8U	<0.8U	<0.8U	<0.8U	
1,1-Dichloroethane	UG/L	-	6	-			<1U	<1U	<1U	<1U	
1,1-Dichloroethene	UG/L	-	7	-			<0.8U	<0.8U	<0.8U	<0.8U	
1,2,3-Trichloropropane	UG/L	-	0.005	-			<1U	<1U	<1U	<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2			<0.6U	<0.5U	<0.5U	<0.6U	
1,2,4-Trichlorobenzene	UG/L	-	70	-			<0.6U	<0.5U	<0.5U	<0.6U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-			<2U	<2U	<2U	<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-			<1U	<1U	<1U	<1U	
1,2-Dichlorobenzene	UG/L	-	20	-			<0.6U	<0.5U	<0.5U	<0.6U	
1,2-Dichloroethane	UG/L	-	0.4	-			<1U	<1U	<1U	<1U	
1,2-Dichloropropane	UG/L	-	0.6	-			<1U	<1U	<1U	<1U	
1,2-Diphenylhydrazine	UG/L	0.067	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
1,3,5-Trinitrobenzene	UG/L	460	-	-			<6UJ	<5U	<5U	<6U	
1,3-Dichlorobenzene	UG/L	-	200	-			<0.6U	<0.5U	<0.5U	<0.6U	
1,3-Dinitrobenzene	UG/L	1.5	-	-			<2U	<2U	<2U	<2U	
1,4-Dichlorobenzene	UG/L	-	6	-			<0.6U	<0.5U	<0.5U	<0.6U	
1,4-Dioxane	UG/L	-	3	-		[90]	[82]	[85]	[10]	<1U	2J
1,4-Naphthoquinone	UG/L	-	-	-			<12R	<10R	<11R	<11R	
1-Naphthylamine	UG/L	-	-	-			<6U	<5U	<5U	<6U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-			<0.6U	<0.5U	<0.5U	<0.6U	
2,4,5-Trichlorophenol	UG/L	-	-	63			<0.6U	<0.5U	<0.5U	<0.6U	
2,4,6-Trichlorophenol	UG/L	-	-	4			<0.6U	<0.5U	<0.5U	<0.6U	
2,4-Dichlorophenol	UG/L	-	-	0.98			<0.6U	<0.5U	<0.5U	<0.6U	
2,4-Dimethylphenol	UG/L	-	100	-			<0.6U	<0.5U	<0.5U	<0.6U	
2,4-Dinitrophenol	UG/L	30	-	-			<12U	<10U	<11U	<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1			<1U	<1U	<1U	<1U	
2,6-Dichlorophenol	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
2,6-Dinitrotoluene	UG/L	0.042	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
2-Acetylaminofluorene	UG/L	0.013	-	-			<2U	<2U	<2U	<2U	
2-Chloronaphthalene	UG/L	550	-	-			<0.5U	<0.4U	<0.4U	<0.4U	
2-Chlorophenol	UG/L	-	0.4	-			<0.6U	<0.5U	<0.5U	<0.6U	
2-Hexanone	UG/L	-	-	40			<3U	<3U	<3U	<3U	
2-Methylnaphthalene	UG/L	-	30	-			<0.68U	<0.60U	<0.62U	<0.61U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400			<0.6U	<0.5U	<0.5U	<0.6U	
2-Naphthylamine	UG/L	0.033	-	-			<6U	<5U	<5U	<6U	
2-Nitroaniline	UG/L	150	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
2-Nitrophenol	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
2-Picoline	UG/L	-	-	-			<2U	<2U	<2U	<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-			<2U	<2U	<2U	<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-			<30U	<26U	<27U	<28U	
3-Methylcholanthrene	UG/L	0.00098	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
3-Nitroaniline	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-			<6U	<5U	<5U	<6U	
4-Aminobiphenyl	UG/L	0.0026	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-			<0.6U	<0.5U	<0.5U	<0.6U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	AOCA-RW-07R	MW-02	MW-2	MW-03	MW-4	MW-5	MW-10
				Sample Date	10/24/2013	05/06/2013	11/13/2013	11/11/2013	11/11/2013	11/08/2013	05/09/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Nitroaniline	UG/L	3.3	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
4-Nitrophenol	UG/L	-	-	-			<12U	<10U	<11U	<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-			<24U	<21U	<22U	<22U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Acenaphthene	UG/L	-	80	-			<0.68U	<0.60U	<0.62U	<0.61U	
Acenaphthylene	UG/L	-	200	-			<0.80U	<0.70U	<0.72U	<0.71U	
Acetaldehyde	UG/L	2.2	-	-			<50U	<50U	<50U	<100U	
Acetone	MG/L	-	6	-			<0.006U	<0.006U	<0.006U	<0.006U	
Acetonitrile	UG/L	130	-	-			<25U	<25U	<25U	<25U	
Acetophenone	UG/L	-	-	700			<0.6U	<0.5U	<0.5U	<0.6U	
Acrolein	UG/L	-	-	4			<1.6UJ	<1.6UJ	<1.6UJ	<1.6UJ	
Acrylonitrile	UG/L	0.045	-	-			<1.9U	<1.9U	<1.9U	<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-			<1U	<1U	<1U	<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-			<6U	<5U	<5U	<6U	
Aniline	UG/L	12	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Anthracene	MG/L	-	2	-			<0.00068U	<0.0006U	<0.00062U	<0.00061U	
Antimony	UG/L	-	-	1	<5.3U		<5.3U	<5.3U	<5.3U	<5.3U	
Aramite	UG/L	1.1	-	-			<6U	<5U	<5U	<6U	
Arsenic	UG/L	-	10	-	<0.42U		<0.42U	[11.1]	5.1	<0.78U	
Barium	UG/L	-	700	-	7.6J		15.5	17.6	2J	8.4J	
Benzene	UG/L	-	1	-			<2.00U	<2.00U	<2.00U	<2.00U	
Benzo(A)Anthracene	UG/L	-	0.05	-			<0.80U	<0.70U	<0.72U	<0.71U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-			<0.68U	<0.60U	<0.62U	<0.61U	
Benzo(G,H,I)Perylene	UG/L	-	200	-			<0.68U	<0.60U	<0.62U	<0.61U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-			<1.0U	<0.89U	<0.93U	<0.91U	
Benzo(A)Pyrene	UG/L	-	0.005	-			<0.68U	<0.60U	<0.62U	<0.61U	
Benzyl Alcohol	UG/L	-	-	700			<6U	<5U	<5U	<6U	
Beryllium	UG/L	-	-	4	<0.67U		<0.67U	<0.67U	<0.67U	<0.67U	
Biphenyl	UG/L	-	400	-			<0.6U	<0.5U	<0.5U	<0.6U	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-			<0.6U	<0.5U	<0.5U	<0.6U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-			<2U	<2U	<2U	<2U	
Bromodichloromethane	UG/L	-	0.6	-			<1U	<1U	<1U	<1U	
Bromoform	UG/L	-	4	-			<1U	<1U	<1U	<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-			<0.002U	<0.002U	<0.002U	<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-			<46U	<40U	<41U	<40U	
C19 to C36 Aliphatics	UG/L	-	-	-			<57U	<50U	<52U	<51U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U	<50.0U	<50.0U	<50.0U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	AOCA-RW-07R	MW-02	MW-2	MW-03	MW-4	MW-5	MW-10
				Sample Date	10/24/2013	05/06/2013	11/13/2013	11/11/2013	11/11/2013	11/08/2013	05/09/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-			<50.0U	<50.0U	<50.0U	<50.0U	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-			<20.0U	<20.0U	<20.0U	<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U	<50.0U	<50.0U	<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-			<34U	<30U	<31U	<30U	
Cadmium	UG/L	-	2	-	<0.76U		0.94J	1.5J	0.83J	0.95J	
Carbon Disulfide	UG/L	-	700	-			<1U	<1U	<1U	<1U	
Carbon Tetrachloride	UG/L	-	0.3	-			<1U	<1U	<1U	<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-			<0.8U	6	<0.8U	<0.8U	
Chlorobenzilate	UG/L	0.27	-	-			<4UJ	<3U	<3U	<3U	
Chlorodibromomethane	UG/L	-	0.4	-			<1U	<1U	<1U	<1U	
Chloroform	UG/L	-	70	-			<0.8U	<0.8U	<0.8U	<0.8U	
Chloroprene	UG/L	0.016	-	-			<1U	<1U	<1U	<1U	
Chromium	UG/L	-	10	-	<1.6U		<1.6U	<1.6U	<1.6U	2.1J	
Chrysene	UG/L	-	5	-			<0.57U	<0.50U	<0.52U	<0.51U	
cis-1,2 Dichloroethene	UG/L	-	70	-			<0.8U	<0.8U	<0.8U	<0.8U	
cis-1,3-Dichloropropene	UG/L	-	-	-			<1U	<1U	<1U	<1U	
Cobalt	UG/L	-	-	1	<1.3U		<1.3U	<1.3U	<1.3U	<1.3U	
Copper	MG/L	-	1	-	<0.0027U		<0.0027U	<0.0027U	<0.0027U	<0.0027U	
Di-N-Butyl Phthalate	UG/L	-	700	-			<2U	<2U	<2U	<2U	
Diallate	UG/L	0.46	-	-			<1U	<1U	<1U	<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-			<0.57U	<0.50U	<0.52U	<0.51U	
Dibenzofuran	UG/L	-	-	28			<0.6U	<0.5U	<0.5U	<0.6U	
Dichlorodifluoromethane	MG/L	-	1	-			<0.002U	<0.002U	<0.002U	<0.002U	
Diethyl Phthalate	MG/L	-	6	-			<0.002U	<0.002U	<0.002U	<0.002U	
Diethylene Glycol	UG/L	-	-	-			<8000U	<8000U	<8000U	<8000U	
Dimethoate	UG/L	3.1	-	-			<4U	<3U	<3U	<3U	
Dimethyl Phthalate	UG/L	-	-	-			<2U	<2U	<2U	<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100			<0.6U	13	<0.5U	<0.6U	
Ethyl Chloride	UG/L	-	3000	-			<1U	<1U	<1U	<1U	
Ethyl Methacrylate	UG/L	420	-	-			<1U	<1U	<1U	<1U	
Ethyl Methanesulfonate	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Ethylbenzene	UG/L	-	600	-			<2.00U	<2.00U	<2.00U	<2.00U	
Ethylene Glycol	MG/L	-	10	-			<8U	<8U	<8U	<8U	
Fluoranthene	UG/L	-	300	-			<0.57U	<0.50U	<0.52U	<0.51U	
Fluorene	UG/L	-	300	-			<0.68U	<0.60U	<0.62U	<0.61U	
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-			<0.1U	<0.1U	<0.1U	<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-			<0.6U	<0.5U	<0.5U	<0.6U	
Hexachlorocyclopentadiene	UG/L	22	-	-			<6U	<5U	<5U	<6U	
Hexachloroethane	UG/L	0.79	-	-			<1U	<1U	<1U	<1U	
Hexachloropropylene	UG/L	-	-	-			<2UJ	<2U	<2U	<2U	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-			<0.68U	<0.60U	<0.62U	<0.61U	
Iodomethane	UG/L	-	-	-			<1U	<1U	<1U	<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
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				Location	AOCA-RW-07R	MW-02	MW-2	MW-03	MW-4	MW-5	MW-10
				Sample Date	10/24/2013	05/06/2013	11/13/2013	11/11/2013	11/11/2013	11/08/2013	05/09/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-			<100U	<100U	<100U	<100U	
Isodrin	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Isophorone	UG/L	-	40	-			<0.6U	<0.5U	<0.5U	<0.6U	
Isosafrole	UG/L	-	-	-			<2U	<2U	<2U	<2U	
Lead	UG/L	-	15	-	0.34J		<0.085U	<0.085U	<0.085U	0.13J	
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-	<0.06U		<0.06U	<0.06U	<0.06U	<0.06U	
Meta- And Para-Xylene	UG/L	-	-	-			<5.00U	<5.00U	<5.00U	<5.00U	
Methacrylonitrile	UG/L	1.5	-	-			<10U	<10U	<10U	<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-			<18U	<16U	<16U	<17U	
Methyl Bromide	UG/L	7	-	10			<1U	<1U	<1U	<1U	
Methyl Chloride	UG/L	-	3	-			<1U	<1U	<1U	<1U	
Methyl Ethyl Ketone	MG/L	-	4	-			<0.003U	<0.003U	<0.003U	<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100			<3U	<3U	<3U	<3U	
Methyl Methacrylate	UG/L	-	-	25			<1U	<1U	<1U	<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-			<1U	<1U	<1U	<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-			<2.00U	<2.00U	<2.00U	<2.00U	
Methylene Bromide	UG/L	-	-	70			<1U	<1U	<1U	<1U	
Methylene Chloride	UG/L	-	5	-			<2U	<2U	<2U	<2U	
N-Dioctyl Phthalate	UG/L	-	100	-			<2U	<2U	<2U	<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-			<2U	<2U	<2U	<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-			<2U	<2U	<2U	<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-			<2U	<2U	<2U	<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
N-Nitrosomorpholine	UG/L	0.01	-	-			<2U	<2U	<2U	<2U	
N-Nitrosopiperidine	UG/L	0.0071	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Naphthalene	UG/L	-	6	-			<3.00U	0.2J	<3.00U	<3.00U	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-			<50.0U	<50.0U	<50.0U	<50.0U	
Nickel	UG/L	-	100	-	<1.5U		3.9J	<1.5U	<1.5U	<1.5U	
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-			<2U	<2U	<2U	<2U	
O-Toluidine	UG/L	-	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Ortho-Xylene	UG/L	190	-	-			<2.00U	<2.00U	<2.00U	<2.00U	
para-Phenylenediamine	UG/L	3000	-	-			<91U	<78U	<82U	<83U	
Pentachlorobenzene	UG/L	2.3	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Pentachloroethane	UG/L	0.56	-	-			<1U	<1U	<1U	<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-			<2U	<2U	<2U	<2U	
Pentachlorophenol	UG/L	-	0.3	-			<1U	<1U	<1U	<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Phenanthrene	UG/L	-	200	-			<0.68U	<0.60U	<0.62U	<0.61U	

Appendix A
Groundwater Analytical Results
South Disposal Area
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				Location	AOCA-RW-07R	MW-02	MW-2	MW-03	MW-4	MW-5	MW-10
				Sample Date	10/24/2013	05/06/2013	11/13/2013	11/11/2013	11/11/2013	11/08/2013	05/09/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-			<0.6U	<0.5U	<0.5U	<0.6U	
Pronamide	UG/L	900	-	-			<0.6U	<0.5U	<0.5U	<0.6U	
Propionitrile	UG/L	-	-	-			<30U	<30U	<30U	<30U	
Propylene Glycol	UG/L	-	-	140000			<8000U	<8000U	<8000U	<8000U	
Pyrene	UG/L	-	200	-			<4.6U	<4.0U	<4.1U	<4.0U	
Pyridine	UG/L	15	-	-			<2U	<2U	<2U	<2U	
Safrole	UG/L	0.083	-	-			<2U	<2U	<2U	<2U	
Selenium	UG/L	-	20	-	<0.5UJ		<0.5U	<0.5U	<0.5U	<0.5U	
Silver	UG/L	-	20	-	<2.1U		<2.1U	<2.1U	<2.1U	<2.1U	
Styrene	UG/L	-	70	-			<1U	<1U	<1U	<1U	
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-			<100U	<100U	<100U	<100U	
Tetrachloroethene	UG/L	-	0.7	-			<0.8U	<0.8U	<0.8U	<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-			<1U	<1U	<1U	<1U	
Thallium	UG/L	-	-	0.2	<0.15U		<0.15U	<0.15U	<0.15U	<0.15U	
Thionazin	UG/L	-	-	-			<2U	<2U	<2U	<2U	
Tin	UG/L	-	-	2000	<2.9U		<2.9U	<2.9U	<2.9U	<2.9U	
Toluene	UG/L	-	600	-			<2.00U	<2.00U	<2.00U	<2.00U	
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-			<0.8U	<0.8U	<0.8U	<0.8U	
trans-1,3-Dichloropropene	UG/L	-	-	-			<1U	<1U	<1U	<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-			<15U	<15U	<15U	<15U	
Trichloroethene	UG/L	-	3	-			<1U	<1U	<1U	<1U	
Trichlorofluoromethane	MG/L	-	2	-			<0.002U	<0.002U	<0.002U	<0.002U	
Triethylene Glycol	UG/L	-	-	-			<8000U	<8000U	<8000U	<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-			<46U	<40U	<41U	<40U	
Vanadium	UG/L	-	-	0.3	<2U		<2U	<2U	<2U	<2U	
Vinyl Acetate	UG/L	-	-	88			<2U	<2U	<2U	<2U	
Vinyl Chloride	UG/L	-	0.03	-			<0.010U	[0.13]	<0.010U	<0.010U	
Xylenes	UG/L	-	500	-			<0.8U	<0.8U	<0.8U	<0.8U	
Zinc	MG/L	-	1	-	<0.0020U		<0.0020U	<0.0020U	<0.0020U	0.0062J	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-10	MW-10	MW-11	MW-11	MW-12A	MW-13	MW-13
				Sample Date	10/25/2013	10/25/2013	05/10/2013	11/06/2013	11/06/2013	05/07/2013	11/12/2013
				Sample Purpose	Regular Sample	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<1U	<1U		<50U	<10U		<1U
1,1,1-Trichloroethane	UG/L	-	200	-	<0.8U	<0.8U		<40U	<8U		<0.8U
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<1U	<1U		<50U	<10U		<1U
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.8U	<0.8U		<40U	<8U		<0.8U
1,1-Dichloroethane	UG/L	-	6	-	<1U	<1U		<50U	<10U		<1U
1,1-Dichloroethene	UG/L	-	7	-	<0.8U	<0.8U		<40U	<8U		<0.8U
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U	<1U		<50U	<10U		<1U
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,2,4-Trichlorobenzene	UG/L	-	70	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U	<2U		<100U	<20U		<2U
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<1U	<1U		<50U	<10U		<1U
1,2-Dichlorobenzene	UG/L	-	20	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,2-Dichloroethane	UG/L	-	0.4	-	<1U	<1U		<50U	<10U		<1U
1,2-Dichloropropane	UG/L	-	0.6	-	<1U	<1U		<50U	<10U		<1U
1,2-Diphenylhydrazine	UG/L	0.067	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,3,5-Trinitrobenzene	UG/L	460	-	-	<6U	<5U		<53U	<5U		<5UJ
1,3-Dichlorobenzene	UG/L	-	200	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,3-Dinitrobenzene	UG/L	1.5	-	-	<2U	<2U		<21U	<2U		<2U
1,4-Dichlorobenzene	UG/L	-	6	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
1,4-Dioxane	UG/L	-	3	-	<1U	<1U	[150]	[170]	[280]		[81]
1,4-Naphthoquinone	UG/L	-	-	-	<11U	<11U		<110R	<11R		<11R
1-Naphthylamine	UG/L	-	-	-	<6U	<5U		<53U	<5U		<5U
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,4,5-Trichlorophenol	UG/L	-	-	63	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,4,6-Trichlorophenol	UG/L	-	-	4	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,4-Dichlorophenol	UG/L	-	-	0.98	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,4-Dimethylphenol	UG/L	-	100	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,4-Dinitrophenol	UG/L	30	-	-	<11U	<11U		<110U	<11U		<11U
2,4-Dinitrotoluene	UG/L	-	-	0.1	<1U	<1U		<11U	<1U		<1U
2,6-Dichlorophenol	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2,6-Dinitrotoluene	UG/L	0.042	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2-Acetylaminofluorene	UG/L	0.013	-	-	<2U	<2U		<21U	<2U		<2U
2-Chloronaphthalene	UG/L	550	-	-	<0.4U	<0.4U		<4U	<0.4U		<0.4U
2-Chlorophenol	UG/L	-	0.4	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2-Hexanone	UG/L	-	-	40	<3U	<3U		<150U	<30U		<3U
2-Methylnaphthalene	UG/L	-	30	-	<0.58U	<0.58U		[44J]	<0.60UJ		<0.60U
2-Methylphenol (O-Cresol)	UG/L	-	-	400	<0.6U	<0.5U		[540]	<0.5U		<0.5U
2-Naphthylamine	UG/L	0.033	-	-	<6U	<5U		<53U	<5U		<5U
2-Nitroaniline	UG/L	150	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2-Nitrophenol	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
2-Picoline	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
3,3'-Dichlorobenzidine	UG/L	0.11	-	-	<2U	<2U		<21U	<2U		<2U
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-	<28U	<26U		<260U	<27U		<26U
3-Methylcholanthrene	UG/L	0.00098	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
3-Nitroaniline	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-	<6U	<5U		<53U	<5U		<5U
4-Aminobiphenyl	UG/L	0.0026	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Bromophenyl Phenyl Ether	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Chloro-3-Methylphenol	UG/L	1100	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-10	MW-10	MW-11	MW-11	MW-12A	MW-13	MW-13
				Sample Date	10/25/2013	10/25/2013	05/10/2013	11/06/2013	11/06/2013	05/07/2013	11/12/2013
				Sample Purpose	Regular Sample	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Methylphenol (P-Cresol)	UG/L	-	40	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Nitroaniline	UG/L	3.3	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
4-Nitrophenol	UG/L	-	-	-	<11U	<11U		<110U	<11U		<11U
4-Nitroquinoline-N-Oxide	UG/L	-	-	-	<22U	<21U		<210UJ	<22UJ		<21U
5-Nitro-Ortho-Toluidine	UG/L	7	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Acenaphthene	UG/L	-	80	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Acenaphthylene	UG/L	-	200	-	<0.68U	<0.68U		18J	<0.70UJ		<0.70U
Acetaldehyde	UG/L	2.2	-	-	<50U	<50U		[250J]	<500UJ		<50U
Acetone	MG/L	-	6	-	<0.006U	<0.006U		<0.3U	<0.06U		<0.006U
Acetonitrile	UG/L	130	-	-	<25U	<25U			<250U		<25U
Acetophenone	UG/L	-	-	700	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Acrolein	UG/L	-	-	4	<1.6UJ	<1.6UJ		<1.6UJ	<1.6UJ		<1.6UJ
Acrylonitrile	UG/L	0.045	-	-	<1.9U	<1.9U		<1.9U	<1.9U		<1.9U
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-						<0.70U	
Alkalinity, Total	MG CACO3/L	-	-	-						218	
Allyl Chloride	UG/L	0.63	-	-	<1U	<1U		<50U	<10U		<1U
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-	<6U	<5U		<53U	<5U		<5U
Aniline	UG/L	12	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Anthracene	MG/L	-	2	-	<0.00058U	<0.00058U		<0.015UJ	<0.0006UJ		<0.0006U
Antimony	UG/L	-	-	1	<5.3U	<5.3U		[25.4J]	<5.3U		<5.3U
Aramite	UG/L	1.1	-	-	<6U	<5U		<53U	<5U		<5U
Arsenic	UG/L	-	10	-	2J	2J		[38.1]	2.5J	<6.8U	0.71J
Barium	UG/L	-	700	-	1.8J	1.8J		1.3J	8.8J	8.8J	8.1J
Benzene	UG/L	-	1	-	<2.00U	<2.00U		[130J]	<5U		<2.00U
Benzo(A)Anthracene	UG/L	-	0.05	-	<0.68U	<0.68U		<1U	<0.70UJ		<0.70U
Benzo(B)Fluoranthene	UG/L	-	0.05	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Benzo(G,H,I)Perylene	UG/L	-	200	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Benzo(K)Fluoranthene	UG/L	-	0.5	-	<0.87U	<0.87U		<22UJ	<0.90UJ		<0.90U
Benzo(A)Pyrene	UG/L	-	0.005	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Benzyl Alcohol	UG/L	-	-	700	<6U	<5U		<53U	<5U		<5U
Beryllium	UG/L	-	-	4	<0.67U	<0.67U		<0.67U	<0.67U		<0.67U
Biphenyl	UG/L	-	400	-	<0.6U	<0.5U		13	<0.5U		<0.5U
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-	<0.6U	<0.5U		<5UJ	<0.5UJ		<0.5U
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	<2U	<2U		<21U	<2U		<2U
Bromodichloromethane	UG/L	-	0.6	-	<1U	<1U		<50U	<10U		<1U
Bromoform	UG/L	-	4	-	<1U	<1U		<50U	<10U		<1U
Butyl Benzyl Phthalate	MG/L	-	1	-	<0.002U	<0.002U		<0.021U	<0.002U		<0.002U
C11 to C22 Aromatics	UG/L	-	-	-	<39U	<39U		30000J	78J		<40U
C19 to C36 Aliphatics	UG/L	-	-	-	<48U	<48U		<49UJ	<50UJ		<50U
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U	<50.0U		<10000U	<50.0U		<50.0U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-10	MW-10	MW-11	MW-11	MW-12A	MW-13	MW-13
				Sample Date	10/25/2013	10/25/2013	05/10/2013	11/06/2013	11/06/2013	05/07/2013	11/12/2013
				Sample Purpose	Regular Sample	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-	<50.0U	<50.0U		<10000U	<50.0U		<50.0U
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-	<20.0U	<20.0U		<4000U	<20.0U		<20.0U
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U	<50.0U		<10000U	<50.0U		<50.0U
C9 to C18 Aliphatics	UG/L	-	700	-	<29U	<29U		<30UJ	<30UJ		<30U
Cadmium	UG/L	-	2	-	<0.76U	<0.76U		<0.76U	<0.76U	<0.36U	0.86J
Carbon Disulfide	UG/L	-	700	-	<1U	<1U		<50U	<10U		<1U
Carbon Tetrachloride	UG/L	-	0.3	-	<1U	<1U		<50U	<10U		<1U
Chemical Oxygen Demand (COD)	MG/L	-	-	-						57.1	
Chloride	MG/L	-	250	-						17.1	
Chlorobenzene	UG/L	-	50	-	<0.8U	<0.8U		<40U	<8U		4J
Chlorobenzilate	UG/L	0.27	-	-	<3U	<3U		<32U	<3U		<3U
Chlorodibromomethane	UG/L	-	0.4	-	<1U	<1U		<50U	<10U		<1U
Chloroform	UG/L	-	70	-	<0.8U	<0.8U		[600]	<8U		<0.8U
Chloroprene	UG/L	0.016	-	-	<1U	<1U		<50U	<10U		<1U
Chromium	UG/L	-	10	-	1.8J	2J		9.4J	2.3J	<1.1U	<1.6U
Chrysene	UG/L	-	5	-	<0.48U	<0.48U		<1U	<0.50UJ		<0.50U
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.8U	<0.8U		<40U	<8U		<0.8U
cis-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U		<50U	<10U		<1U
Cobalt	UG/L	-	-	1	<1.3U	<1.3U		[10.5]	<1.3U		[1.6J]
Copper	MG/L	-	1	-	<0.0027U	<0.0027U		0.0032J	<0.0027U	<0.0021U	<0.0027U
Di-N-Butyl Phthalate	UG/L	-	700	-	<2U	<2U		<21U	<2U		<2U
Diallate	UG/L	0.46	-	-	<1U	<1U		<11U	<1U		<1U
Dibenz(A,H)Anthracene	UG/L	-	0.005	-	<0.48U	<0.48U		<1U	<0.50UJ		<0.50U
Dibenzofuran	UG/L	-	-	28	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Dichlorodifluoromethane	MG/L	-	1	-	<0.002U	<0.002U		<0.1U	<0.02U		<0.002U
Diethyl Phthalate	MG/L	-	6	-	<0.002U	<0.002U		<0.021U	<0.002U		<0.002U
Diethylene Glycol	UG/L	-	-	-	<8000U	<8000U		<8000U	<8000U		<8000U
Dimethoate	UG/L	3.1	-	-	<3U	<3U		<32U	<3U		<3U
Dimethyl Phthalate	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100	17	17		[120]	2		20
Ethyl Chloride	UG/L	-	3000	-	<1U	<1U		<50U	<10U		<1U
Ethyl Methacrylate	UG/L	420	-	-	<1U	<1U		<50U	<10U		<1U
Ethyl Methanesulfonate	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Ethylbenzene	UG/L	-	600	-	<2.00U	<2.00U		89J	<8U		<2.00U
Ethylene Glycol	MG/L	-	10	-	<8U	<8U		[17]	<8U		<8U
Fluoranthene	UG/L	-	300	-	<0.48U	<0.48U		<1U	<0.50UJ		<0.50U
Fluorene	UG/L	-	300	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Fluoride	MG/L	-	2	-						<0.40U	
Hexachlorobenzene	UG/L	-	0.02	-	<0.1U	<0.1U		<1U	<0.1U		<0.1U
Hexachlorobutadiene	UG/L	-	0.4	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Hexachlorocyclopentadiene	UG/L	22	-	-	<6U	<5U		<53U	<5U		<5U
Hexachloroethane	UG/L	0.79	-	-	<1U	<1U		<11U	<1U		<1U
Hexachloropropylene	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U
Iodomethane	UG/L	-	-	-	<1U	<1U		<50U	<10U		<1U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013							
				Location	MW-10	MW-10	MW-11	MW-11	MW-12A	MW-13	MW-13
				Sample Date	10/25/2013	10/25/2013	05/10/2013	11/06/2013	11/06/2013	05/07/2013	11/12/2013
				Sample Purpose	Regular Sample	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Iron	UG/L	-	300	-						<33.3U	
Isobutyl Alcohol	UG/L	4600	-	-	<100U	<100U		[30000]	<1000U		<100U
Isodrin	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Isophorone	UG/L	-	40	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Isosafrole	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
Lead	UG/L	-	15	-	<0.085U	<0.085U		<0.085U	<0.085U	<5.1U	<0.085U
Manganese	UG/L	-	50	-						[63.6]	
Mercury	UG/L	-	1	-	<0.06U	<0.06U		<0.3U	<0.06U	<0.07U	<0.06U
Meta- And Para-Xylene	UG/L	-	-	-	<5.00U	<5.00U		<1000U	<5.00U		<5.00U
Methacrylonitrile	UG/L	1.5	-	-	<10U	<10U		<500U	<100U		<10U
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-	<17U	<16U		<160U	<16U		<16U
Methyl Bromide	UG/L	7	-	10	<1U	<1U		<50U	<10U		<1U
Methyl Chloride	UG/L	-	3	-	<1U	<1U		<50U	<10U		<1U
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U	<0.003U		<0.15U	<0.03U		<0.003U
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U	<3U		<150U	<30U		<3U
Methyl Methacrylate	UG/L	-	-	25	<1U	<1U		<50U	<10U		<1U
Methyl Methanesulfonate	UG/L	0.68	-	-	<1U	<1U		<11U	<1U		<1U
Methyl Tertiary Butyl Ether	UG/L	-	20	-	<2.00U	<2.00U		<400U	<2.00U		<2.00U
Methylene Bromide	UG/L	-	-	70	<1U	<1U		<50U	<10U		<1U
Methylene Chloride	UG/L	-	5	-	<2U	<2U		[2600B]	<20U		<2U
N-Dioctyl Phthalate	UG/L	-	100	-	<2U	<2U		<21U	<2U		<2U
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-	<2U	<2U		<21U	<2U		<2U
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-	<2U	<2U		<21U	<2U		<2U
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
N-Nitrosodiethylamine	UG/L	0.00014	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
N-Nitrosodimethylamine	UG/L	-	0.0007	-	<2U	<2U		<21U	<2U		<2U
N-Nitrosodiphenylamine	UG/L	10	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
N-Nitrosomorpholine	UG/L	0.01	-	-	<2U	<2U		<21UJ	<2UJ		<2U
N-Nitrosopiperidine	UG/L	0.0071	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
N-Nitrosopyrrolidine	UG/L	0.032	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Naphthalene	UG/L	-	6	-	<3.00U	<3.00U		<600U	<3.00U		<3.00U
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-	<50.0U	<50.0U		<10000U	<50.0U		<50.0U
Nickel	UG/L	-	100	-	<1.5U	<1.5U		20.2	<1.5U		2.4J
Nitrate	MG/L	-	10	-						<0.25U	
Nitrobenzene	UG/L	0.12	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
O,O,O-Triethylphosphorothioate	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
O-Toluidine	UG/L	-	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Ortho-Xylene	UG/L	190	-	-	<2.00U	<2.00U		<400U	<2.00U		<2.00U
para-Phenylenediamine	UG/L	3000	-	-	<83U	<79U		<790U	<81U		<79U
Pentachlorobenzene	UG/L	2.3	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Pentachloroethane	UG/L	0.56	-	-	<1U	<1U		<50U	<10U		<1U
Pentachloronitrobenzene	UG/L	0.1	-	-	<2U	<2U		<21U	<2U		<2U
Pentachlorophenol	UG/L	-	0.3	-	<1U	<1U		<11U	<1U		<1U
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Phenanthrene	UG/L	-	200	-	<0.58U	<0.58U		<1U	<0.60UJ		<0.60U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-10	MW-10	MW-11	MW-11	MW-12A	MW-13	MW-13
				Sample Date	10/25/2013	10/25/2013	05/10/2013	11/06/2013	11/06/2013	05/07/2013	11/12/2013
				Sample Purpose	Regular Sample	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-	<0.6U	<0.5U		[35]	<0.5U		<0.5U
Pronamide	UG/L	900	-	-	<0.6U	<0.5U		<5U	<0.5U		<0.5U
Propionitrile	UG/L	-	-	-	<30U	<30U		<1500U	<300U		<30U
Propylene Glycol	UG/L	-	-	140000	<8000U	<8000U		<8000U	<8000U		<8000U
Pyrene	UG/L	-	200	-	<3.9U	<3.9U		<99UJ	<4.0UJ		<4.0U
Pyridine	UG/L	15	-	-	<2U	<2U		[47J]	<2U		<2U
Safrole	UG/L	0.083	-	-	<2U	<2U		<21U	<2U		<2U
Selenium	UG/L	-	20	-	<0.5UJ	<0.5UJ		1.3J	<0.5U	<7.5U	<0.5U
Silver	UG/L	-	20	-	<2.1U	<2.1U		<2.1U	<2.1U	<1.2U	<2.1U
Styrene	UG/L	-	70	-	<1U	<1U		<50U	<10U		<1U
Sulfate	MG/L	-	250	-						45.5	
Terephthalic Acid	UG/L	15000	-	-	<100U	<500U		[260000]	<99U		<100U
Tetrachloroethene	UG/L	-	0.7	-	<0.8U	<0.8U		<40U	<8U		<0.8U
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-	<1U	<1U		<11U	<1U		<1U
Thallium	UG/L	-	-	0.2	<0.15U	<0.15U		<0.15U	<0.15U		<0.15U
Thionazin	UG/L	-	-	-	<2U	<2U		<21U	<2U		<2U
Tin	UG/L	-	-	2000	<2.9U	<2.9U		3J	<2.9U		<2.9U
Toluene	UG/L	-	600	-	<2.00U	<2.00U		<400U	<7U		<2.00U
Total Dissolved Solids	MG/L	-	500	-						341	
Total Organic Carbon	MG/L	-	-	-						14.9	
Total Organic Halogen	UG/L	-	-	-						230	
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.8U	<0.8U		<40U	<8U		<0.8U
trans-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U		<50U	<10U		<1U
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U	<15U		<750U	<150U		<15U
Trichloroethene	UG/L	-	3	-	<1U	<1U		<50U	<10U		<1U
Trichlorofluoromethane	MG/L	-	2	-	<0.002U	<0.002U		<0.1U	<0.02U		<0.002U
Triethylene Glycol	UG/L	-	-	-	<8000U	<8000U		<8000U	<8000U		<8000U
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-	<39U	<39U		30000J	78J		<40U
Vanadium	UG/L	-	-	0.3	<2U	<2U		[2.7J]	<2U		<2U
Vinyl Acetate	UG/L	-	-	88	<2U	<2U			<20U		<2U
Vinyl Chloride	UG/L	-	0.03	-	<0.010U	<0.010U		[0.60B]	[0.033B]		<0.010U
Xylenes	UG/L	-	500	-	<0.8U	<0.8U		160J	<8U		<0.8U
Zinc	MG/L	-	1	-	<0.0020U	<0.0020U		0.0454	<0.0020U	0.0044J	0.0042J

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15
				Sample Date	05/15/2014	05/07/2013	11/13/2013	05/14/2014	05/07/2013	11/13/2013	05/14/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1			<1U			<1U	
1,1,1-Trichloroethane	UG/L	-	200	-			<0.8U			<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-			<1U			<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6			<0.8U			<0.8U	
1,1-Dichloroethane	UG/L	-	6	-			<1U			<1U	
1,1-Dichloroethene	UG/L	-	7	-			<0.8U			<0.8U	
1,2,3-Trichloropropane	UG/L	-	0.005	-			<1U			<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2			<0.6U			<0.6U	
1,2,4-Trichlorobenzene	UG/L	-	70	-			<0.6U			<0.6U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-			<2U			<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-			<1U			<1U	
1,2-Dichlorobenzene	UG/L	-	20	-			<0.6U			<0.6U	
1,2-Dichloroethane	UG/L	-	0.4	-			<1U			<1U	
1,2-Dichloropropane	UG/L	-	0.6	-			<1U			<1U	
1,2-Diphenylhydrazine	UG/L	0.067	-	-			<0.6U			<0.6U	
1,3,5-Trinitrobenzene	UG/L	460	-	-			<6UJ			<6UJ	
1,3-Dichlorobenzene	UG/L	-	200	-			<0.6U			<0.6U	
1,3-Dinitrobenzene	UG/L	1.5	-	-			<2U			<2U	
1,4-Dichlorobenzene	UG/L	-	6	-			<0.6U			<0.6U	
1,4-Dioxane	UG/L	-	3	-		1J	3J		[230]	[140]	
1,4-Naphthoquinone	UG/L	-	-	-			<11R			<11R	
1-Naphthylamine	UG/L	-	-	-			<6U			<6U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-			<0.6U			<0.6U	
2,4,5-Trichlorophenol	UG/L	-	-	63			<0.6U			<0.6U	
2,4,6-Trichlorophenol	UG/L	-	-	4			<0.6U			<0.6U	
2,4-Dichlorophenol	UG/L	-	-	0.98			<0.6U			<0.6U	
2,4-Dimethylphenol	UG/L	-	100	-			<0.6U			<0.6U	
2,4-Dinitrophenol	UG/L	30	-	-			<11U			<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1			<1U			<1U	
2,6-Dichlorophenol	UG/L	-	-	-			<0.6U			<0.6U	
2,6-Dinitrotoluene	UG/L	0.042	-	-			<0.6U			<0.6U	
2-Acetylaminofluorene	UG/L	0.013	-	-			<2U			<2U	
2-Chloronaphthalene	UG/L	550	-	-			<0.5U			<0.4U	
2-Chlorophenol	UG/L	-	0.4	-			<0.6U			<0.6U	
2-Hexanone	UG/L	-	-	40			<3U			<3U	
2-Methylnaphthalene	UG/L	-	30	-			<0.59U			<0.61U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400			<0.6U			<0.6U	
2-Naphthylamine	UG/L	0.033	-	-			<6U			<6U	
2-Nitroaniline	UG/L	150	-	-			<0.6U			<0.6U	
2-Nitrophenol	UG/L	-	-	-			<0.6U			<0.6U	
2-Picoline	UG/L	-	-	-			<2U			<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-			<2U			<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-			<28U			<28U	
3-Methylcholanthrene	UG/L	0.00098	-	-			<0.6U			<0.6U	
3-Nitroaniline	UG/L	-	-	-			<0.6U			<0.6U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-			<6U			<6U	
4-Aminobiphenyl	UG/L	0.0026	-	-			<0.6U			<0.6U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-			<0.6U			<0.6U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-			<0.6U			<0.6U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15
				Sample Date	05/15/2014	05/07/2013	11/13/2013	05/14/2014	05/07/2013	11/13/2013	05/14/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-			<0.6U			<0.6U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-			<0.6U			<0.6U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-			<0.6U			<0.6U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-			<0.6U			<0.6U	
4-Nitroaniline	UG/L	3.3	-	-			<0.6U			<0.6U	
4-Nitrophenol	UG/L	-	-	-			<11U			<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-			<23U			<22U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-			<0.6U			<0.6U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-			<0.6U			<0.6U	
Acenaphthene	UG/L	-	80	-			<0.59U			<0.61U	
Acenaphthylene	UG/L	-	200	-			<0.69U			<0.71U	
Acetaldehyde	UG/L	2.2	-	-			<50U			<500U	
Acetone	MG/L	-	6	-			<0.006U			<0.006U	
Acetonitrile	UG/L	130	-	-			<25U			<25U	
Acetophenone	UG/L	-	-	700			<0.6U			<0.6U	
Acrolein	UG/L	-	-	4			<1.6UJ			<1.6UJ	
Acrylonitrile	UG/L	0.045	-	-			<1.9U			<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-	<0.70U	<0.70U		<0.70U	<0.70U		<0.70U
Alkalinity, Total	MG CACO3/L	-	-	-	202	41.7		38.4	713		633
Allyl Chloride	UG/L	0.63	-	-			<1U			<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-			<6U			<6U	
Aniline	UG/L	12	-	-			<0.6U			<0.6U	
Anthracene	MG/L	-	2	-			<0.00059U			<0.00061U	
Antimony	UG/L	-	-	1			<5.3U			<5.3U	
Aramite	UG/L	1.1	-	-			<6U			<6U	
Arsenic	UG/L	-	10	-	<6.8U	<6.8U	1.4J	<6.8U	[36.6J]	[31.5J]	7.5J
Barium	UG/L	-	700	-	8.7J	4.4J	4.2J	3.1B	43.7	28.8	29.6
Benzene	UG/L	-	1	-			<2.00U			<2.00U	
Benzo(A)Anthracene	UG/L	-	0.05	-			<0.69U			<0.71U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-			<0.59U			<0.61U	
Benzo(G,H,I)Perylene	UG/L	-	200	-			<0.59U			<0.61U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-			<0.89U			<0.92U	
Benzo(A)Pyrene	UG/L	-	0.005	-			<0.59U			<0.61U	
Benzyl Alcohol	UG/L	-	-	700			<6U			<6U	
Beryllium	UG/L	-	-	4			<0.67U			<0.67U	
Biphenyl	UG/L	-	400	-			<0.6U			<0.6U	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-			<0.6U			<0.6U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-			<0.6U			<0.6U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-			<0.6U			<0.6U	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-			<2U			<2U	
Bromodichloromethane	UG/L	-	0.6	-			<1U			<1U	
Bromoform	UG/L	-	4	-			<1U			<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-			<0.002U			<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-			<40U			<41U	
C19 to C36 Aliphatics	UG/L	-	-	-			<49U			<51U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U			<50.0U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15
				Sample Date	05/15/2014	05/07/2013	11/13/2013	05/14/2014	05/07/2013	11/13/2013	05/14/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-			<50.0U			<50.0U	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-			<20.0U			<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U			<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-			<30U			<31U	
Cadmium	UG/L	-	2	-	<0.76U	<0.36U	<0.76U	<0.76U	<0.36U	1.5J	<0.76U
Carbon Disulfide	UG/L	-	700	-			<1U			<1U	
Carbon Tetrachloride	UG/L	-	0.3	-			<1U			<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-	47.1J	13.6J		<12.8U	63.9		56.2J
Chloride	MG/L	-	250	-	16.7	8.6		5.5	37.7		27.6
Chlorobenzene	UG/L	-	50	-			<0.8U			<0.8U	
Chlorobenzilate	UG/L	0.27	-	-			<3UJ			<3UJ	
Chlorodibromomethane	UG/L	-	0.4	-			<1U			<1U	
Chloroform	UG/L	-	70	-			<0.8U			<0.8U	
Chloroprene	UG/L	0.016	-	-			<1U			<1U	
Chromium	UG/L	-	10	-	<1.6U	<1.1U	<1.6U	<1.6U	<1.1U	<1.6U	2.7J
Chrysene	UG/L	-	5	-			<0.49U			<0.51U	
cis-1,2 Dichloroethene	UG/L	-	70	-			<0.8U			<0.8U	
cis-1,3-Dichloropropene	UG/L	-	-	-			<1U			<1U	
Cobalt	UG/L	-	-	1			[10.3]			<1.3U	
Copper	MG/L	-	1	-	<0.0027U	<0.0021U	<0.0027U	<0.0027U	<0.0021U	<0.0027U	<0.0027U
Di-N-Butyl Phthalate	UG/L	-	700	-			<2U			<2U	
Diallate	UG/L	0.46	-	-			<1U			<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-			<0.49U			<0.51U	
Dibenzofuran	UG/L	-	-	28			<0.6U			<0.6U	
Dichlorodifluoromethane	MG/L	-	1	-			<0.002U			<0.002U	
Diethyl Phthalate	MG/L	-	6	-			<0.002U			<0.002U	
Diethylene Glycol	UG/L	-	-	-			<8000U			<8000U	
Dimethoate	UG/L	3.1	-	-			<3U			<3U	
Dimethyl Phthalate	UG/L	-	-	-			<2U			<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100			<0.6U			22	
Ethyl Chloride	UG/L	-	3000	-			<1U			<1U	
Ethyl Methacrylate	UG/L	420	-	-			<1U			<1U	
Ethyl Methanesulfonate	UG/L	-	-	-			<0.6U			<0.6U	
Ethylbenzene	UG/L	-	600	-			<2.00U			<2.00U	
Ethylene Glycol	MG/L	-	10	-			<8U			<8U	
Fluoranthene	UG/L	-	300	-			<0.49U			<0.51U	
Fluorene	UG/L	-	300	-			<0.59U			<0.61U	
Fluoride	MG/L	-	2	-	<0.40U	<0.40U		<0.40U	<0.40U		<0.40U
Hexachlorobenzene	UG/L	-	0.02	-			<0.1U			<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-			<0.6U			<0.6U	
Hexachlorocyclopentadiene	UG/L	22	-	-			<6U			<6U	
Hexachloroethane	UG/L	0.79	-	-			<1U			<1U	
Hexachloropropylene	UG/L	-	-	-			<2UJ			<2UJ	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-			<0.59U			<0.61U	
Iodomethane	UG/L	-	-	-			<1U			<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15
				Sample Date	05/15/2014	05/07/2013	11/13/2013	05/14/2014	05/07/2013	11/13/2013	05/14/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-	<43U	[422]		126J	[79800]		[65300]
Isobutyl Alcohol	UG/L	4600	-	-			<100U			<100U	
Isodrin	UG/L	-	-	-			<0.6U			<0.6U	
Isophorone	UG/L	-	40	-			<0.6U			<0.6U	
Isosafrole	UG/L	-	-	-			<2U			<2U	
Lead	UG/L	-	15	-	<4.7U	<5.1U	<0.085U	<4.7U	<5.1U	<0.085U	9.6J
Manganese	UG/L	-	50	-	[67.3]	41.1		18.6	[292]		[269]
Mercury	UG/L	-	1	-	<0.06U	<0.07U	<0.06U	<0.06U	<0.07U	<0.06U	<0.06U
Meta- And Para-Xylene	UG/L	-	-	-			<5.00U			<5.00U	
Methacrylonitrile	UG/L	1.5	-	-			<10U			<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-			<17U			<17U	
Methyl Bromide	UG/L	7	-	10			<1U			<1U	
Methyl Chloride	UG/L	-	3	-			<1U			<1U	
Methyl Ethyl Ketone	MG/L	-	4	-			<0.003U			<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100			<3U			<3U	
Methyl Methacrylate	UG/L	-	-	25			<1U			<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-			<1U			<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-			<2.00U			<2.00U	
Methylene Bromide	UG/L	-	-	70			<1U			<1U	
Methylene Chloride	UG/L	-	5	-			<2U			<2U	
N-Dioctyl Phthalate	UG/L	-	100	-			<2U			<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-			<2U			<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-			<2U			<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-			<0.6U			<0.6U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-			<0.6U			<0.6U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-			<2U			<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-			<0.6U			<0.6U	
N-Nitrosomorpholine	UG/L	0.01	-	-			<2U			<2U	
N-Nitrosopiperidine	UG/L	0.0071	-	-			<0.6U			<0.6U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-			<0.6U			<0.6U	
Naphthalene	UG/L	-	6	-			<3.00U			<3.00U	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-			<50.0U			<50.0U	
Nickel	UG/L	-	100	-			4J			<1.5U	
Nitrate	MG/L	-	10	-	<0.25U	5.4		3.6	<0.25U		<0.25U
Nitrobenzene	UG/L	0.12	-	-			<0.6U			<0.6U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-			<2U			<2U	
O-Toluidine	UG/L	-	-	-			<0.6U			<0.6U	
Ortho-Xylene	UG/L	190	-	-			<2.00U			<2.00U	
para-Phenylenediamine	UG/L	3000	-	-			<85U			<83U	
Pentachlorobenzene	UG/L	2.3	-	-			<0.6U			<0.6U	
Pentachloroethane	UG/L	0.56	-	-			<1U			<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-			<2U			<2U	
Pentachlorophenol	UG/L	-	0.3	-			<1U			<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-			<0.6U			<0.6U	
Phenanthrene	UG/L	-	200	-			<0.59U			<0.61U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15
				Sample Date	05/15/2014	05/07/2013	11/13/2013	05/14/2014	05/07/2013	11/13/2013	05/14/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-			<0.6U			2	
Pronamide	UG/L	900	-	-			<0.6U			<0.6U	
Propionitrile	UG/L	-	-	-			<30U			<30U	
Propylene Glycol	UG/L	-	-	140000			<8000U			<8000U	
Pyrene	UG/L	-	200	-			<4.0U			<4.1U	
Pyridine	UG/L	15	-	-			<2U			<2U	
Safrole	UG/L	0.083	-	-			<2U			<2U	
Selenium	UG/L	-	20	-	<8.4U	<7.5U	<0.5U	<8.4U	<7.5U	<0.5U	<8.4U
Silver	UG/L	-	20	-	<2.1U	<1.2U	<2.1U	<2.1U	<1.2U	<2.1U	<2.1U
Styrene	UG/L	-	70	-			<1U			<1U	
Sulfate	MG/L	-	250	-	39.2	32.6		25.3	<1.5U		<1.5U
Terephthalic Acid	UG/L	15000	-	-			<100U			<100U	
Tetrachloroethene	UG/L	-	0.7	-			<0.8U			<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-			<1U			<1U	
Thallium	UG/L	-	-	0.2			<0.15U			<0.15U	
Thionazin	UG/L	-	-	-			<2U			<2U	
Tin	UG/L	-	-	2000			<2.9U			<2.9U	
Toluene	UG/L	-	600	-			<2.00U			<2.00U	
Total Dissolved Solids	MG/L	-	500	-	336	139		126	[886]		[757]
Total Organic Carbon	MG/L	-	-	-	19.1J	2.6		3.1J	16.1		19.3J
Total Organic Halogen	UG/L	-	-	-	280B	17		13B	68		91
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-			<0.8U			<0.8U	
trans-1,3-Dichloropropene	UG/L	-	-	-			<1U			<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-			<15U			<15U	
Trichloroethene	UG/L	-	3	-			<1U			<1U	
Trichlorofluoromethane	MG/L	-	2	-			<0.002U			<0.002U	
Triethylene Glycol	UG/L	-	-	-			<8000U			<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-			<40U			<41U	
Vanadium	UG/L	-	-	0.3			<2U			[2.1J]	
Vinyl Acetate	UG/L	-	-	88			<2U			<2U	
Vinyl Chloride	UG/L	-	0.03	-			<0.010U			0.013J	
Xylenes	UG/L	-	500	-			<0.8U			<0.8U	
Zinc	MG/L	-	1	-	0.0239J	<0.0020U	0.0114J	<0.0020U	<0.0020U	<0.0020U	0.0054J

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-16	MW-16	MW-16	MW-17A	MW-17A	MW-17A	MW-17A
				Sample Date	05/07/2013	11/11/2013	05/14/2014	05/07/2013	05/07/2013	11/05/2013	05/15/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1		<1U				<1U	
1,1,1-Trichloroethane	UG/L	-	200	-		<0.8U				<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-		<1U				<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6		<0.8U				<0.8U	
1,1-Dichloroethane	UG/L	-	6	-		1J				[110]	
1,1-Dichloroethene	UG/L	-	7	-		<0.8U				[21]	
1,2,3-Trichloropropane	UG/L	-	0.005	-		<1U				<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2		<0.5U				<0.5U	
1,2,4-Trichlorobenzene	UG/L	-	70	-		<0.5U				<0.5U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-		<2U				<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-		<1U				<1U	
1,2-Dichlorobenzene	UG/L	-	20	-		<0.5U				<0.5U	
1,2-Dichloroethane	UG/L	-	0.4	-		<1U				<1U	
1,2-Dichloropropane	UG/L	-	0.6	-		<1U				[1J]	
1,2-Diphenylhydrazine	UG/L	0.067	-	-		<0.5U				<0.5U	
1,3,5-Trinitrobenzene	UG/L	460	-	-		<5U				<5U	
1,3-Dichlorobenzene	UG/L	-	200	-		<0.5U				<0.5U	
1,3-Dinitrobenzene	UG/L	1.5	-	-		<2U				<2U	
1,4-Dichlorobenzene	UG/L	-	6	-		<0.5U				<0.5U	
1,4-Dioxane	UG/L	-	3	-	[61]	[51]				[36]	
1,4-Naphthoquinone	UG/L	-	-	-		<11R				<11R	
1-Naphthylamine	UG/L	-	-	-		<5U				<5U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-		<0.5U				<0.5U	
2,4,5-Trichlorophenol	UG/L	-	-	63		<0.5U				<0.5U	
2,4,6-Trichlorophenol	UG/L	-	-	4		<0.5U				<0.5U	
2,4-Dichlorophenol	UG/L	-	-	0.98		<0.5U				<0.5U	
2,4-Dimethylphenol	UG/L	-	100	-		<0.5U				<0.5U	
2,4-Dinitrophenol	UG/L	30	-	-		<11U				<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1		<1U				<1U	
2,6-Dichlorophenol	UG/L	-	-	-		<0.5U				<0.5U	
2,6-Dinitrotoluene	UG/L	0.042	-	-		<0.5U				<0.5U	
2-Acetylaminofluorene	UG/L	0.013	-	-		<2U				<2U	
2-Chloronaphthalene	UG/L	550	-	-		<0.4U				<0.4U	
2-Chlorophenol	UG/L	-	0.4	-		<0.5U				<0.5U	
2-Hexanone	UG/L	-	-	40		<3U				<3U	
2-Methylnaphthalene	UG/L	-	30	-		<0.61U				<0.59U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400		<0.5U				240	
2-Naphthylamine	UG/L	0.033	-	-		<5U				<5U	
2-Nitroaniline	UG/L	150	-	-		<0.5U				<0.5U	
2-Nitrophenol	UG/L	-	-	-		<0.5U				<0.5U	
2-Picoline	UG/L	-	-	-		<2U				<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-		<2U				<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-		<26U				<26U	
3-Methylcholanthrene	UG/L	0.00098	-	-		<0.5U				<0.5U	
3-Nitroaniline	UG/L	-	-	-		<0.5U				<0.5U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-		<5U				<5U	
4-Aminobiphenyl	UG/L	0.0026	-	-		<0.5U				<0.5U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-		<0.5U				<0.5U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-		<0.5U				<0.5U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-16	MW-16	MW-16	MW-17A	MW-17A	MW-17A	MW-17A
				Sample Date	05/07/2013	11/11/2013	05/14/2014	05/07/2013	05/07/2013	11/05/2013	05/15/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-		<0.5U				<0.5U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-		<0.5U				<0.5U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-		<0.5U				<0.5U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-		<0.5U				[52]	
4-Nitroaniline	UG/L	3.3	-	-		<0.5U				<0.5U	
4-Nitrophenol	UG/L	-	-	-		<11U				<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-		<21U				<21U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-		<0.5U				<0.5U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-		<0.5U				<0.5U	
Acenaphthene	UG/L	-	80	-		<0.61U				<0.59U	
Acenaphthylene	UG/L	-	200	-		<0.71U				<0.68U	
Acetaldehyde	UG/L	2.2	-	-		<50U				[540J]	
Acetone	MG/L	-	6	-		<0.006U				0.043	
Acetonitrile	UG/L	130	-	-		<25U				<25U	
Acetophenone	UG/L	-	-	700		<0.5U				1	
Acrolein	UG/L	-	-	4		<1.6UJ				<1.6UJ	
Acrylonitrile	UG/L	0.045	-	-		<1.9U				<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-	<0.70U		<0.70U	<0.70U	<0.70U		<0.70U
Alkalinity, Total	MG CACO3/L	-	-	-	202		183	180	176		164
Allyl Chloride	UG/L	0.63	-	-		<1U				<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-		<5U				<5U	
Aniline	UG/L	12	-	-		<0.5U				<0.5U	
Anthracene	MG/L	-	2	-		<0.00061U				<0.00059U	
Antimony	UG/L	-	-	1		<5.3U				<5.3U	
Aramite	UG/L	1.1	-	-		<5U				<5U	
Arsenic	UG/L	-	10	-	[20.7J]	[21.6]	[10.8J]	<6.8U	<6.8U	4.4	<6.8U
Barium	UG/L	-	700	-	9.3J	2.7J	2B	10.9	10.5	8.6J	11.4
Benzene	UG/L	-	1	-		<2.00U				[51]	
Benzo(A)Anthracene	UG/L	-	0.05	-		<0.71U				<0.68U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-		<0.61U				<0.59U	
Benzo(G,H,I)Perylene	UG/L	-	200	-		<0.61U				<0.59U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-		<0.91U				<0.88U	
Benzo(A)Pyrene	UG/L	-	0.005	-		<0.61U				<0.59U	
Benzyl Alcohol	UG/L	-	-	700		<5U				<5U	
Beryllium	UG/L	-	-	4		<0.67U				<0.67U	
Biphenyl	UG/L	-	400	-		<0.5U				6	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-		<0.5U				<0.5U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-		<0.5U				<0.5U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-		<0.5U				<0.5UJ	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-		<2U				<2U	
Bromodichloromethane	UG/L	-	0.6	-		<1U				<1U	
Bromoform	UG/L	-	4	-		<1U				<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-		<0.002U				<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-		<40U				71	
C19 to C36 Aliphatics	UG/L	-	-	-		<51U				<49U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-		<50.0U				398	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-16	MW-16	MW-16	MW-17A	MW-17A	MW-17A	MW-17A
				Sample Date	05/07/2013	11/11/2013	05/14/2014	05/07/2013	05/07/2013	11/05/2013	05/15/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-		<50.0U				483	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-		<20.0U				<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-		<50.0U				<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-		<30U				<29U	
Cadmium	UG/L	-	2	-	<0.36U	0.88J	<0.76U	0.45J	0.67J	<0.76U	<0.76U
Carbon Disulfide	UG/L	-	700	-		<1U				<1U	
Carbon Tetrachloride	UG/L	-	0.3	-		<1U				<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-	61.6		26.5J	501	448		608J
Chloride	MG/L	-	250	-	11.6		8.5	57.9J	29.1J		70.7
Chlorobenzene	UG/L	-	50	-		<0.8U				2J	
Chlorobenzilate	UG/L	0.27	-	-		<3U				<3U	
Chlorodibromomethane	UG/L	-	0.4	-		<1U				<1U	
Chloroform	UG/L	-	70	-		<0.8U				<0.8U	
Chloroprene	UG/L	0.016	-	-		<1U				<1U	
Chromium	UG/L	-	10	-	<1.1U	<1.6U	<1.6U	<1.1U	<1.1U	1.7J	3.3J
Chrysene	UG/L	-	5	-		<0.51U				<0.49U	
cis-1,2 Dichloroethene	UG/L	-	70	-		<0.8U				[660]	
cis-1,3-Dichloropropene	UG/L	-	-	-		<1U				<1U	
Cobalt	UG/L	-	-	1		<1.3U				<1.3U	
Copper	MG/L	-	1	-	<0.0021U	<0.0027U	<0.0027U	<0.0021U	<0.0021U	<0.0027U	<0.0027U
Di-N-Butyl Phthalate	UG/L	-	700	-		<2U				<2U	
Diallate	UG/L	0.46	-	-		<1U				<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-		<0.51U				<0.49U	
Dibenzofuran	UG/L	-	-	28		<0.5U				<0.5U	
Dichlorodifluoromethane	MG/L	-	1	-		<0.002U				<0.002U	
Diethyl Phthalate	MG/L	-	6	-		<0.002U				<0.002U	
Diethylene Glycol	UG/L	-	-	-		<8000U				<8000U	
Dimethoate	UG/L	3.1	-	-		<3U				<3U	
Dimethyl Phthalate	UG/L	-	-	-		<2U				<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100		2				65	
Ethyl Chloride	UG/L	-	3000	-		<1U				<1U	
Ethyl Methacrylate	UG/L	420	-	-		<1U				<1U	
Ethyl Methanesulfonate	UG/L	-	-	-		<0.5U				<0.5U	
Ethylbenzene	UG/L	-	600	-		<2.00U				1J	
Ethylene Glycol	MG/L	-	10	-		<8U				<8U	
Fluoranthene	UG/L	-	300	-		<0.51U				<0.49U	
Fluorene	UG/L	-	300	-		<0.61U				<0.59U	
Fluoride	MG/L	-	2	-	<0.40U		<0.40U	<0.40U	<0.40U		[11.7]
Hexachlorobenzene	UG/L	-	0.02	-		<0.1U				<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-		<0.5U				<0.5U	
Hexachlorocyclopentadiene	UG/L	22	-	-		<5U				<5U	
Hexachloroethane	UG/L	0.79	-	-		<1U				<1U	
Hexachloropropylene	UG/L	-	-	-		<2U				<2U	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-		<0.61U				<0.59U	
Iodomethane	UG/L	-	-	-		<1U				<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-16	MW-16	MW-16	MW-17A	MW-17A	MW-17A	MW-17A
				Sample Date	05/07/2013	11/11/2013	05/14/2014	05/07/2013	05/07/2013	11/05/2013	05/15/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-	[52700]		[45500]	[134000]	[127000]		[147000]
Isobutyl Alcohol	UG/L	4600	-	-		<100U				<100U	
Isodrin	UG/L	-	-	-		<0.5U				<0.5U	
Isophorone	UG/L	-	40	-		<0.5U				<0.5U	
Isosafrole	UG/L	-	-	-		<2U				<2U	
Lead	UG/L	-	15	-	<5.1U	<0.085U	10J	<5.1U	<5.1U	<0.085U	[34.6]
Manganese	UG/L	-	50	-	[268]		[249]	[277]	[266]		[300]
Mercury	UG/L	-	1	-	<0.07U	<0.06U	<0.06U	<0.07U	<0.07U	<0.06U	<0.06U
Meta- And Para-Xylene	UG/L	-	-	-		<5.00U				<5.00U	
Methacrylonitrile	UG/L	1.5	-	-		<10U				<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-		<16U				<16U	
Methyl Bromide	UG/L	7	-	10		<1U				<1U	
Methyl Chloride	UG/L	-	3	-		<1U				<1U	
Methyl Ethyl Ketone	MG/L	-	4	-		<0.003U				<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100		<3U				4J	
Methyl Methacrylate	UG/L	-	-	25		<1U				<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-		<1U				<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-		<2.00U				<2.00U	
Methylene Bromide	UG/L	-	-	70		<1U				<1U	
Methylene Chloride	UG/L	-	5	-		<2U				<2U	
N-Dioctyl Phthalate	UG/L	-	100	-		<2U				<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-		<2U				<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-		<2U				<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-		<0.5U				<0.5U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-		<0.5U				<0.5U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-		<2U				<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-		<0.5U				<0.5U	
N-Nitrosomorpholine	UG/L	0.01	-	-		<2U				<2UJ	
N-Nitrosopiperidine	UG/L	0.0071	-	-		<0.5U				<0.5U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-		<0.5U				<0.5U	
Naphthalene	UG/L	-	6	-		<3.00U				1	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-		<50.0U				<50.0U	
Nickel	UG/L	-	100	-		<1.5U				1.6J	
Nitrate	MG/L	-	10	-	<0.25U		<0.25U	<0.25U	<0.25U		<0.25U
Nitrobenzene	UG/L	0.12	-	-		<0.5U				<0.5U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-		<2U				<2U	
O-Toluidine	UG/L	-	-	-		<0.5U				<0.5U	
Ortho-Xylene	UG/L	190	-	-		<2.00U				<2.00U	
para-Phenylenediamine	UG/L	3000	-	-		<79U				<79U	
Pentachlorobenzene	UG/L	2.3	-	-		<0.5U				<0.5U	
Pentachloroethane	UG/L	0.56	-	-		<1U				<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-		<2U				<2U	
Pentachlorophenol	UG/L	-	0.3	-		<1U				<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-		<0.5U				<0.5U	
Phenanthrene	UG/L	-	200	-		<0.61U				<0.59U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-16	MW-16	MW-16	MW-17A	MW-17A	MW-17A	MW-17A
				Sample Date	05/07/2013	11/11/2013	05/14/2014	05/07/2013	05/07/2013	11/05/2013	05/15/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-		<0.5U				9	
Pronamide	UG/L	900	-	-		<0.5U				<0.5U	
Propionitrile	UG/L	-	-	-		<30U				<30U	
Propylene Glycol	UG/L	-	-	140000		<8000U				<8000U	
Pyrene	UG/L	-	200	-		<4.0U				<3.9U	
Pyridine	UG/L	15	-	-		<2U				9	
Safrole	UG/L	0.083	-	-		<2U				<2U	
Selenium	UG/L	-	20	-	<7.5U	<0.5U	<8.4U	7.9J	9J	<0.5U	15.8J
Silver	UG/L	-	20	-	<1.2U	<2.1U	<2.1U	<1.2U	<1.2U	<2.1U	<2.1U
Styrene	UG/L	-	70	-		<1U				<1U	
Sulfate	MG/L	-	250	-	12.1		3.9J	4.0J	6.4		1.8J
Terephthalic Acid	UG/L	15000	-	-		<100U				4300	
Tetrachloroethene	UG/L	-	0.7	-		<0.8U				<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-		<1U				<1U	
Thallium	UG/L	-	-	0.2		<0.15U				<0.15U	
Thionazin	UG/L	-	-	-		<2U				<2U	
Tin	UG/L	-	-	2000		<2.9U				<2.9U	
Toluene	UG/L	-	600	-		<2.00U				37	
Total Dissolved Solids	MG/L	-	500	-	256		249	393	385		446
Total Organic Carbon	MG/L	-	-	-	8.2		10J	136	137		182J
Total Organic Halogen	UG/L	-	-	-	99		74B	930	940		2500
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-		<0.8U				7	
trans-1,3-Dichloropropene	UG/L	-	-	-		<1U				<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-		<15U				<15U	
Trichloroethene	UG/L	-	3	-		<1U				<1U	
Trichlorofluoromethane	MG/L	-	2	-		<0.002U				<0.002U	
Triethylene Glycol	UG/L	-	-	-		<8000U				<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-		<40U				71	
Vanadium	UG/L	-	-	0.3		<2U				[3.8J]	
Vinyl Acetate	UG/L	-	-	88		<2U				<2U	
Vinyl Chloride	UG/L	-	0.03	-		[0.39]				[3.2]	
Xylenes	UG/L	-	500	-		<0.8U				4J	
Zinc	MG/L	-	1	-	<0.0020U	<0.0020U	0.0028J	0.0043J	0.0045J	<0.0020U	0.0126J

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-17A	MW-18	MW-18	MW-18	MW-19	MW-19	MW-20
				Sample Date	05/15/2014	05/07/2013	11/05/2013	05/15/2014	05/10/2013	10/25/2013	05/10/2013
				Sample Purpose	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1			<1U			<1U	
1,1,1-Trichloroethane	UG/L	-	200	-			<0.8U			<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-			<1U			<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6			<0.8U			<0.8U	
1,1-Dichloroethane	UG/L	-	6	-			<1U			<1U	
1,1-Dichloroethene	UG/L	-	7	-			<0.8U			<0.8U	
1,2,3-Trichloropropane	UG/L	-	0.005	-			<1U			<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2			<0.7U			<0.5U	
1,2,4-Trichlorobenzene	UG/L	-	70	-			<0.7U			<0.5U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-			<2U			<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-			<1U			<1U	
1,2-Dichlorobenzene	UG/L	-	20	-			<0.7U			<0.5U	
1,2-Dichloroethane	UG/L	-	0.4	-			<1U			<1U	
1,2-Dichloropropane	UG/L	-	0.6	-			<1U			<1U	
1,2-Diphenylhydrazine	UG/L	0.067	-	-			<0.7U			<0.5U	
1,3,5-Trinitrobenzene	UG/L	460	-	-			<7U			<5U	
1,3-Dichlorobenzene	UG/L	-	200	-			<0.7U			<0.5U	
1,3-Dinitrobenzene	UG/L	1.5	-	-			<3U			<2U	
1,4-Dichlorobenzene	UG/L	-	6	-			<0.7U			<0.5U	
1,4-Dioxane	UG/L	-	3	-			<1U		<1U	<1U	[9]
1,4-Naphthoquinone	UG/L	-	-	-			<13R			<11U	
1-Naphthylamine	UG/L	-	-	-			<7U			<5U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-			<0.7U			<0.5U	
2,4,5-Trichlorophenol	UG/L	-	-	63			<0.7U			<0.5U	
2,4,6-Trichlorophenol	UG/L	-	-	4			<0.7U			<0.5U	
2,4-Dichlorophenol	UG/L	-	-	0.98			<0.7U			<0.5U	
2,4-Dimethylphenol	UG/L	-	100	-			<0.7U			<0.5U	
2,4-Dinitrophenol	UG/L	30	-	-			<13U			<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1			<1U			<1U	
2,6-Dichlorophenol	UG/L	-	-	-			<0.7U			<0.5U	
2,6-Dinitrotoluene	UG/L	0.042	-	-			<0.7U			<0.5U	
2-Acetylaminofluorene	UG/L	0.013	-	-			<3U			<2U	
2-Chloronaphthalene	UG/L	550	-	-			<0.5U			<0.4U	
2-Chlorophenol	UG/L	-	0.4	-			<0.7U			<0.5U	
2-Hexanone	UG/L	-	-	40			<3U			<3U	
2-Methylnaphthalene	UG/L	-	30	-			<0.59U			<0.59U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400			<0.7U			<0.5U	
2-Naphthylamine	UG/L	0.033	-	-			<7U			<5U	
2-Nitroaniline	UG/L	150	-	-			<0.7U			<0.5U	
2-Nitrophenol	UG/L	-	-	-			<0.7U			<0.5U	
2-Picoline	UG/L	-	-	-			<3U			<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-			<3U			<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-			<33U			<26U	
3-Methylcholanthrene	UG/L	0.00098	-	-			<0.7U			<0.5U	
3-Nitroaniline	UG/L	-	-	-			<0.7U			<0.5U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-			<7U			<5U	
4-Aminobiphenyl	UG/L	0.0026	-	-			<0.7U			<0.5U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-			<0.7U			<0.5U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-			<0.7U			<0.5U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-17A	MW-18	MW-18	MW-18	MW-19	MW-19	MW-20
				Sample Date	05/15/2014	05/07/2013	11/05/2013	05/15/2014	05/10/2013	10/25/2013	05/10/2013
				Sample Purpose	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-			<0.7U			<0.5U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-			<0.7U			<0.5U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-			<0.7U			<0.5U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-			<0.7U			<0.5U	
4-Nitroaniline	UG/L	3.3	-	-			<0.7U			<0.5U	
4-Nitrophenol	UG/L	-	-	-			<13U			<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-			<26U			<21U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-			<0.7U			<0.5U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-			<0.7U			<0.5U	
Acenaphthene	UG/L	-	80	-			<0.59U			<0.59U	
Acenaphthylene	UG/L	-	200	-			<0.69U			<0.69U	
Acetaldehyde	UG/L	2.2	-	-			<50UJ			<50U	
Acetone	MG/L	-	6	-			<0.006U			<0.006U	
Acetonitrile	UG/L	130	-	-			<25U			<25U	
Acetophenone	UG/L	-	-	700			<0.7U			<0.5U	
Acrolein	UG/L	-	-	4			<1.6UJ			<1.6UJ	
Acrylonitrile	UG/L	0.045	-	-			<1.9U			<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-	<0.70U	<0.70U		<0.70U			
Alkalinity, Total	MG CACO3/L	-	-	-	172	15.2		20.7			
Allyl Chloride	UG/L	0.63	-	-			<1U			<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-			<7U			<5U	
Aniline	UG/L	12	-	-			<0.7U			<0.5U	
Anthracene	MG/L	-	2	-			<0.00059U			<0.00059U	
Antimony	UG/L	-	-	1			<5.3U			<5.3U	
Aramite	UG/L	1.1	-	-			<7U			<5U	
Arsenic	UG/L	-	10	-	<6.8U	<6.8U	<0.42U	<6.8U		3J	
Barium	UG/L	-	700	-	11.6	26.7	29.1	21.4		16.8	
Benzene	UG/L	-	1	-			<2.00U			<2.00U	
Benzo(A)Anthracene	UG/L	-	0.05	-			<0.69U			<0.69U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-			<0.59U			<0.59U	
Benzo(G,H,I)Perylene	UG/L	-	200	-			<0.59U			<0.59U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-			<0.89U			<0.89U	
Benzo(A)Pyrene	UG/L	-	0.005	-			<0.59U			<0.59U	
Benzyl Alcohol	UG/L	-	-	700			<7U			<5U	
Beryllium	UG/L	-	-	4			<0.67U			<0.67U	
Biphenyl	UG/L	-	400	-			<0.7U			<0.5U	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-			<0.7U			<0.5U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-			<0.7U			<0.5U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-			<0.7UJ			<0.5U	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-			<3U			<2U	
Bromodichloromethane	UG/L	-	0.6	-			<1U			<1U	
Bromoform	UG/L	-	4	-			<1U			<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-			<0.003U			<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-			<40U			<40U	
C19 to C36 Aliphatics	UG/L	-	-	-			<50U			<49U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U			<50.0U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-17A	MW-18	MW-18	MW-18	MW-19	MW-19	MW-20
				Sample Date	05/15/2014	05/07/2013	11/05/2013	05/15/2014	05/10/2013	10/25/2013	05/10/2013
				Sample Purpose	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-			<50.0U			<50.0U	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-			<20.0U			<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-			<50.0U			<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-			<30U			<30U	
Cadmium	UG/L	-	2	-	<0.76U	<0.36U	<0.76U	<0.76U		<0.76U	
Carbon Disulfide	UG/L	-	700	-			<1U			<1U	
Carbon Tetrachloride	UG/L	-	0.3	-			<1U			<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-	605J	<12.8U		<12.8U			
Chloride	MG/L	-	250	-	70.1	4		5.8			
Chlorobenzene	UG/L	-	50	-			<0.8U			<0.8U	
Chlorobenzilate	UG/L	0.27	-	-			<4U			<3U	
Chlorodibromomethane	UG/L	-	0.4	-			<1U			<1U	
Chloroform	UG/L	-	70	-			<0.8U			<0.8U	
Chloroprene	UG/L	0.016	-	-			<1U			<1U	
Chromium	UG/L	-	10	-	2.8J	<1.1U	<1.6U	<1.6U		7.5J	
Chrysene	UG/L	-	5	-			<0.50U			<0.49U	
cis-1,2 Dichloroethene	UG/L	-	70	-			<0.8U			<0.8U	
cis-1,3-Dichloropropene	UG/L	-	-	-			<1U			<1U	
Cobalt	UG/L	-	-	1			<1.3U			<1.3U	
Copper	MG/L	-	1	-	<0.0027U	<0.0021U	<0.0027U	<0.0027U		<0.0027U	
Di-N-Butyl Phthalate	UG/L	-	700	-			<3U			<2U	
Diallate	UG/L	0.46	-	-			<1U			<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-			<0.50U			<0.49U	
Dibenzofuran	UG/L	-	-	28			<0.7U			<0.5U	
Dichlorodifluoromethane	MG/L	-	1	-			<0.002U			<0.002U	
Diethyl Phthalate	MG/L	-	6	-			<0.003U			<0.002U	
Diethylene Glycol	UG/L	-	-	-			<8000U			<8000U	
Dimethoate	UG/L	3.1	-	-			<4U			<3U	
Dimethyl Phthalate	UG/L	-	-	-			<3U			<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100			<0.7U			<0.5U	
Ethyl Chloride	UG/L	-	3000	-			<1U			<1U	
Ethyl Methacrylate	UG/L	420	-	-			<1U			<1U	
Ethyl Methanesulfonate	UG/L	-	-	-			<0.7U			<0.5U	
Ethylbenzene	UG/L	-	600	-			<2.00U			<2.00U	
Ethylene Glycol	MG/L	-	10	-			<8U			<8U	
Fluoranthene	UG/L	-	300	-			<0.50U			<0.49U	
Fluorene	UG/L	-	300	-			<0.59U			<0.59U	
Fluoride	MG/L	-	2	-	[12.0]	<0.40U		<0.40U			
Hexachlorobenzene	UG/L	-	0.02	-			<0.1U			<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-			<0.7U			<0.5U	
Hexachlorocyclopentadiene	UG/L	22	-	-			<7U			<5U	
Hexachloroethane	UG/L	0.79	-	-			<1U			<1U	
Hexachloropropylene	UG/L	-	-	-			<3U			<2U	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-			<0.59U			<0.59U	
Iodomethane	UG/L	-	-	-			<1U			<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-17A	MW-18	MW-18	MW-18	MW-19	MW-19	MW-20
				Sample Date	05/15/2014	05/07/2013	11/05/2013	05/15/2014	05/10/2013	10/25/2013	05/10/2013
				Sample Purpose	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-	[153000]	<33.3U		<43U			
Isobutyl Alcohol	UG/L	4600	-	-			<100U			<100U	
Isodrin	UG/L	-	-	-			<0.7U			<0.5U	
Isophorone	UG/L	-	40	-			<0.7U			<0.5U	
Isosafrole	UG/L	-	-	-			<3U			<2U	
Lead	UG/L	-	15	-	[37.4]	<5.1U	<0.085U	<4.7U		3.2	
Manganese	UG/L	-	50	-	[311]	37.9		26.6			
Mercury	UG/L	-	1	-	<0.06U	<0.07U	<0.06U	<0.06U		0.074J	
Meta- And Para-Xylene	UG/L	-	-	-			<5.00U			<5.00U	
Methacrylonitrile	UG/L	1.5	-	-			<10U			<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-			<20U			<16U	
Methyl Bromide	UG/L	7	-	10			<1U			<1U	
Methyl Chloride	UG/L	-	3	-			<1U			<1U	
Methyl Ethyl Ketone	MG/L	-	4	-			<0.003U			<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100			<3U			<3U	
Methyl Methacrylate	UG/L	-	-	25			<1U			<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-			<1U			<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-			<2.00U			<2.00U	
Methylene Bromide	UG/L	-	-	70			<1U			<1U	
Methylene Chloride	UG/L	-	5	-			<2U			<2U	
N-Dioctyl Phthalate	UG/L	-	100	-			<3U			<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-			<3U			<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-			<3U			<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-			<0.7U			<0.5U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-			<0.7U			<0.5U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-			<3U			<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-			<0.7U			<0.5U	
N-Nitrosomorpholine	UG/L	0.01	-	-			<3UJ			<2U	
N-Nitrosopiperidine	UG/L	0.0071	-	-			<0.7U			<0.5U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-			<0.7U			<0.5U	
Naphthalene	UG/L	-	6	-			<3.00U			<3.00U	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-			<50.0U			<50.0U	
Nickel	UG/L	-	100	-			<1.5U			1.7J	
Nitrate	MG/L	-	10	-	<0.25U	1.8		1.6			
Nitrobenzene	UG/L	0.12	-	-			<0.7U			<0.5U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-			<3U			<2U	
O-Toluidine	UG/L	-	-	-			<0.7U			<0.5U	
Ortho-Xylene	UG/L	190	-	-			<2.00U			<2.00U	
para-Phenylenediamine	UG/L	3000	-	-			<99U			<79U	
Pentachlorobenzene	UG/L	2.3	-	-			<0.7U			<0.5U	
Pentachloroethane	UG/L	0.56	-	-			<1U			<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-			<3U			<2U	
Pentachlorophenol	UG/L	-	0.3	-			<1U			<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-			<0.7U			<0.5U	
Phenanthrene	UG/L	-	200	-			<0.59U			<0.59U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-17A	MW-18	MW-18	MW-18	MW-19	MW-19	MW-20
				Sample Date	05/15/2014	05/07/2013	11/05/2013	05/15/2014	05/10/2013	10/25/2013	05/10/2013
				Sample Purpose	Field Duplicate	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-			<0.7U			<0.5U	
Pronamide	UG/L	900	-	-			<0.7U			<0.5U	
Propionitrile	UG/L	-	-	-			<30U			<30U	
Propylene Glycol	UG/L	-	-	140000			<8000U			<8000U	
Pyrene	UG/L	-	200	-			<4.2U			<4.0U	
Pyridine	UG/L	15	-	-			<3U			<2U	
Safrole	UG/L	0.083	-	-			<3U			<2U	
Selenium	UG/L	-	20	-	13.6J	<7.5U	0.86J	<8.4U		1.3J	
Silver	UG/L	-	20	-	<2.1U	<1.2U	<2.1U	<2.1U		<2.1U	
Styrene	UG/L	-	70	-			<1U			<1U	
Sulfate	MG/L	-	250	-	2.0J	36.2		25.3			
Terephthalic Acid	UG/L	15000	-	-			<100U			<100U	
Tetrachloroethene	UG/L	-	0.7	-			<0.8U			<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-			<1U			<1U	
Thallium	UG/L	-	-	0.2			<0.15U			<0.15U	
Thionazin	UG/L	-	-	-			<3U			<2U	
Tin	UG/L	-	-	2000			<2.9U			<2.9U	
Toluene	UG/L	-	600	-			<2.00U			<2.00U	
Total Dissolved Solids	MG/L	-	500	-	482	105		83			
Total Organic Carbon	MG/L	-	-	-	187J	1.4		2.9J			
Total Organic Halogen	UG/L	-	-	-	2100J	13		10B			
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-			<0.8U			<0.8U	
trans-1,3-Dichloropropene	UG/L	-	-	-			<1U			<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-			<15U			<15U	
Trichloroethene	UG/L	-	3	-			<1U			<1U	
Trichlorofluoromethane	MG/L	-	2	-			<0.002U			<0.002U	
Triethylene Glycol	UG/L	-	-	-			<8000U			<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-			<40U			<40U	
Vanadium	UG/L	-	-	0.3			<2U			[21.3]	
Vinyl Acetate	UG/L	-	-	88			<2U			<2U	
Vinyl Chloride	UG/L	-	0.03	-			<0.010U			<0.010U	
Xylenes	UG/L	-	500	-			<0.8U			<0.8U	
Zinc	MG/L	-	1	-	0.0069J	<0.0020U	<0.0020U	<0.0020U		<0.0020U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-20	MW-21	MW-21	MW-22	MW-22	MW-22	MW-23A
				Sample Date	10/25/2013	05/06/2013	11/05/2013	05/06/2013	05/06/2013	11/05/2013	05/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<1U		<1U			<1U	
1,1,1-Trichloroethane	UG/L	-	200	-	<0.8U		<0.8U			<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<1U		<1U			<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.8U		<0.8U			<0.8U	
1,1-Dichloroethane	UG/L	-	6	-	<1U		<1U			<1U	
1,1-Dichloroethene	UG/L	-	7	-	<0.8U		<0.8U			<0.8U	
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U		<1U			<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2	<0.5U		<0.5U			<0.5U	
1,2,4-Trichlorobenzene	UG/L	-	70	-	<0.5U		<0.5U			<0.5U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U		<2U			<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<1U		<1U			<1U	
1,2-Dichlorobenzene	UG/L	-	20	-	<0.5U		<0.5U			<0.5U	
1,2-Dichloroethane	UG/L	-	0.4	-	<1U		<1U			<1U	
1,2-Dichloropropane	UG/L	-	0.6	-	<1U		<1U			<1U	
1,2-Diphenylhydrazine	UG/L	0.067	-	-	<0.5U		<0.5U			<0.5U	
1,3,5-Trinitrobenzene	UG/L	460	-	-	<5U		<5U			<5U	
1,3-Dichlorobenzene	UG/L	-	200	-	<0.5U		<0.5U			<0.5U	
1,3-Dinitrobenzene	UG/L	1.5	-	-	<2U		<2U			<2U	
1,4-Dichlorobenzene	UG/L	-	6	-	<0.5U		<0.5U			<0.5U	
1,4-Dioxane	UG/L	-	3	-	3J	[14]	[4J]	[17]	[18]	[13]	[4J]
1,4-Naphthoquinone	UG/L	-	-	-	<10U		<10R			<11R	
1-Naphthylamine	UG/L	-	-	-	<5U		<5UJ			<5U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-	<0.5U		<0.5U			<0.5U	
2,4,5-Trichlorophenol	UG/L	-	-	63	<0.5U		<0.5U			<0.5U	
2,4,6-Trichlorophenol	UG/L	-	-	4	<0.5U		<0.5U			<0.5U	
2,4-Dichlorophenol	UG/L	-	-	0.98	<0.5U		<0.5U			<0.5U	
2,4-Dimethylphenol	UG/L	-	100	-	<0.5U		<0.5U			<0.5U	
2,4-Dinitrophenol	UG/L	30	-	-	<10U		<10U			<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1	<1U		<1U			<1U	
2,6-Dichlorophenol	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
2,6-Dinitrotoluene	UG/L	0.042	-	-	<0.5U		<0.5U			<0.5U	
2-Acetylaminofluorene	UG/L	0.013	-	-	<2U		<2U			<2U	
2-Chloronaphthalene	UG/L	550	-	-	<0.4U		<0.4U			<0.4U	
2-Chlorophenol	UG/L	-	0.4	-	<0.5U		<0.5U			<0.5U	
2-Hexanone	UG/L	-	-	40	<3U		<3U			<3U	
2-Methylnaphthalene	UG/L	-	30	-	<0.58U		<0.60U			<1.2U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400	<0.5U		<0.5U			<0.5U	
2-Naphthylamine	UG/L	0.033	-	-	<5U		<5U			<5U	
2-Nitroaniline	UG/L	150	-	-	<0.5U		<0.5U			<0.5U	
2-Nitrophenol	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
2-Picoline	UG/L	-	-	-	<2U		<2U			<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-	<2U		<2U			<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-	<26U		<26R			<26U	
3-Methylcholanthrene	UG/L	0.00098	-	-	<0.5U		<0.5U			<0.5U	
3-Nitroaniline	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-	<5U		<5U			<5U	
4-Aminobiphenyl	UG/L	0.0026	-	-	<0.5U		<0.5U			<0.5U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-	<0.5U		<0.5U			<0.5U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-20	MW-21	MW-21	MW-22	MW-22	MW-22	MW-23A
				Sample Date	10/25/2013	05/06/2013	11/05/2013	05/06/2013	05/06/2013	11/05/2013	05/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-	<0.5U		<0.5U			<0.5U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-	<0.5U		<0.5U			<0.5U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-	<0.5U		<0.5U			<0.5U	
4-Nitroaniline	UG/L	3.3	-	-	<0.5U		<0.5U			<0.5U	
4-Nitrophenol	UG/L	-	-	-	<10U		<10U			<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-	<21U		<21U			<21U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-	<0.5U		<0.5U			<0.5U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-	<0.5U		<0.5U			<0.5U	
Acenaphthene	UG/L	-	80	-	<0.58U		<0.60U			<1.2U	
Acenaphthylene	UG/L	-	200	-	<0.67U		<0.70U			<1.4U	
Acetaldehyde	UG/L	2.2	-	-	<50U		<50UJ			<500UJ	
Acetone	MG/L	-	6	-	<0.006U		<0.006U			<0.006U	
Acetonitrile	UG/L	130	-	-	<25U		<25UJ			<25U	
Acetophenone	UG/L	-	-	700	<0.5U		<0.5U			<0.5U	
Acrolein	UG/L	-	-	4	<1.6UJ	<10.0U	<1.6UJ	[8.2J]	[8.3J]	1.7J	
Acrylonitrile	UG/L	0.045	-	-	<1.9U		<1.9U			<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-	<1U		<1U			<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-	<5U		<5U			<5U	
Aniline	UG/L	12	-	-	<0.5U		<0.5U			<0.5U	
Anthracene	MG/L	-	2	-	<0.00058U		<0.0006U			<0.0012U	
Antimony	UG/L	-	-	1	<5.3U		[10J]			<5.3U	
Aramite	UG/L	1.1	-	-	<5U		<5U			<5U	
Arsenic	UG/L	-	10	-	3.8J		1.6J			1.4J	
Barium	UG/L	-	700	-	10.6		10.6			12.9	
Benzene	UG/L	-	1	-	<2.00U		<2.00U			<2.00U	
Benzo(A)Anthracene	UG/L	-	0.05	-	<0.67U		<0.70U			<1.4U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-	<0.58U		<0.60U			<1.2U	
Benzo(G,H,I)Perylene	UG/L	-	200	-	<0.58U		<0.60U			<1.2U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-	<0.86U		<0.89U			<1.8U	
Benzo(A)Pyrene	UG/L	-	0.005	-	<0.58U		<0.60U			<1.2U	
Benzyl Alcohol	UG/L	-	-	700	<5U		<5U			<5U	
Beryllium	UG/L	-	-	4	<0.67U		<0.67U			<0.67U	
Biphenyl	UG/L	-	400	-	<0.5U		<0.5U	[660]	[630]	19	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-	<0.5U		<0.5U			<0.5U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-	<0.5U		<0.5U			<0.5U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-	<0.5U		<0.5UJ			<0.5UJ	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	<2U		<2U			<2U	
Bromodichloromethane	UG/L	-	0.6	-	<1U		<1U			<1U	
Bromoform	UG/L	-	4	-	<1U		<1U			<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-	<0.002U		<0.002U			<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-	<38U		<40U			3300	
C19 to C36 Aliphatics	UG/L	-	-	-	<48U		<50U			<50U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U		<50.0U			<50.0U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-20	MW-21	MW-21	MW-22	MW-22	MW-22	MW-23A
				Sample Date	10/25/2013	05/06/2013	11/05/2013	05/06/2013	05/06/2013	11/05/2013	05/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-	<50.0U		<50.0U			<50.0U	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-	<20.0U		<20.0U			<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U		<50.0U			<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-	<29U		<30U			<30U	
Cadmium	UG/L	-	2	-	<0.76U		<0.76U			<0.76U	
Carbon Disulfide	UG/L	-	700	-	<1U		<1U			<1U	
Carbon Tetrachloride	UG/L	-	0.3	-	<1U		<1U			<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-	<0.8U		<0.8U			<0.8U	
Chlorobenzilate	UG/L	0.27	-	-	<3U		<3U			<3U	
Chlorodibromomethane	UG/L	-	0.4	-	<1U		<1U			<1U	
Chloroform	UG/L	-	70	-	<0.8U		<0.8U			<0.8U	
Chloroprene	UG/L	0.016	-	-	<1U		<1U			<1U	
Chromium	UG/L	-	10	-	2.8J		<1.6U			1.9J	
Chrysene	UG/L	-	5	-	<0.48U		<0.50U			<1.0U	
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.8U		<0.8U			<0.8U	
cis-1,3-Dichloropropene	UG/L	-	-	-	<1U		<1U			<1U	
Cobalt	UG/L	-	-	1	<1.3U		<1.3U			<1.3U	
Copper	MG/L	-	1	-	<0.0027U		<0.0027U			<0.0027U	
Di-N-Butyl Phthalate	UG/L	-	700	-	<2U		<2U			<2U	
Diallate	UG/L	0.46	-	-	<1U		<1U			<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-	<0.48U		<0.50U			<1.0U	
Dibenzofuran	UG/L	-	-	28	<0.5U		<0.5U			2	
Dichlorodifluoromethane	MG/L	-	1	-	<0.002U		<0.002U			<0.002U	
Diethyl Phthalate	MG/L	-	6	-	<0.002U		<0.002U			<0.002U	
Diethylene Glycol	UG/L	-	-	-	<8000U		<8000U			<8000U	
Dimethoate	UG/L	3.1	-	-	<3U		<3U			<3U	
Dimethyl Phthalate	UG/L	-	-	-	<2U		<2U			<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100	<0.5U		<0.5U	[5800]	[5300]	[3500]	
Ethyl Chloride	UG/L	-	3000	-	<1U		<1U			<1U	
Ethyl Methacrylate	UG/L	420	-	-	<1U		<1U			<1U	
Ethyl Methanesulfonate	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
Ethylbenzene	UG/L	-	600	-	<2.00U		<2.00U			<2.00U	
Ethylene Glycol	MG/L	-	10	-	<8U		<8U			<8U	
Fluoranthene	UG/L	-	300	-	<0.48U		<0.50U			<1.0U	
Fluorene	UG/L	-	300	-	<0.58U		<0.60U			<1.2U	
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-	<0.1U		<0.1U			<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-	<0.5U		<0.5U			<0.5U	
Hexachlorocyclopentadiene	UG/L	22	-	-	<5U		<5U			<5U	
Hexachloroethane	UG/L	0.79	-	-	<1U		<1U			<1U	
Hexachloropropylene	UG/L	-	-	-	<2U		<2U			<2U	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-	<0.58U		<0.60U			<1.2U	
Iodomethane	UG/L	-	-	-	<1U		<1U			<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-20	MW-21	MW-21	MW-22	MW-22	MW-22	MW-23A
				Sample Date	10/25/2013	05/06/2013	11/05/2013	05/06/2013	05/06/2013	11/05/2013	05/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-	<100U		<100U			<100U	
Isodrin	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
Isophorone	UG/L	-	40	-	<0.5U		<0.5U			<0.5U	
Isosafrole	UG/L	-	-	-	<2U		<2U			<2U	
Lead	UG/L	-	15	-	0.93J		0.29J			<0.085U	
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-	<0.06U		<0.06U			<0.06U	
Meta- And Para-Xylene	UG/L	-	-	-	<5.00U		<5.00U			<5.00U	
Methacrylonitrile	UG/L	1.5	-	-	<10U		<10U			<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-	<16U		<15U			<16U	
Methyl Bromide	UG/L	7	-	10	<1U		<1U			<1U	
Methyl Chloride	UG/L	-	3	-	<1U		<1U			<1U	
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U		<0.003U			<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U		<3U			<3U	
Methyl Methacrylate	UG/L	-	-	25	<1U		<1U			<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-	<1U		<1U			<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-	<2.00U		<2.00U			<2.00U	
Methylene Bromide	UG/L	-	-	70	<1U		<1U			<1U	
Methylene Chloride	UG/L	-	5	-	<2U		<2U			<2U	
N-Dioctyl Phthalate	UG/L	-	100	-	<2U		<2U			<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-	<2U		<2U			<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-	<2U		<2U			<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-	<0.5U		<0.5U			<0.5U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-	<0.5U		<0.5U			<0.5U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-	<2U		<2U			<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-	<0.5U		<0.5U			<0.5U	
N-Nitrosomorpholine	UG/L	0.01	-	-	<2U		<2UJ			<2UJ	
N-Nitrosopiperidine	UG/L	0.0071	-	-	<0.5U		<0.5U			<0.5U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-	<0.5U		<0.5U			<0.5U	
Naphthalene	UG/L	-	6	-	<3.00U		<3.00U			<3.00U	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-	<50.0U		<50.0U			<50.0U	
Nickel	UG/L	-	100	-	<1.5U		3J			<1.5U	
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-	<0.5U		<0.5U			<0.5U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-	<2U		<2U			<2U	
O-Toluidine	UG/L	-	-	-	<0.5U		<0.5U			<0.5U	
Ortho-Xylene	UG/L	190	-	-	<2.00U		<2.00U			<2.00U	
para-Phenylenediamine	UG/L	3000	-	-	<78U		<77U			<79U	
Pentachlorobenzene	UG/L	2.3	-	-	<0.5U		<0.5U			<0.5U	
Pentachloroethane	UG/L	0.56	-	-	<1U		<1U			<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-	<2U		<2U			<2U	
Pentachlorophenol	UG/L	-	0.3	-	<1U		<1U			<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-	<0.5U		<0.5U			<0.5U	
Phenanthrene	UG/L	-	200	-	<0.58U		<0.60U			<1.2U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-20	MW-21	MW-21	MW-22	MW-22	MW-22	MW-23A
				Sample Date	10/25/2013	05/06/2013	11/05/2013	05/06/2013	05/06/2013	11/05/2013	05/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-	<0.5U		<0.5U			[56]	
Pronamide	UG/L	900	-	-	<0.5U		<0.5U			<0.5U	
Propionitrile	UG/L	-	-	-	<30U		<30U			<30U	
Propylene Glycol	UG/L	-	-	140000	<8000U		<8000U			<8000U	
Pyrene	UG/L	-	200	-	<3.8U		<4.0U			<8.0U	
Pyridine	UG/L	15	-	-	<2U		<2U			<2U	
Safrole	UG/L	0.083	-	-	<2U		<2U			<2U	
Selenium	UG/L	-	20	-	<0.5UJ		<0.5U			<0.5U	
Silver	UG/L	-	20	-	<2.1U		<2.1U			<2.1U	
Styrene	UG/L	-	70	-	<1U		<1U			<1U	
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-	<100U		<100U			<100U	
Tetrachloroethene	UG/L	-	0.7	-	<0.8U		<0.8U			<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-	<1U		<1UJ			<1U	
Thallium	UG/L	-	-	0.2	<0.15U		<0.15U			<0.15U	
Thionazin	UG/L	-	-	-	<2U		<2U			<2U	
Tin	UG/L	-	-	2000	<2.9U		<2.9U			<2.9U	
Toluene	UG/L	-	600	-	<2.00U		<2.00U			<2.00U	
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.8U		<0.8U			<0.8U	
trans-1,3-Dichloropropene	UG/L	-	-	-	<1U		<1U			<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U		<15U			<15U	
Trichloroethene	UG/L	-	3	-	<1U		<1U			<1U	
Trichlorofluoromethane	MG/L	-	2	-	<0.002U		<0.002U			<0.002U	
Triethylene Glycol	UG/L	-	-	-	<8000U		<8000U			<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-	<38U		<40U			3300	
Vanadium	UG/L	-	-	0.3	[8.7J]		[5.9J]			<2U	
Vinyl Acetate	UG/L	-	-	88	<2U		<2UJ			<2U	
Vinyl Chloride	UG/L	-	0.03	-	<0.010U		<0.010U			0.025J	
Xylenes	UG/L	-	500	-	<0.8U		<0.8U			<0.8U	
Zinc	MG/L	-	1	-	<0.0020U		<0.0020U			<0.0020U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-23A	MW-24	MW-25	MW-25	MW-26A	MW-26A	MW-50
				Sample Date	11/14/2013	11/14/2013	05/07/2013	11/04/2013	05/06/2013	11/04/2013	11/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<1U	<1U		<1U		<1U	<1U
1,1,1-Trichloroethane	UG/L	-	200	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<1U	<1U		<1U		<1U	<1U
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
1,1-Dichloroethane	UG/L	-	6	-	<1U	<1U		<1U		<1U	<1U
1,1-Dichloroethene	UG/L	-	7	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U	<1U		<1U		<1U	<1U
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,2,4-Trichlorobenzene	UG/L	-	70	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U	<2U		<2U		<2U	<2U
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<1U	<1U		<1U		<1U	<1U
1,2-Dichlorobenzene	UG/L	-	20	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,2-Dichloroethane	UG/L	-	0.4	-	<1U	<1U		<1U		<1U	<1U
1,2-Dichloropropane	UG/L	-	0.6	-	<1U	<1U		<1U		<1U	<1U
1,2-Diphenylhydrazine	UG/L	0.067	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,3,5-Trinitrobenzene	UG/L	460	-	-	<5U	<5U		<5U		<5U	<5U
1,3-Dichlorobenzene	UG/L	-	200	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,3-Dinitrobenzene	UG/L	1.5	-	-	<2U	<2U		<2U		<2U	<2U
1,4-Dichlorobenzene	UG/L	-	6	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
1,4-Dioxane	UG/L	-	3	-	[7]	2J	3J	[4J]		<1U	[6]
1,4-Naphthoquinone	UG/L	-	-	-	<11U	<11U		<11R		<10R	<11R
1-Naphthylamine	UG/L	-	-	-	<5U	<5U		<5U		<5U	<5U
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,4,5-Trichlorophenol	UG/L	-	-	63	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,4,6-Trichlorophenol	UG/L	-	-	4	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,4-Dichlorophenol	UG/L	-	-	0.98	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,4-Dimethylphenol	UG/L	-	100	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,4-Dinitrophenol	UG/L	30	-	-	<11U	<11U		<11U		<10U	<11U
2,4-Dinitrotoluene	UG/L	-	-	0.1	<1U	<1U		<1U		<1U	<1U
2,6-Dichlorophenol	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2,6-Dinitrotoluene	UG/L	0.042	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2-Acetylaminofluorene	UG/L	0.013	-	-	<2U	<2U		<2U		<2U	<2U
2-Chloronaphthalene	UG/L	550	-	-	<0.4U	<0.4U		<0.4U		<0.4U	<0.4U
2-Chlorophenol	UG/L	-	0.4	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2-Hexanone	UG/L	-	-	40	<3U	<3U		<3U		<3U	<3U
2-Methylnaphthalene	UG/L	-	30	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
2-Methylphenol (O-Cresol)	UG/L	-	-	400	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2-Naphthylamine	UG/L	0.033	-	-	<5U	<5U		<5U		<5U	<5U
2-Nitroaniline	UG/L	150	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2-Nitrophenol	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
2-Picoline	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
3,3'-Dichlorobenzidine	UG/L	0.11	-	-	<2U	<2U		<2U		<2U	<2U
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-	<27U	<26U		<27U		<26U	<26U
3-Methylcholanthrene	UG/L	0.00098	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
3-Nitroaniline	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-	<5U	<5U		<5U		<5U	<5U
4-Aminobiphenyl	UG/L	0.0026	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Bromophenyl Phenyl Ether	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Chloro-3-Methylphenol	UG/L	1100	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-23A	MW-24	MW-25	MW-25	MW-26A	MW-26A	MW-50
				Sample Date	11/14/2013	11/14/2013	05/07/2013	11/04/2013	05/06/2013	11/04/2013	11/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Methylphenol (P-Cresol)	UG/L	-	40	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Nitroaniline	UG/L	3.3	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
4-Nitrophenol	UG/L	-	-	-	<11U	<11U		<11U		<10U	<11U
4-Nitroquinoline-N-Oxide	UG/L	-	-	-	<21U	<21U		<22U		<21U	<21UJ
5-Nitro-Ortho-Toluidine	UG/L	7	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Acenaphthene	UG/L	-	80	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Acenaphthylene	UG/L	-	200	-	<0.69U	<0.69U		<0.78U		<0.68U	<0.71UJ
Acetaldehyde	UG/L	2.2	-	-	<50U	<50U		<50UJ		<50UJ	<50UJ
Acetone	MG/L	-	6	-	<0.006U	<0.006U		<0.006U		<0.006U	<0.006U
Acetonitrile	UG/L	130	-	-	<25U	<25U		<25U		<25U	<25U
Acetophenone	UG/L	-	-	700	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Acrolein	UG/L	-	-	4	<1.6UJ	<1.6UJ		<1.6UJ	<10.0U	<1.6UJ	<1.6UJ
Acrylonitrile	UG/L	0.045	-	-	<1.9U	<1.9U		<1.9U		<1.9U	<1.9U
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-	<1U	<1U		<1U		<1U	<1U
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-	<5U	<5U		<5U		<5U	<5U
Aniline	UG/L	12	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Anthracene	MG/L	-	2	-	<0.00059U	<0.0006U		<0.00067U		<0.00058U	<0.00061UJ
Antimony	UG/L	-	-	1	<5.3U	<5.3U		<5.3U		<5.3U	<5.3U
Aramite	UG/L	1.1	-	-	<5U	<5U		<5U		<5U	<5U
Arsenic	UG/L	-	10	-	0.96J	0.64J		<0.42U		<0.42U	0.97J
Barium	UG/L	-	700	-	6.2J	5.2J		13.3		31	13.4
Benzene	UG/L	-	1	-	<2.00U	<2.00U		<2.00U		<2.00U	<2.00U
Benzo(A)Anthracene	UG/L	-	0.05	-	<0.69U	<0.69U		<0.78U		<0.68U	<0.71UJ
Benzo(B)Fluoranthene	UG/L	-	0.05	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Benzo(G,H,I)Perylene	UG/L	-	200	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Benzo(K)Fluoranthene	UG/L	-	0.5	-	<0.88U	<0.89U		<1.0U		<0.87U	<0.92UJ
Benzo(A)Pyrene	UG/L	-	0.005	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Benzyl Alcohol	UG/L	-	-	700	<5U	<5U		<5U		<5U	<5U
Beryllium	UG/L	-	-	4	<0.67U	<0.67U		<0.67U		<0.67U	<0.67U
Biphenyl	UG/L	-	400	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-	<0.5U	<0.5U		<0.5UJ		<0.5UJ	<0.5UJ
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	<2U	<2U		<2U		<2U	<2U
Bromodichloromethane	UG/L	-	0.6	-	<1U	<1U		<1U		<1U	<1U
Bromoform	UG/L	-	4	-	<1U	<1U		<1U		<1U	<1U
Butyl Benzyl Phthalate	MG/L	-	1	-	<0.002U	<0.002U		<0.002U		<0.002U	<0.002U
C11 to C22 Aromatics	UG/L	-	-	-	<39U	<40U		<45U		<39U	<41UJ
C19 to C36 Aliphatics	UG/L	-	-	-	<49U	<50U		<56U		<48U	<51UJ
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U	<50.0U		<50.0U		<50.0U	<50.0U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-23A	MW-24	MW-25	MW-25	MW-26A	MW-26A	MW-50
				Sample Date	11/14/2013	11/14/2013	05/07/2013	11/04/2013	05/06/2013	11/04/2013	11/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-	<50.0U	<50.0U		<50.0U		<50.0U	<50.0U
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-	<20.0U	<20.0U		<20.0U		<20.0U	<20.0U
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U	<50.0U		<50.0U		<50.0U	<50.0U
C9 to C18 Aliphatics	UG/L	-	700	-	<29U	<30U		<33U		<29U	<31UJ
Cadmium	UG/L	-	2	-	<0.76U	<0.76U		<0.76U		<0.76U	<0.76U
Carbon Disulfide	UG/L	-	700	-	<1U	<1U		<1U		<1U	<1U
Carbon Tetrachloride	UG/L	-	0.3	-	<1U	<1U		<1U		<1U	<1U
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
Chlorobenzilate	UG/L	0.27	-	-	<3U	<3U		<3U		<3U	<3U
Chlorodibromomethane	UG/L	-	0.4	-	<1U	<1U		<1U		<1U	<1U
Chloroform	UG/L	-	70	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
Chloroprene	UG/L	0.016	-	-	<1U	<1U		<1U		<1U	<1U
Chromium	UG/L	-	10	-	2.9J	2.2J		<1.6U		<1.6U	<1.6U
Chrysene	UG/L	-	5	-	<0.49U	<0.50U		<0.56U		<0.48U	<0.51UJ
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
cis-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U		<1U		<1U	<1U
Cobalt	UG/L	-	-	1	<1.3U	<1.3U		<1.3U		<1.3U	<1.3U
Copper	MG/L	-	1	-	<0.0027U	<0.0027U		<0.0027U		<0.0027U	<0.0027U
Di-N-Butyl Phthalate	UG/L	-	700	-	<2U	<2U		<2U		<2U	<2U
Diallate	UG/L	0.46	-	-	<1U	<1U		<1U		<1U	<1U
Dibenz(A,H)Anthracene	UG/L	-	0.005	-	<0.49U	<0.50U		<0.56U		<0.48U	<0.51UJ
Dibenzofuran	UG/L	-	-	28	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Dichlorodifluoromethane	MG/L	-	1	-	<0.002U	<0.002U		<0.002U		<0.002U	<0.002U
Diethyl Phthalate	MG/L	-	6	-	<0.002U	<0.002U		<0.002U		<0.002U	<0.002U
Diethylene Glycol	UG/L	-	-	-	<8000U	<8000U		<8000U		<8000U	<8000U
Dimethoate	UG/L	3.1	-	-	<3U	<3U		<3U		<3U	<3U
Dimethyl Phthalate	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100	<0.5U	<0.5U		<0.5U		<0.5U	1
Ethyl Chloride	UG/L	-	3000	-	<1U	<1U		<1U		<1U	<1U
Ethyl Methacrylate	UG/L	420	-	-	<1U	<1U		<1U		<1U	<1U
Ethyl Methanesulfonate	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Ethylbenzene	UG/L	-	600	-	<2.00U	<2.00U		<2.00U		<2.00U	<2.00U
Ethylene Glycol	MG/L	-	10	-	<8U	<8U		<8U		<8U	<8U
Fluoranthene	UG/L	-	300	-	<0.49U	<0.50U		<0.56U		<0.48U	<0.51UJ
Fluorene	UG/L	-	300	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-	<0.1U	<0.1U		<0.1U		<0.1U	<0.1U
Hexachlorobutadiene	UG/L	-	0.4	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Hexachlorocyclopentadiene	UG/L	22	-	-	<5U	<5U		<5U		<5U	<5U
Hexachloroethane	UG/L	0.79	-	-	<1U	<1U		<1U		<1U	<1U
Hexachloropropylene	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ
Iodomethane	UG/L	-	-	-	<1U	<1U		<1U		<1U	<1U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-23A	MW-24	MW-25	MW-25	MW-26A	MW-26A	MW-50
				Sample Date	11/14/2013	11/14/2013	05/07/2013	11/04/2013	05/06/2013	11/04/2013	11/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-	<100U	<100U		<100U		<100U	<100U
Isodrin	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Isophorone	UG/L	-	40	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Isosafrole	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
Lead	UG/L	-	15	-	0.26J	<0.085U		0.087J		<0.085U	<0.085U
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-	<0.06U	<0.06U		<0.06U		<0.06U	<0.06U
Meta- And Para-Xylene	UG/L	-	-	-	<5.00U	<5.00U		<5.00U		<5.00U	<5.00U
Methacrylonitrile	UG/L	1.5	-	-	<10U	<10U		<10U		<10U	<10U
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-	<16U	<16U		<16U		<16U	<16U
Methyl Bromide	UG/L	7	-	10	<1U	<1U		<1U		<1U	<1U
Methyl Chloride	UG/L	-	3	-	<1U	<1U		<1U		<1U	<1U
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U	<0.003U		<0.003U		<0.003U	<0.003U
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U	<3U		<3U		<3U	<3U
Methyl Methacrylate	UG/L	-	-	25	<1U	<1U		<1U		<1U	<1U
Methyl Methanesulfonate	UG/L	0.68	-	-	<1U	<1U		<1U		<1U	<1U
Methyl Tertiary Butyl Ether	UG/L	-	20	-	<2.00U	<2.00U		<2.00U		<2.00U	<2.00U
Methylene Bromide	UG/L	-	-	70	<1U	<1U		<1U		<1U	<1U
Methylene Chloride	UG/L	-	5	-	<2U	<2U		<2U		<2U	<2U
N-Dioctyl Phthalate	UG/L	-	100	-	<2U	<2U		<2U		<2U	<2U
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-	<2U	<2U		<2U		<2U	<2U
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-	<2U	<2U		<2U		<2U	<2U
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
N-Nitrosodiethylamine	UG/L	0.00014	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
N-Nitrosodimethylamine	UG/L	-	0.0007	-	<2U	<2U		<2U		<2U	<2U
N-Nitrosodiphenylamine	UG/L	10	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
N-Nitrosomorpholine	UG/L	0.01	-	-	<2U	<2U		<2UJ		<2UJ	<2UJ
N-Nitrosopiperidine	UG/L	0.0071	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
N-Nitrosopyrrolidine	UG/L	0.032	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Naphthalene	UG/L	-	6	-	<3.00U	<3.00U		<3.00U		<3.00U	<3.00U
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-	<50.0U	<50.0U		<50.0U		<50.0U	<50.0U
Nickel	UG/L	-	100	-	2.6J	<1.5U		<1.5U		<1.5U	2.6J
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
O,O,O-Triethylphosphorothioate	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
O-Toluidine	UG/L	-	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Ortho-Xylene	UG/L	190	-	-	<2.00U	<2.00U		<2.00U		<2.00U	<2.00U
para-Phenylenediamine	UG/L	3000	-	-	<80U	<79U		<81U		<78U	<79U
Pentachlorobenzene	UG/L	2.3	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Pentachloroethane	UG/L	0.56	-	-	<1U	<1U		<1U		<1U	<1U
Pentachloronitrobenzene	UG/L	0.1	-	-	<2U	<2U		<2U		<2U	<2U
Pentachlorophenol	UG/L	-	0.3	-	<1U	<1U		<1U		<1U	<1U
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Phenanthrene	UG/L	-	200	-	<0.59U	<0.60U		<0.67U		<0.58U	<0.61UJ

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-23A	MW-24	MW-25	MW-25	MW-26A	MW-26A	MW-50
				Sample Date	11/14/2013	11/14/2013	05/07/2013	11/04/2013	05/06/2013	11/04/2013	11/06/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Pronamide	UG/L	900	-	-	<0.5U	<0.5U		<0.5U		<0.5U	<0.5U
Propionitrile	UG/L	-	-	-	<30U	<30U		<30U		<30U	<30U
Propylene Glycol	UG/L	-	-	140000	<8000U	<8000U		<8000U		<8000U	<8000U
Pyrene	UG/L	-	200	-	<3.9U	<4.0U		<5.5U		<3.9U	<4.2UJ
Pyridine	UG/L	15	-	-	<2U	<2U		<2U		<2U	<2U
Safrole	UG/L	0.083	-	-	<2U	<2U		<2U		<2U	<2U
Selenium	UG/L	-	20	-	<0.5U	<0.5U		<0.5U		0.56J	<0.5U
Silver	UG/L	-	20	-	<2.1U	<2.1U		<2.1U		<2.1U	<2.1U
Styrene	UG/L	-	70	-	<1U	<1U		<1U		<1U	<1U
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-	<100U	<100U		<99U		<99U	<90U
Tetrachloroethene	UG/L	-	0.7	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-	<1U	<1U		<1U		<1U	<1U
Thallium	UG/L	-	-	0.2	<0.15U	<0.15U		<0.15U		<0.15U	<0.15U
Thionazin	UG/L	-	-	-	<2U	<2U		<2U		<2U	<2U
Tin	UG/L	-	-	2000	<2.9U	<2.9U		<2.9U		<2.9U	<2.9U
Toluene	UG/L	-	600	-	<2.00U	<2.00U		<2.00U		<2.00U	<2.00U
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
trans-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U		<1U		<1U	<1U
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U	<15U		<15U		<15U	<15U
Trichloroethene	UG/L	-	3	-	<1U	<1U		<1U		<1U	<1U
Trichlorofluoromethane	MG/L	-	2	-	<0.002U	<0.002U		<0.002U		<0.002U	<0.002U
Triethylene Glycol	UG/L	-	-	-	<8000U	<8000U		<8000U		<8000U	<8000U
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-	<39U	<40U		<45U		<39U	<41UJ
Vanadium	UG/L	-	-	0.3	[2.6J]	<2U		<2U		<2U	[3.4J]
Vinyl Acetate	UG/L	-	-	88	<2U	<2U		<2U		<2U	<2U
Vinyl Chloride	UG/L	-	0.03	-	<0.010U	<0.010U		<0.010U		<0.010U	<0.010U
Xylenes	UG/L	-	500	-	<0.8U	<0.8U		<0.8U		<0.8U	<0.8U
Zinc	MG/L	-	1	-	0.0035B	0.0064B		0.0064J		<0.0020U	<0.0020U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-51	MW-52	MW-52	MW-56	MW-56	MW-56	MW-70
				Sample Date	11/06/2013	05/06/2013	11/06/2013	05/06/2013	11/13/2013	11/13/2013	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<1U		<1U		<1U	<1U	
1,1,1-Trichloroethane	UG/L	-	200	-	<0.8U		<0.8U		<0.8U	<0.8U	
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<1U		<1U		<1U	<1U	
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.8U		<0.8U		<0.8U	<0.8U	
1,1-Dichloroethane	UG/L	-	6	-	<1U		<1U		<1U	<1U	
1,1-Dichloroethene	UG/L	-	7	-	<0.8U		<0.8U		<0.8U	<0.8U	
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U		<1U		<1U	<1U	
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2	<0.5U		<0.5U		<0.6U	<0.5U	
1,2,4-Trichlorobenzene	UG/L	-	70	-	<0.5U		<0.5U		<0.6U	<0.5U	
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U		<2U		<2U	<2U	
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<1U		<1U		<1U	<1U	
1,2-Dichlorobenzene	UG/L	-	20	-	<0.5U		<0.5U		<0.6U	<0.5U	
1,2-Dichloroethane	UG/L	-	0.4	-	<1U		<1U		<1U	<1U	
1,2-Dichloropropane	UG/L	-	0.6	-	<1U		<1U		<1U	<1U	
1,2-Diphenylhydrazine	UG/L	0.067	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
1,3,5-Trinitrobenzene	UG/L	460	-	-	<5U		<5U		<6UJ	<5UJ	
1,3-Dichlorobenzene	UG/L	-	200	-	<0.5U		<0.5U		<0.6U	<0.5U	
1,3-Dinitrobenzene	UG/L	1.5	-	-	<2U		<2U		<2U	<2U	
1,4-Dichlorobenzene	UG/L	-	6	-	<0.5U		<0.5U		<0.6U	<0.5U	
1,4-Dioxane	UG/L	-	3	-	[55]	[86]	[71]	[19]	[21]	[20]	0.36J
1,4-Naphthoquinone	UG/L	-	-	-	<11R		<10R		<11R	<11R	
1-Naphthylamine	UG/L	-	-	-	<5U		<5U		<6U	<5U	
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-	<0.5U		<0.5U		<0.6U	<0.5U	
2,4,5-Trichlorophenol	UG/L	-	-	63	<0.5U		<0.5U		<0.6U	<0.5U	
2,4,6-Trichlorophenol	UG/L	-	-	4	<0.5U		<0.5U		<0.6U	<0.5U	
2,4-Dichlorophenol	UG/L	-	-	0.98	<0.5U		<0.5U		<0.6U	<0.5U	
2,4-Dimethylphenol	UG/L	-	100	-	<0.5U		<0.5U		<0.6U	<0.5U	
2,4-Dinitrophenol	UG/L	30	-	-	<11U		<10U		<11U	<11U	
2,4-Dinitrotoluene	UG/L	-	-	0.1	<1U		<1U		<1U	<1U	
2,6-Dichlorophenol	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
2,6-Dinitrotoluene	UG/L	0.042	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
2-Acetylaminofluorene	UG/L	0.013	-	-	<2U		<2U		<2U	<2U	
2-Chloronaphthalene	UG/L	550	-	-	<0.4U		<0.4U		<0.4U	<0.4U	
2-Chlorophenol	UG/L	-	0.4	-	<0.5U		<0.5U		<0.6U	<0.5U	
2-Hexanone	UG/L	-	-	40	<3U		<3U		<3U	<3U	
2-Methylnaphthalene	UG/L	-	30	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
2-Methylphenol (O-Cresol)	UG/L	-	-	400	<0.5U		<0.5U		<0.6U	<0.5U	
2-Naphthylamine	UG/L	0.033	-	-	<5U		<5U		<6U	<5U	
2-Nitroaniline	UG/L	150	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
2-Nitrophenol	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
2-Picoline	UG/L	-	-	-	<2U		<2U		<2U	<2U	
3,3'-Dichlorobenzidine	UG/L	0.11	-	-	<2U		<2U		<2U	<2U	
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-	<26U		<26U		<28U	<27U	
3-Methylcholanthrene	UG/L	0.00098	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
3-Nitroaniline	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-	<5U		<5U		<6U	<5U	
4-Aminobiphenyl	UG/L	0.0026	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Bromophenyl Phenyl Ether	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Chloro-3-Methylphenol	UG/L	1100	-	-	<0.5U		<0.5U		<0.6U	<0.5U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-51	MW-52	MW-52	MW-56	MW-56	MW-56	MW-70
				Sample Date	11/06/2013	05/06/2013	11/06/2013	05/06/2013	11/13/2013	11/13/2013	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Methylphenol (P-Cresol)	UG/L	-	40	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Nitroaniline	UG/L	3.3	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
4-Nitrophenol	UG/L	-	-	-	<11U		<10U		<11U	<11U	
4-Nitroquinoline-N-Oxide	UG/L	-	-	-	<21UJ		<21UJ		<22U	<22U	
5-Nitro-Ortho-Toluidine	UG/L	7	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Acenaphthene	UG/L	-	80	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Acenaphthylene	UG/L	-	200	-	<0.68UJ		<0.68UJ		<0.71U	<0.70U	
Acetaldehyde	UG/L	2.2	-	-	<100UJ		<50UJ		<500U	<500U	
Acetone	MG/L	-	6	-	<0.006U		<0.006U		<0.006U	<0.006U	
Acetonitrile	UG/L	130	-	-	<25U		<25U		<25U	<25U	
Acetophenone	UG/L	-	-	700	<0.5U		<0.5U		<0.6U	<0.5U	
Acrolein	UG/L	-	-	4	<1.6UJ		<1.6UJ		<1.6UJ	<1.6UJ	
Acrylonitrile	UG/L	0.045	-	-	<1.9U		<1.9U		<1.9U	<1.9U	
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-	<1U		<1U		<1U	<1U	
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-	<5U		<5U		<6U	<5U	
Aniline	UG/L	12	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Anthracene	MG/L	-	2	-	<0.00059UJ		<0.00059UJ		<0.00061U	<0.0006U	
Antimony	UG/L	-	-	1	<5.3U		[30.2J]		<5.3U	<5.3U	
Aramite	UG/L	1.1	-	-	<5U		<5U		<6U	<5U	
Arsenic	UG/L	-	10	-	3.1J		1.9J		8.8J	8.7J	
Barium	UG/L	-	700	-	33.5		8.2J		10	10J	
Benzene	UG/L	-	1	-	<2.00U		<2.00U		<2.00U	<2.00U	
Benzo(A)Anthracene	UG/L	-	0.05	-	<0.68UJ		<0.68UJ		<0.71U	<0.70U	
Benzo(B)Fluoranthene	UG/L	-	0.05	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Benzo(G,H,I)Perylene	UG/L	-	200	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Benzo(K)Fluoranthene	UG/L	-	0.5	-	<0.88UJ		<0.88UJ		<0.91U	<0.89U	
Benzo(A)Pyrene	UG/L	-	0.005	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Benzyl Alcohol	UG/L	-	-	700	<5U		<5U		<6U	<5U	
Beryllium	UG/L	-	-	4	<0.67U		<0.67U		<0.67U	<0.67U	
Biphenyl	UG/L	-	400	-	<0.5U		<0.5U		<0.6U	<0.5U	
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-	<0.5U		<0.5U		<0.6U	<0.5U	
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-	<0.5UJ		<0.5UJ		<0.6U	<0.5U	
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	<2U		<2U		<2U	<2U	
Bromodichloromethane	UG/L	-	0.6	-	<1U		<1U		<1U	<1U	
Bromoform	UG/L	-	4	-	<1U		<1U		<1U	<1U	
Butyl Benzyl Phthalate	MG/L	-	1	-	<0.002U		<0.002U		<0.002U	<0.002U	
C11 to C22 Aromatics	UG/L	-	-	-	<39UJ		<39UJ		<41U	<40U	
C19 to C36 Aliphatics	UG/L	-	-	-	<49UJ		<49UJ		<51U	<50U	
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U		<50.0U		<50.0U	<50.0U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-51	MW-52	MW-52	MW-56	MW-56	MW-56	MW-70
				Sample Date	11/06/2013	05/06/2013	11/06/2013	05/06/2013	11/13/2013	11/13/2013	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-	<50.0U		<50.0U		<50.0U	<50.0U	
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-	<20.0U		<20.0U		<20.0U	<20.0U	
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-	<50.0U		<50.0U		<50.0U	<50.0U	
C9 to C18 Aliphatics	UG/L	-	700	-	<29UJ		<29UJ		<30U	<30U	
Cadmium	UG/L	-	2	-	<0.76U		<0.76U		0.97J	1.1J	
Carbon Disulfide	UG/L	-	700	-	<1U		<1U		<1U	<1U	
Carbon Tetrachloride	UG/L	-	0.3	-	<1U		<1U		<1U	<1U	
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-	<0.8U		<0.8U		<0.8U	<0.8U	
Chlorobenzilate	UG/L	0.27	-	-	<3U		<3U		<3UJ	<3UJ	
Chlorodibromomethane	UG/L	-	0.4	-	<1U		<1U		<1U	<1U	
Chloroform	UG/L	-	70	-	<0.8U		<0.8U		<0.8U	<0.8U	
Chloroprene	UG/L	0.016	-	-	<1U		<1U		<1U	<1U	
Chromium	UG/L	-	10	-	2.1J		<1.6U		<1.6U	<1.6U	
Chrysene	UG/L	-	5	-	<0.49UJ		<0.49UJ		<0.51U	<0.50U	
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.8U		<0.8U		<0.8U	<0.8U	
cis-1,3-Dichloropropene	UG/L	-	-	-	<1U		<1U		<1U	<1U	
Cobalt	UG/L	-	-	1	<1.3U		<1.3U		<1.3U	<1.3U	
Copper	MG/L	-	1	-	<0.0027U		<0.0027U		<0.0027U	<0.0027U	
Di-N-Butyl Phthalate	UG/L	-	700	-	<2U		<2U		<2U	<2U	
Diallate	UG/L	0.46	-	-	<1U		<1U		<1U	<1U	
Dibenz(A,H)Anthracene	UG/L	-	0.005	-	<0.49UJ		<0.49UJ		<0.51U	<0.50U	
Dibenzofuran	UG/L	-	-	28	<0.5U		<0.5U		<0.6U	<0.5U	
Dichlorodifluoromethane	MG/L	-	1	-	<0.002U		<0.002U		<0.002U	<0.002U	
Diethyl Phthalate	MG/L	-	6	-	<0.002U		<0.002U		<0.002U	<0.002U	
Diethylene Glycol	UG/L	-	-	-	<8000U		<8000U		<8000U	<8000U	
Dimethoate	UG/L	3.1	-	-	<3U		<3U		<3U	<3U	
Dimethyl Phthalate	UG/L	-	-	-	<2U		<2U		<2U	<2U	
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100	1		1		5	5	
Ethyl Chloride	UG/L	-	3000	-	<1U		<1U		<1U	<1U	
Ethyl Methacrylate	UG/L	420	-	-	<1U		<1U		<1U	<1U	
Ethyl Methanesulfonate	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Ethylbenzene	UG/L	-	600	-	<2.00U		<2.00U		<2.00U	<2.00U	
Ethylene Glycol	MG/L	-	10	-	<8U		<8U		<8U	<8U	
Fluoranthene	UG/L	-	300	-	<0.49UJ		<0.49UJ		<0.51U	<0.50U	
Fluorene	UG/L	-	300	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-	<0.1U		<0.1U		<0.1U	<0.1U	
Hexachlorobutadiene	UG/L	-	0.4	-	<0.5U		<0.5U		<0.6U	<0.5U	
Hexachlorocyclopentadiene	UG/L	22	-	-	<5U		<5U		<6U	<5U	
Hexachloroethane	UG/L	0.79	-	-	<1U		<1U		<1U	<1U	
Hexachloropropylene	UG/L	-	-	-	<2U		<2U		<2UJ	<2UJ	
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	
Iodomethane	UG/L	-	-	-	<1U		<1U		<1U	<1U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-51	MW-52	MW-52	MW-56	MW-56	MW-56	MW-70
				Sample Date	11/06/2013	05/06/2013	11/06/2013	05/06/2013	11/13/2013	11/13/2013	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-	<100U		<100U		<100U	<100U	
Isodrin	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Isophorone	UG/L	-	40	-	<0.5U		<0.5U		<0.6U	<0.5U	
Isosafrole	UG/L	-	-	-	<2U		<2U		<2U	<2U	
Lead	UG/L	-	15	-	<0.085U		<0.085U		<0.085U	<0.085U	
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-	<0.06U		<0.06U		<0.06U	<0.06U	
Meta- And Para-Xylene	UG/L	-	-	-	<5.00U		<5.00U		<5.00U	<5.00U	
Methacrylonitrile	UG/L	1.5	-	-	<10U		<10U		<10U	<10U	
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-	<16U		<16U		<17U	<16U	
Methyl Bromide	UG/L	7	-	10	<1U		<1U		<1U	<1U	
Methyl Chloride	UG/L	-	3	-	<1U		<1U		<1U	<1U	
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U		<0.003U		<0.003U	<0.003U	
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U		<3U		<3U	<3U	
Methyl Methacrylate	UG/L	-	-	25	<1U		<1U		<1U	<1U	
Methyl Methanesulfonate	UG/L	0.68	-	-	<1U		<1U		<1U	<1U	
Methyl Tertiary Butyl Ether	UG/L	-	20	-	<2.00U		<2.00U		<2.00U	<2.00U	
Methylene Bromide	UG/L	-	-	70	<1U		<1U		<1U	<1U	
Methylene Chloride	UG/L	-	5	-	<2U		<2U		<2U	<2U	
N-Dioctyl Phthalate	UG/L	-	100	-	<2U		<2U		<2U	<2U	
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-	<2U		<2U		<2U	<2U	
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-	<2U		<2U		<2U	<2U	
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
N-Nitrosodiethylamine	UG/L	0.00014	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
N-Nitrosodimethylamine	UG/L	-	0.0007	-	<2U		<2U		<2U	<2U	
N-Nitrosodiphenylamine	UG/L	10	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
N-Nitrosomorpholine	UG/L	0.01	-	-	<2UJ		<2UJ		<2U	<2U	
N-Nitrosopiperidine	UG/L	0.0071	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
N-Nitrosopyrrolidine	UG/L	0.032	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Naphthalene	UG/L	-	6	-	<3.00U		<3.00U		<3.00U	<3.00U	
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-	<50.0U		<50.0U		<50.0U	<50.0U	
Nickel	UG/L	-	100	-	2.1J		2.5J		<1.5U	<1.5U	
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
O,O,O-Triethylphosphorothioate	UG/L	-	-	-	<2U		<2U		<2U	<2U	
O-Toluidine	UG/L	-	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Ortho-Xylene	UG/L	190	-	-	<2.00U		<2.00U		<2.00U	<2.00U	
para-Phenylenediamine	UG/L	3000	-	-	<79U		<78U		<83U	<82U	
Pentachlorobenzene	UG/L	2.3	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Pentachloroethane	UG/L	0.56	-	-	<1U		<1U		<1U	<1U	
Pentachloronitrobenzene	UG/L	0.1	-	-	<2U		<2U		<2U	<2U	
Pentachlorophenol	UG/L	-	0.3	-	<1U		<1U		<1U	<1U	
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Phenanthrene	UG/L	-	200	-	<0.59UJ		<0.59UJ		<0.61U	<0.60U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-51	MW-52	MW-52	MW-56	MW-56	MW-56	MW-70
				Sample Date	11/06/2013	05/06/2013	11/06/2013	05/06/2013	11/13/2013	11/13/2013	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-	<0.5U		<0.5U		<0.6U	<0.5U	
Pronamide	UG/L	900	-	-	<0.5U		<0.5U		<0.6U	<0.5U	
Propionitrile	UG/L	-	-	-	<30U		<30U		<30U	<30U	
Propylene Glycol	UG/L	-	-	140000	<8000U		<8000U		<8000U	<8000U	
Pyrene	UG/L	-	200	-	<3.9UJ		<3.9UJ		<4.1U	<4.0U	
Pyridine	UG/L	15	-	-	<2U		<2U		<2U	<2U	
Safrole	UG/L	0.083	-	-	<2U		<2U		<2U	<2U	
Selenium	UG/L	-	20	-	<0.5U		<0.5U		<0.5U	<0.5U	
Silver	UG/L	-	20	-	<2.1U		<2.1U		<2.1U	<2.1U	
Styrene	UG/L	-	70	-	<1U		<1U		<1U	<1U	
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-	<99U		<99U		<100U	<100U	
Tetrachloroethene	UG/L	-	0.7	-	<0.8U		<0.8U		<0.8U	<0.8U	
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-	<1U		<1U		<1U	<1U	
Thallium	UG/L	-	-	0.2	<0.15U		<0.15U		<0.15U	<0.15U	
Thionazin	UG/L	-	-	-	<2U		<2U		<2U	<2U	
Tin	UG/L	-	-	2000	<2.9U		<2.9U		<2.9U	<2.9U	
Toluene	UG/L	-	600	-	<2.00U		<2.00U		1J	1J	
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.8U		<0.8U		<0.8U	<0.8U	
trans-1,3-Dichloropropene	UG/L	-	-	-	<1U		<1U		<1U	<1U	
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U		<15U		<15U	<15U	
Trichloroethene	UG/L	-	3	-	<1U		<1U		<1U	<1U	
Trichlorofluoromethane	MG/L	-	2	-	<0.002U		<0.002U		<0.002U	<0.002U	
Triethylene Glycol	UG/L	-	-	-	<8000U		<8000U		<8000U	<8000U	
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-	<39UJ		<39UJ		<41U	<40U	
Vanadium	UG/L	-	-	0.3	<2U		[8J]		<2U	<2U	
Vinyl Acetate	UG/L	-	-	88	<2U		<2U		<2U	<2U	
Vinyl Chloride	UG/L	-	0.03	-	0.020B		<0.010U		<0.010U	<0.010U	<0.010U
Xylenes	UG/L	-	500	-	<0.8U		<0.8U		<0.8U	<0.8U	
Zinc	MG/L	-	1	-	<0.0020U		<0.0020U		<0.0020U	<0.0020U	

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-71	MW-72	SWMU9-TW-21R	SWMU90-TW-1	SWMU90-TW-2	SWMU90-TW-3	SWMU90-TW-4
				Sample Date	06/20/2014	06/20/2014	10/25/2013	10/14/2013	10/14/2013	10/14/2013	10/15/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1				<1U	<1U	<1U	<1U
1,1,1-Trichloroethane	UG/L	-	200	-				<0.8U	<0.8U	<0.8U	<0.8U
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-				<1U	<1U	<1U	<1U
1,1,2-Trichloroethane	UG/L	-	-	0.6				<0.8U	<0.8U	<0.8U	<0.8U
1,1-Dichloroethane	UG/L	-	6	-				<1U	<1U	<1U	<1U
1,1-Dichloroethene	UG/L	-	7	-				<0.8U	<0.8U	<0.8U	<0.8U
1,2,3-Trichloropropane	UG/L	-	0.005	-				<1U	<1U	<1U	<1U
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2				<0.5U	<0.5U	<0.5U	<0.5U
1,2,4-Trichlorobenzene	UG/L	-	70	-				<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-				<2U	<2U	<2U	<2U
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-				<1U	<1U	<1U	<1U
1,2-Dichlorobenzene	UG/L	-	20	-				<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dichloroethane	UG/L	-	0.4	-				<1U	<1U	<1U	<1U
1,2-Dichloropropane	UG/L	-	0.6	-				<1U	<1U	<1U	<1U
1,2-Diphenylhydrazine	UG/L	0.067	-	-				<0.5U	<0.5U	<0.5U	<0.5U
1,3,5-Trinitrobenzene	UG/L	460	-	-				<5U	<5U	<5U	<5U
1,3-Dichlorobenzene	UG/L	-	200	-				<0.5U	<0.5U	<0.5U	<0.5U
1,3-Dinitrobenzene	UG/L	1.5	-	-				<2U	<2U	<2U	<2U
1,4-Dichlorobenzene	UG/L	-	6	-				<0.5U	<0.5U	<0.5U	<0.5U
1,4-Dioxane	UG/L	-	3	-	<0.051U	<0.051U		[72J]	[72]	[5J]	[11]
1,4-Naphthoquinone	UG/L	-	-	-				<10R	<10R	<10R	<10R
1-Naphthylamine	UG/L	-	-	-				<5UJ	<5U	<5U	<5U
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-				<0.5U	<0.5U	<0.5U	<0.5U
2,4,5-Trichlorophenol	UG/L	-	-	63				<0.5U	<0.5U	<0.5U	<0.5U
2,4,6-Trichlorophenol	UG/L	-	-	4				<0.5U	<0.5U	<0.5U	<0.5U
2,4-Dichlorophenol	UG/L	-	-	0.98				<0.5U	<0.5U	<0.5U	<0.5U
2,4-Dimethylphenol	UG/L	-	100	-				<0.5U	<0.5U	<0.5U	<0.5U
2,4-Dinitrophenol	UG/L	30	-	-				<10U	<10U	<10U	<10U
2,4-Dinitrotoluene	UG/L	-	-	0.1				<1U	<1U	<1U	<1U
2,6-Dichlorophenol	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
2,6-Dinitrotoluene	UG/L	0.042	-	-				<0.5U	<0.5U	<0.5U	<0.5U
2-Acetylaminofluorene	UG/L	0.013	-	-				<2U	<2U	<2U	<2U
2-Chloronaphthalene	UG/L	550	-	-				<0.4U	<0.4U	<0.4U	<0.4U
2-Chlorophenol	UG/L	-	0.4	-				<0.5U	<0.5U	<0.5U	<0.5U
2-Hexanone	UG/L	-	-	40				<3U	<3U	<3U	<3U
2-Methylnaphthalene	UG/L	-	30	-				<0.1U	<0.1U	<0.1U	<0.1U
2-Methylphenol (O-Cresol)	UG/L	-	-	400				<0.5U	<0.5U	<0.5U	<0.5U
2-Naphthylamine	UG/L	0.033	-	-				<5U	<5U	<5U	<5U
2-Nitroaniline	UG/L	150	-	-				<0.5U	<0.5U	<0.5U	<0.5U
2-Nitrophenol	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
2-Picoline	UG/L	-	-	-				<2U	<2U	<2U	<2U
3,3'-Dichlorobenzidine	UG/L	0.11	-	-				<2U	<2U	<2U	<2U
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-				<25R	<25U	<25U	<26U
3-Methylcholanthrene	UG/L	0.00098	-	-				<0.5U	<0.5U	<0.5U	<0.5U
3-Nitroaniline	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-				<5U	<5U	<5U	<5U
4-Aminobiphenyl	UG/L	0.0026	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Bromophenyl Phenyl Ether	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Chloro-3-Methylphenol	UG/L	1100	-	-				<0.5U	<0.5U	<0.5U	<0.5U

Appendix A
Groundwater Analytical Results
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				Location	MW-71	MW-72	SWMU9-TW-21R	SWMU90-TW-1	SWMU90-TW-2	SWMU90-TW-3	SWMU90-TW-4
				Sample Date	06/20/2014	06/20/2014	10/25/2013	10/14/2013	10/14/2013	10/14/2013	10/15/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Methylphenol (P-Cresol)	UG/L	-	40	-				<0.5U	<0.5U	<0.5U	3
4-Nitroaniline	UG/L	3.3	-	-				<0.5U	<0.5U	<0.5U	<0.5U
4-Nitrophenol	UG/L	-	-	-				<10U	<10U	<10U	<10U
4-Nitroquinoline-N-Oxide	UG/L	-	-	-				<20U	<20U	<20U	<20U
5-Nitro-Ortho-Toluidine	UG/L	7	-	-				<0.5U	<0.5U	<0.5U	<0.5U
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Acenaphthene	UG/L	-	80	-				<0.1U	<0.1U	<0.1U	<0.1U
Acenaphthylene	UG/L	-	200	-				<0.1U	<0.1U	<0.1U	<0.1U
Acetaldehyde	UG/L	2.2	-	-							
Acetone	MG/L	-	6	-				<0.006U	<0.006U	<0.006U	<0.006U
Acetonitrile	UG/L	130	-	-				<25U	<25U	<25U	<25U
Acetophenone	UG/L	-	-	700				<0.5U	<0.5U	<0.5U	<0.5U
Acrolein	UG/L	-	-	4				<1.6UJ	<1.6UJ	<1.6UJ	<1.6UJ
Acrylonitrile	UG/L	0.045	-	-				<1.9U	<1.9U	<1.9U	<1.9U
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-				<1U	<1U	<1U	<1U
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-				<5R	<5U	<5U	<5U
Aniline	UG/L	12	-	-				<0.5UJ	<0.5U	<0.5U	<0.5U
Anthracene	MG/L	-	2	-				<0.0001U	<0.0001U	<0.0001U	<0.0001U
Antimony	UG/L	-	-	1			<5.3U	<5.3U	<5.3U	<5.3U	<5.3U
Aramite	UG/L	1.1	-	-				<5R	<5U	<5U	<5U
Arsenic	UG/L	-	10	-			0.82J	[138]	[29.4]	[58.1]	[64.1]
Barium	UG/L	-	700	-			27.9	26.6	8.6J	9.3J	29.4
Benzene	UG/L	-	1	-				[5]	[2J]	[6]	[9]
Benzo(A)Anthracene	UG/L	-	0.05	-				<0.1U	<0.1U	<0.1U	<0.1U
Benzo(B)Fluoranthene	UG/L	-	0.05	-				<0.1U	<0.1U	<0.1U	<0.1U
Benzo(G,H,I)Perylene	UG/L	-	200	-				<0.1U	<0.1U	<0.1U	<0.1U
Benzo(K)Fluoranthene	UG/L	-	0.5	-				<0.1U	<0.1U	<0.1U	<0.1U
Benzo(A)Pyrene	UG/L	-	0.005	-				<0.1U	<0.1U	<0.1U	<0.1U
Benzyl Alcohol	UG/L	-	-	700				<5U	<5U	<5U	<5U
Beryllium	UG/L	-	-	4			<0.67U	<0.67U	<0.67U	<0.67U	<0.67U
Biphenyl	UG/L	-	400	-				<0.5U	<0.5U	<0.5U	<0.5U
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-				<0.5U	<0.5U	<0.5U	<0.5U
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-				<2U	<2U	<2U	<2U
Bromodichloromethane	UG/L	-	0.6	-				<1U	<1U	<1U	<1U
Bromoform	UG/L	-	4	-				<1U	<1U	<1U	<1U
Butyl Benzyl Phthalate	MG/L	-	1	-				<0.002U	<0.002U	<0.002U	<0.002U
C11 to C22 Aromatics	UG/L	-	-	-							
C19 to C36 Aliphatics	UG/L	-	-	-							
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-							

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Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	MW-71	MW-72	SWMU9-TW-21R	SWMU90-TW-1	SWMU90-TW-2	SWMU90-TW-3	SWMU90-TW-4
				Sample Date	06/20/2014	06/20/2014	10/25/2013	10/14/2013	10/14/2013	10/14/2013	10/15/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
C5 - C8 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-							
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-							
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-							
C9 to C18 Aliphatics	UG/L	-	700	-							
Cadmium	UG/L	-	2	-			<0.76U	<0.76U	<0.76U	<0.76U	<0.76U
Carbon Disulfide	UG/L	-	700	-				<1U	<1U	<1U	<1U
Carbon Tetrachloride	UG/L	-	0.3	-				<1U	<1U	<1U	<1U
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-				<0.8U	<0.8U	<0.8U	<0.8U
Chlorobenzilate	UG/L	0.27	-	-				<3U	<3U	<3U	<3U
Chlorodibromomethane	UG/L	-	0.4	-				<1U	<1U	<1U	<1U
Chloroform	UG/L	-	70	-				<0.8U	<0.8U	<0.8U	<0.8U
Chloroprene	UG/L	0.016	-	-				<1U	<1U	<1U	<1U
Chromium	UG/L	-	10	-			<1.6U	[27.7J]	2.6J	7.1J	[93.1]
Chrysene	UG/L	-	5	-				<0.1U	<0.1U	<0.1U	<0.1U
cis-1,2 Dichloroethene	UG/L	-	70	-				4J	0.9J	5	4J
cis-1,3-Dichloropropene	UG/L	-	-	-				<1U	<1U	<1U	<1U
Cobalt	UG/L	-	-	1			<1.3U	[4.8J]	[11]	[2.7J]	[12.2]
Copper	MG/L	-	1	-			<0.0027U	<0.0027U	<0.0027U	<0.0027U	0.0043J
Di-N-Butyl Phthalate	UG/L	-	700	-				<2U	<2U	<2U	<2U
Diallate	UG/L	0.46	-	-				<1U	<1U	<1U	<1U
Dibenz(A,H)Anthracene	UG/L	-	0.005	-				<0.1U	<0.1U	<0.1U	<0.1U
Dibenzofuran	UG/L	-	-	28				<0.5U	<0.5U	<0.5U	<0.5U
Dichlorodifluoromethane	MG/L	-	1	-				<0.002U	<0.002U	<0.002U	<0.002U
Diethyl Phthalate	MG/L	-	6	-				<0.002U	<0.002U	<0.002U	<0.002U
Diethylene Glycol	UG/L	-	-	-				<8000U	<8000U	<8000U	<8000U
Dimethoate	UG/L	3.1	-	-				<3U	<3U	<3U	<3U
Dimethyl Phthalate	UG/L	-	-	-				<2U	<2U	<2U	<2U
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100				[230]	20	[140]	[490]
Ethyl Chloride	UG/L	-	3000	-				<1U	<1U	<1U	<1U
Ethyl Methacrylate	UG/L	420	-	-				<1U	<1U	<1U	<1U
Ethyl Methanesulfonate	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Ethylbenzene	UG/L	-	600	-				<0.8U	<0.8U	<0.8U	<0.8U
Ethylene Glycol	MG/L	-	10	-				<8U	<8U	<8U	<8U
Fluoranthene	UG/L	-	300	-				<0.1U	<0.1U	<0.1U	<0.1U
Fluorene	UG/L	-	300	-				<0.1U	<0.1U	<0.1U	<0.1U
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-				<0.1U	<0.1U	<0.1U	<0.1U
Hexachlorobutadiene	UG/L	-	0.4	-				<0.5U	<0.5U	<0.5U	<0.5U
Hexachlorocyclopentadiene	UG/L	22	-	-				<5U	<5U	<5U	<5U
Hexachloroethane	UG/L	0.79	-	-				<1U	<1U	<1U	<1U
Hexachloropropylene	UG/L	-	-	-				<2U	<2U	<2U	<2U
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-				<0.1U	<0.1U	<0.1U	<0.1U
Iodomethane	UG/L	-	-	-				<1U	<1U	<1U	<1U

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Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013	MW-71	MW-72	SWMU9-TW-21R	SWMU90-TW-1	SWMU90-TW-2	SWMU90-TW-3	SWMU90-TW-4
				Sample Date	06/20/2014	06/20/2014	10/25/2013	10/14/2013	10/14/2013	10/14/2013	10/15/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-				<100U	<100U	<100U	<100U
Isodrin	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Isophorone	UG/L	-	40	-				<0.5U	<0.5U	<0.5U	<0.5U
Isosafrole	UG/L	-	-	-				<2U	<2U	<2U	<2U
Lead	UG/L	-	15	-			0.096J	1.2J	<0.085U	0.18J	1.3J
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-			<0.06U	<0.06U	<0.06U	<0.06U	0.061J
Meta- And Para-Xylene	UG/L	-	-	-							
Methacrylonitrile	UG/L	1.5	-	-				<10U	<10U	<10U	<10U
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-				<15U	<15U	<15U	<15U
Methyl Bromide	UG/L	7	-	10				<1U	<1U	<1U	<1U
Methyl Chloride	UG/L	-	3	-				<1U	<1U	<1U	<1U
Methyl Ethyl Ketone	MG/L	-	4	-				<0.003U	<0.003U	<0.003U	<0.003U
Methyl Isobutyl Ketone	UG/L	-	-	100				<3U	<3U	<3U	<3U
Methyl Methacrylate	UG/L	-	-	25				<1U	<1U	<1U	<1U
Methyl Methanesulfonate	UG/L	0.68	-	-				<1U	<1U	<1U	<1U
Methyl Tertiary Butyl Ether	UG/L	-	20	-							
Methylene Bromide	UG/L	-	-	70				<1U	<1U	<1U	<1U
Methylene Chloride	UG/L	-	5	-				<2U	<2U	<2U	<2U
N-Dioctyl Phthalate	UG/L	-	100	-				<2U	<2U	<2U	<2U
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-				<2U	<2U	<2U	<2U
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-				<2U	<2U	<2U	<2U
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-				<0.5U	<0.5U	<0.5U	<0.5U
N-Nitrosodiethylamine	UG/L	0.00014	-	-				<0.5U	<0.5U	<0.5U	<0.5U
N-Nitrosodimethylamine	UG/L	-	0.0007	-				<2U	<2U	<2U	<2U
N-Nitrosodiphenylamine	UG/L	10	-	-				<0.5U	<0.5U	<0.5U	<0.5U
N-Nitrosomorpholine	UG/L	0.01	-	-				<2U	<2U	<2U	<2U
N-Nitrosopiperidine	UG/L	0.0071	-	-				<0.5U	<0.5U	<0.5U	<0.5U
N-Nitrosopyrrolidine	UG/L	0.032	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Naphthalene	UG/L	-	6	-				<0.1U	<0.1U	0.3J	0.4J
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-							
Nickel	UG/L	-	100	-			<1.5U	5.2J	16.1J	<1.5U	13.1J
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-				<0.5U	<0.5U	<0.5U	<0.5U
O,O,O-Triethylphosphorothioate	UG/L	-	-	-				<2U	<2U	<2U	<2U
O-Toluidine	UG/L	-	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Ortho-Xylene	UG/L	190	-	-							
para-Phenylenediamine	UG/L	3000	-	-				<76U	<76U	<76U	<77U
Pentachlorobenzene	UG/L	2.3	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Pentachloroethane	UG/L	0.56	-	-				<1U	<1U	<1U	<1U
Pentachloronitrobenzene	UG/L	0.1	-	-				<2U	<2U	<2U	<2U
Pentachlorophenol	UG/L	-	0.3	-				<1U	<1U	<1U	<1U
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Phenanthrene	UG/L	-	200	-				<0.1U	<0.1U	<0.1U	<0.1U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	MW-71	MW-72	SWMU9-TW-21R	SWMU90-TW-1	SWMU90-TW-2	SWMU90-TW-3	SWMU90-TW-4
				Sample Date	06/20/2014	06/20/2014	10/25/2013	10/14/2013	10/14/2013	10/14/2013	10/15/2013
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-				5J	<0.5U	4	17
Pronamide	UG/L	900	-	-				<0.5U	<0.5U	<0.5U	<0.5U
Propionitrile	UG/L	-	-	-				<30U	<30U	<30U	<30U
Propylene Glycol	UG/L	-	-	140000				<8000U	<8000U	<8000U	<8000U
Pyrene	UG/L	-	200	-				<0.1U	<0.1U	<0.1U	<0.1U
Pyridine	UG/L	15	-	-				<2U	<2U	<2U	<2U
Safrole	UG/L	0.083	-	-				<2U	<2U	<2U	<2U
Selenium	UG/L	-	20	-			<0.5UJ	1.1J	<0.5U	<0.5U	2.6J
Silver	UG/L	-	20	-			<2.1U	<2.1U	<2.1U	<2.1U	<2.1U
Styrene	UG/L	-	70	-				<1U	<1U	<1U	<1U
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-				<90U	<90U	<90U	<90U
Tetrachloroethene	UG/L	-	0.7	-				<0.8U	<0.8U	<0.8U	<0.8U
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-				<1U	<1U	<1U	<1U
Thallium	UG/L	-	-	0.2			<0.15U	<0.15U	<0.15U	<0.15U	<0.15U
Thionazin	UG/L	-	-	-				<2U	<2U	<2U	<2U
Tin	UG/L	-	-	2000			<2.9U	<2.9U	<2.9U	<2.9U	<2.9U
Toluene	UG/L	-	600	-				<0.7U	<0.7U	<0.7U	<0.7U
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-				<0.8U	<0.8U	<0.8U	<0.8U
trans-1,3-Dichloropropene	UG/L	-	-	-				<1U	<1U	<1U	<1U
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-				<15U	<15U	<15U	<15U
Trichloroethene	UG/L	-	3	-				<1U	<1U	<1U	<1U
Trichlorofluoromethane	MG/L	-	2	-				<0.002U	<0.002U	<0.002U	<0.002U
Triethylene Glycol	UG/L	-	-	-				<8000U	<8000U	<8000U	<8000U
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-							
Vanadium	UG/L	-	-	0.3			<2U	[7.9J]	<2U	<2U	[28.6]
Vinyl Acetate	UG/L	-	-	88				<2U	<2U	<2U	<2U
Vinyl Chloride	UG/L	-	0.03	-				[7.1]	[2.1]	[19]	[37]
Xylenes	UG/L	-	500	-				<0.8U	<0.8U	<0.8U	<0.8U
Zinc	MG/L	-	1	-			<0.0020U	0.0187J	0.0093J	0.0131J	0.0324J

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-5	SWMU90-TW-6	SWMU90-TW-7	SWMU90-TW-8	SWMU90-TW-9	SWMU90-TW-9	SWMU90-TW-10
				Sample Date	10/15/2013	10/15/2013	10/15/2013	06/19/2014	06/19/2014	06/19/2014	06/19/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,1-Trichloroethane	UG/L	-	200	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
1,1-Dichloroethane	UG/L	-	6	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,1-Dichloroethene	UG/L	-	7	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2	<0.5U	<0.5U	<0.5U				
1,2,4-Trichlorobenzene	UG/L	-	70	-	<0.5U	<0.5U	<0.5U				
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U	<2U	<2U	<2U	<2U	<2U	<2U
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dichlorobenzene	UG/L	-	20	-	<0.5U	<0.5U	<0.5U				
1,2-Dichloroethane	UG/L	-	0.4	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dichloropropane	UG/L	-	0.6	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
1,2-Diphenylhydrazine	UG/L	0.067	-	-	<0.5U	<0.5U	<0.5U				
1,3,5-Trinitrobenzene	UG/L	460	-	-	<5U	<5U	<5U				
1,3-Dichlorobenzene	UG/L	-	200	-	<0.5U	<0.5U	<0.5U				
1,3-Dinitrobenzene	UG/L	1.5	-	-	<2U	<2U	<2U				
1,4-Dichlorobenzene	UG/L	-	6	-	<0.5U	<0.5U	<0.5U				
1,4-Dioxane	UG/L	-	3	-	1J	[4J]	[4J]	[20]	0.95	0.80	[6.4]
1,4-Naphthoquinone	UG/L	-	-	-	<10R	<10R	<10R				
1-Naphthylamine	UG/L	-	-	-	<5U	<5U	<5U				
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-	<0.5U	<0.5U	<0.5U				
2,4,5-Trichlorophenol	UG/L	-	-	63	<0.5U	<0.5U	<0.5U				
2,4,6-Trichlorophenol	UG/L	-	-	4	<0.5U	<0.5U	<0.5U				
2,4-Dichlorophenol	UG/L	-	-	0.98	<0.5U	<0.5U	<0.5U				
2,4-Dimethylphenol	UG/L	-	100	-	<0.5U	<0.5U	<0.5U				
2,4-Dinitrophenol	UG/L	30	-	-	<10U	<10U	<10U				
2,4-Dinitrotoluene	UG/L	-	-	0.1	<1U	<1U	<1U				
2,6-Dichlorophenol	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
2,6-Dinitrotoluene	UG/L	0.042	-	-	<0.5U	<0.5U	<0.5U				
2-Acetylaminofluorene	UG/L	0.013	-	-	<2U	<2U	<2U				
2-Chloronaphthalene	UG/L	550	-	-	<0.4U	<0.4U	<0.4U				
2-Chlorophenol	UG/L	-	0.4	-	<0.5U	<0.5U	<0.5U				
2-Hexanone	UG/L	-	-	40	<3U	<3U	<3U	<3U	<3U	<3U	<3U
2-Methylnaphthalene	UG/L	-	30	-	<0.1U	<0.1U	<0.1U				
2-Methylphenol (O-Cresol)	UG/L	-	-	400	<0.5U	<0.5U	<0.5U				
2-Naphthylamine	UG/L	0.033	-	-	<5U	<5U	<5U				
2-Nitroaniline	UG/L	150	-	-	<0.5U	<0.5U	<0.5U				
2-Nitrophenol	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
2-Picoline	UG/L	-	-	-	<2U	<2U	<2U				
3,3'-Dichlorobenzidine	UG/L	0.11	-	-	<2U	<2U	<2U				
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-	<26U	<25U	<25U				
3-Methylcholanthrene	UG/L	0.00098	-	-	<0.5U	<0.5U	<0.5U				
3-Nitroaniline	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-	<5U	<5U	<5U				
4-Aminobiphenyl	UG/L	0.0026	-	-	<0.5U	<0.5U	<0.5U				
4-Bromophenyl Phenyl Ether	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
4-Chloro-3-Methylphenol	UG/L	1100	-	-	<0.5U	<0.5U	<0.5U				

Appendix A
Groundwater Analytical Results
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				Location	SWMU90-TW-5	SWMU90-TW-6	SWMU90-TW-7	SWMU90-TW-8	SWMU90-TW-9	SWMU90-TW-9	SWMU90-TW-10
				Sample Date	10/15/2013	10/15/2013	10/15/2013	06/19/2014	06/19/2014	06/19/2014	06/19/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
4-Chloroaniline	UG/L	0.32	-	-	<0.5U	<0.5U	<0.5U				
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-	<0.5U	<0.5U	<0.5U				
4-Methylphenol (P-Cresol)	UG/L	-	40	-	<0.5U	<0.5U	<0.5U				
4-Nitroaniline	UG/L	3.3	-	-	<0.5U	<0.5U	<0.5U				
4-Nitrophenol	UG/L	-	-	-	<10U	<10U	<10U				
4-Nitroquinoline-N-Oxide	UG/L	-	-	-	<21U	<20U	<20U				
5-Nitro-Ortho-Toluidine	UG/L	7	-	-	<0.5U	<0.5U	<0.5U				
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-	<0.5U	<0.5U	<0.5U				
Acenaphthene	UG/L	-	80	-	<0.1U	<0.1U	<0.1U				
Acenaphthylene	UG/L	-	200	-	<0.1U	<0.1U	<0.1U				
Acetaldehyde	UG/L	2.2	-	-							
Acetone	MG/L	-	6	-	<0.006U	<0.006U	<0.006U	<0.006U	<0.006U	<0.006U	<0.006U
Acetonitrile	UG/L	130	-	-	<25U	<25U	<25U	<25U	<25U	<25U	<25U
Acetophenone	UG/L	-	-	700	<0.5U	<0.5U	<0.5U				
Acrolein	UG/L	-	-	4	<1.6UJ	<1.6UJ	<1.6UJ				
Acrylonitrile	UG/L	0.045	-	-	<1.9U	<1.9U	<1.9U				
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-							
Alkalinity, Total	MG CACO3/L	-	-	-							
Allyl Chloride	UG/L	0.63	-	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-	<5U	<5U	<5U				
Aniline	UG/L	12	-	-	<0.5U	<0.5U	<0.5U				
Anthracene	MG/L	-	2	-	<0.0001U	<0.0001U	<0.0001U				
Antimony	UG/L	-	-	1	<5.3U	<5.3U	<5.3U	<5.1U	<5.1U	<5.1U	<5.1U
Aramite	UG/L	1.1	-	-	<5U	<5U	<5U				
Arsenic	UG/L	-	10	-	[99.6]	<0.78U	[47.8]	[52.5]	<0.82U	<0.82U	<0.82U
Barium	UG/L	-	700	-	2.8J	16.7	8J	17.1	8B	7.9B	6B
Benzene	UG/L	-	1	-	1J	[6]	[4J]	0.8J	<0.5U	<0.5U	<0.5U
Benzo(A)Anthracene	UG/L	-	0.05	-	<0.1U	<0.1U	<0.1U				
Benzo(B)Fluoranthene	UG/L	-	0.05	-	<0.1U	<0.1U	<0.1U				
Benzo(G,H,I)Perylene	UG/L	-	200	-	<0.1U	<0.1U	<0.1U				
Benzo(K)Fluoranthene	UG/L	-	0.5	-	<0.1U	<0.1U	<0.1U				
Benzo(A)Pyrene	UG/L	-	0.005	-	<0.1U	<0.1U	<0.1U				
Benzyl Alcohol	UG/L	-	-	700	<5U	<5U	<5U				
Beryllium	UG/L	-	-	4	<0.67U	<0.67U	<0.67U	<0.67U	<0.67U	<0.67U	<0.67U
Biphenyl	UG/L	-	400	-	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-	<0.5U	<0.5U	<0.5U				
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-	<0.5U	<0.5U	<0.5U				
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-	<2U	<2U	<2U				
Bromodichloromethane	UG/L	-	0.6	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Bromoform	UG/L	-	4	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Butyl Benzyl Phthalate	MG/L	-	1	-	<0.002U	<0.002U	<0.002U				
C11 to C22 Aromatics	UG/L	-	-	-							
C19 to C36 Aliphatics	UG/L	-	-	-							
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-							

Appendix A
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Parameter Name	Units	EPA_SL_Tap_ 11/2013	NC_2L_ 2013	NC_IMAC_ 2013							
				Location	SWMU90-TW-5	SWMU90-TW-6	SWMU90-TW-7	SWMU90-TW-8	SWMU90-TW-9	SWMU90-TW-9	SWMU90-TW-10
				Sample Date	10/15/2013	10/15/2013	10/15/2013	06/19/2014	06/19/2014	06/19/2014	06/19/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-							
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-							
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-							
C9 to C18 Aliphatics	UG/L	-	700	-							
Cadmium	UG/L	-	2	-	<0.76U	<0.76U	<0.76U	<0.33U	<0.33U	<0.33U	<0.33U
Carbon Disulfide	UG/L	-	700	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Carbon Tetrachloride	UG/L	-	0.3	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Chemical Oxygen Demand (COD)	MG/L	-	-	-							
Chloride	MG/L	-	250	-							
Chlorobenzene	UG/L	-	50	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
Chlorobenzilate	UG/L	0.27	-	-	<3U	<3U	<3U				
Chlorodibromomethane	UG/L	-	0.4	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Chloroform	UG/L	-	70	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
Chloroprene	UG/L	0.016	-	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Chromium	UG/L	-	10	-	2.9J	<1.6U	[14.6J]	[29.9J]	1.6J	1.7J	2.7J
Chrysene	UG/L	-	5	-	<0.1U	<0.1U	<0.1U				
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.8U	7	5J	0.6J	<0.5U	<0.5U	<0.5U
cis-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Cobalt	UG/L	-	-	1	[3J]	<1.3U	[3.1J]	[45.1]	[1.6J]	[1.7J]	[2.1J]
Copper	MG/L	-	1	-	<0.0027U	<0.0027U	<0.0027U	<0.0028U	<0.0028U	<0.0028U	<0.0028U
Di-N-Butyl Phthalate	UG/L	-	700	-	<2U	<2U	<2U				
Diallate	UG/L	0.46	-	-	<1U	<1U	<1U				
Dibenz(A,H)Anthracene	UG/L	-	0.005	-	<0.1U	<0.1U	<0.1U				
Dibenzofuran	UG/L	-	-	28	<0.5U	<0.5U	<0.5U				
Dichlorodifluoromethane	MG/L	-	1	-	<0.002U	<0.002U	<0.002U	<0.0005UJ	<0.0005UJ	<0.0005UJ	<0.0005U
Diethyl Phthalate	MG/L	-	6	-	<0.002U	<0.002U	<0.002U				
Diethylene Glycol	UG/L	-	-	-	<8000U	<8000U	<8000U				
Dimethoate	UG/L	3.1	-	-	<3U	<3U	<3U				
Dimethyl Phthalate	UG/L	-	-	-	<2U	<2U	<2U				
Dimethyl Terephthalate	UG/L	1400	-	-							
Diphenyl Ether	UG/L	-	-	100	[120]	[430]	[270]	10	<0.5U	<0.5U	2
Ethyl Chloride	UG/L	-	3000	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Ethyl Methacrylate	UG/L	420	-	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Ethyl Methanesulfonate	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
Ethylbenzene	UG/L	-	600	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
Ethylene Glycol	MG/L	-	10	-	<8U	<8U	<8U				
Fluoranthene	UG/L	-	300	-	<0.1U	<0.1U	<0.1U				
Fluorene	UG/L	-	300	-	<0.1U	<0.1U	<0.1U				
Fluoride	MG/L	-	2	-							
Hexachlorobenzene	UG/L	-	0.02	-	<0.1U	<0.1U	<0.1U				
Hexachlorobutadiene	UG/L	-	0.4	-	<0.5U	<0.5U	<0.5U				
Hexachlorocyclopentadiene	UG/L	22	-	-	<5U	<5U	<5U				
Hexachloroethane	UG/L	0.79	-	-	<1U	<1U	<1U				
Hexachloropropylene	UG/L	-	-	-	<2U	<2U	<2U				
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-	<0.1U	<0.1U	<0.1U				
Iodomethane	UG/L	-	-	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-5	SWMU90-TW-6	SWMU90-TW-7	SWMU90-TW-8	SWMU90-TW-9	SWMU90-TW-9	SWMU90-TW-10
				Sample Date	10/15/2013	10/15/2013	10/15/2013	06/19/2014	06/19/2014	06/19/2014	06/19/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Iron	UG/L	-	300	-							
Isobutyl Alcohol	UG/L	4600	-	-	<100U	<100U	<100U	<100U	<100U	<100U	<100U
Isodrin	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
Isophorone	UG/L	-	40	-	<0.5U	<0.5U	<0.5U				
Isosafrole	UG/L	-	-	-	<2U	<2U	<2U				
Lead	UG/L	-	15	-	<0.085U	<0.085U	0.58J	0.64J	<0.082U	<0.082U	<0.082U
Manganese	UG/L	-	50	-							
Mercury	UG/L	-	1	-	<0.06U	0.12J	<0.06U	<0.06U	<0.06U	<0.06U	<0.06U
Meta- And Para-Xylene	UG/L	-	-	-							
Methacrylonitrile	UG/L	1.5	-	-	<10U	<10U	<10U	<10U	<10U	<10U	<10U
Methanol	MG/L	-	4	-							
Methapyrilene	UG/L	-	-	-	<15U	<15U	<15U				
Methyl Bromide	UG/L	7	-	10	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Methyl Chloride	UG/L	-	3	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U	<3U	<3U	<3U	<3U	<3U	<3U
Methyl Methacrylate	UG/L	-	-	25	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Methyl Methanesulfonate	UG/L	0.68	-	-	<1U	<1U	<1U				
Methyl Tertiary Butyl Ether	UG/L	-	20	-							
Methylene Bromide	UG/L	-	-	70	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Methylene Chloride	UG/L	-	5	-	<2U	<2U	<2U	<2U	<2U	<2U	<2U
N-Dioctyl Phthalate	UG/L	-	100	-	<2U	<2U	<2U				
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-	<2U	<2U	<2U				
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-	<2U	<2U	<2U				
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-	<0.5U	<0.5U	<0.5U				
N-Nitrosodiethylamine	UG/L	0.00014	-	-	<0.5U	<0.5U	<0.5U				
N-Nitrosodimethylamine	UG/L	-	0.0007	-	<2U	<2U	<2U				
N-Nitrosodiphenylamine	UG/L	10	-	-	<0.5U	<0.5U	<0.5U				
N-Nitrosomorpholine	UG/L	0.01	-	-	<2U	<2U	<2U				
N-Nitrosopiperidine	UG/L	0.0071	-	-	<0.5U	<0.5U	<0.5U				
N-Nitrosopyrrolidine	UG/L	0.032	-	-	<0.5U	<0.5U	<0.5U				
Naphthalene	UG/L	-	6	-	0.1J	<0.1U	<0.1U				
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-							
Nickel	UG/L	-	100	-	<1.5U	<1.5U	<1.5U	14.4J	6.9J	6.1J	4J
Nitrate	MG/L	-	10	-							
Nitrobenzene	UG/L	0.12	-	-	<0.5U	<0.5U	<0.5U				
O,O,O-Triethylphosphorothioate	UG/L	-	-	-	<2U	<2U	<2U				
O-Toluidine	UG/L	-	-	-	<0.5U	<0.5U	<0.5U				
Ortho-Xylene	UG/L	190	-	-							
para-Phenylenediamine	UG/L	3000	-	-	<77U	<76U	<76U				
Pentachlorobenzene	UG/L	2.3	-	-	<0.5U	<0.5U	<0.5U				
Pentachloroethane	UG/L	0.56	-	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Pentachloronitrobenzene	UG/L	0.1	-	-	<2U	<2U	<2U				
Pentachlorophenol	UG/L	-	0.3	-	<1U	<1U	<1U				
Ph	STD UNITS	-	-	-							
Phenacetin	UG/L	30	-	-	<0.5U	<0.5U	<0.5U				
Phenanthrene	UG/L	-	200	-	<0.1U	<0.1U	<0.1U				

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-5	SWMU90-TW-6	SWMU90-TW-7	SWMU90-TW-8	SWMU90-TW-9	SWMU90-TW-9	SWMU90-TW-10
				Sample Date	10/15/2013	10/15/2013	10/15/2013	06/19/2014	06/19/2014	06/19/2014	06/19/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Field Duplicate	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**							
Phenol	UG/L	-	30	-	5	<0.5U	4				
Pronamide	UG/L	900	-	-	<0.5U	<0.5U	<0.5U				
Propionitrile	UG/L	-	-	-	<30U	<30U	<30U	<30U	<30U	<30U	<30U
Propylene Glycol	UG/L	-	-	140000	<8000U	<8000U	<8000U				
Pyrene	UG/L	-	200	-	<0.1U	<0.1U	<0.1U				
Pyridine	UG/L	15	-	-	<2U	<2U	<2U				
Safrole	UG/L	0.083	-	-	<2U	<2U	<2U				
Selenium	UG/L	-	20	-	<0.5U	<0.5U	<0.5U	<0.5U	0.61J	0.57J	<0.5U
Silver	UG/L	-	20	-	<2.1U	<2.1U	<2.1U	<1.8U	<1.8U	<1.8U	<1.8U
Styrene	UG/L	-	70	-	<1U	<1U	<1U	<1U	<1U	<1U	<1U
Sulfate	MG/L	-	250	-							
Terephthalic Acid	UG/L	15000	-	-	<90U	<90U	<90U				
Tetrachloroethene	UG/L	-	0.7	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-	<1U	<1U	<1U				
Thallium	UG/L	-	-	0.2	<0.15U	<0.15U	<0.15U	<0.15U	<0.15U	<0.15U	<0.15U
Thionazin	UG/L	-	-	-	<2U	<2U	<2U				
Tin	UG/L	-	-	2000	<2.9U	<2.9U	<2.9U	<2.4U	<2.4U	<2.4U	<2.4U
Toluene	UG/L	-	600	-	<0.7U	<0.7U	<0.7U	<0.5U	<0.5U	<0.5U	<0.5U
Total Dissolved Solids	MG/L	-	500	-							
Total Organic Carbon	MG/L	-	-	-							
Total Organic Halogen	UG/L	-	-	-							
Total Suspended Solids	MG/L	-	-	-							
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
trans-1,3-Dichloropropene	UG/L	-	-	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U	<15U	<15U	<15U	<15U	<15U	<15U
Trichloroethene	UG/L	-	3	-	<1U	<1U	<1U	<0.5U	<0.5U	<0.5U	<0.5U
Trichlorofluoromethane	MG/L	-	2	-	<0.002U	<0.002U	<0.002U	<0.0005UJ	<0.0005UJ	<0.0005UJ	<0.0005U
Triethylene Glycol	UG/L	-	-	-	<8000U	<8000U	<8000U				
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-							
Vanadium	UG/L	-	-	0.3	<2U	<2U	[5.1J]	[10.4]	<1.9U	<1.9U	<1.9U
Vinyl Acetate	UG/L	-	-	88	<2U	<2U	<2U	<2UJ	<2U	<2U	<2UJ
Vinyl Chloride	UG/L	-	0.03	-	[10]	[34]	[19]	[0.41]	0.014J	0.012J	[0.11]
Xylenes	UG/L	-	500	-	<0.8U	<0.8U	<0.8U	<0.5U	<0.5U	<0.5U	<0.5U
Zinc	MG/L	-	1	-	0.0077J	0.0028J	0.010J	0.0154J	0.0088J	0.0085J	0.0072J

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-11	UNIT1-TW-1	MW-70	MW-71	MW-72
				Sample Date	06/19/2014	10/17/2013	06/20/2014	06/20/2014	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**					
1,1,1,2-Tetrachloroethane	UG/L	-	-	1	<0.5U	<10U			
1,1,1-Trichloroethane	UG/L	-	200	-	<0.5U	<8U			
1,1,2,2-Tetrachloroethane	UG/L	-	0.2	-	<0.5U	<10U			
1,1,2-Trichloroethane	UG/L	-	-	0.6	<0.5U	<8U			
1,1-Dichloroethane	UG/L	-	6	-	<0.5U	[150]			
1,1-Dichloroethene	UG/L	-	7	-	<0.5U	<8U			
1,2,3-Trichloropropane	UG/L	-	0.005	-	<1U	<10U			
1,2,4,5-Tetrachlorobenzene	UG/L	-	-	2		<0.5U			
1,2,4-Trichlorobenzene	UG/L	-	70	-		<0.5U			
1,2-Dibromo-3-Chloropropane	UG/L	-	0.04	-	<2U	<20U			
1,2-Dibromoethane (EDB)	UG/L	-	0.02	-	<0.5U	<10U			
1,2-Dichlorobenzene	UG/L	-	20	-		<0.5U			
1,2-Dichloroethane	UG/L	-	0.4	-	<0.5U	<10U			
1,2-Dichloropropane	UG/L	-	0.6	-	<0.5U	<10U			
1,2-Diphenylhydrazine	UG/L	0.067	-	-		<0.5U			
1,3,5-Trinitrobenzene	UG/L	460	-	-		<5U			
1,3-Dichlorobenzene	UG/L	-	200	-		<0.5U			
1,3-Dinitrobenzene	UG/L	1.5	-	-		<2U			
1,4-Dichlorobenzene	UG/L	-	6	-		<0.5U			
1,4-Dioxane	UG/L	-	3	-	0.6	[9]	0.36 J	<0.051U	<0.051U
1,4-Naphthoquinone	UG/L	-	-	-		<10R			
1-Naphthylamine	UG/L	-	-	-		<5U			
2,3,4,6-Tetrachlorophenol	UG/L	-	200	-		<0.5U			
2,4,5-Trichlorophenol	UG/L	-	-	63		<0.5U			
2,4,6-Trichlorophenol	UG/L	-	-	4		<0.5U			
2,4-Dichlorophenol	UG/L	-	-	0.98		<0.5U			
2,4-Dimethylphenol	UG/L	-	100	-		<0.5U			
2,4-Dinitrophenol	UG/L	30	-	-		<10U			
2,4-Dinitrotoluene	UG/L	-	-	0.1		<1U			
2,6-Dichlorophenol	UG/L	-	-	-		<0.5U			
2,6-Dinitrotoluene	UG/L	0.042	-	-		<0.5U			
2-Acetylaminofluorene	UG/L	0.013	-	-		<2U			
2-Chloronaphthalene	UG/L	550	-	-		<0.4U			
2-Chlorophenol	UG/L	-	0.4	-		<0.5U			
2-Hexanone	UG/L	-	-	40	<3U	<30U			
2-Methylnaphthalene	UG/L	-	30	-		<2.9U			
2-Methylphenol (O-Cresol)	UG/L	-	-	400		180			
2-Naphthylamine	UG/L	0.033	-	-		<5U			
2-Nitroaniline	UG/L	150	-	-		<0.5U			
2-Nitrophenol	UG/L	-	-	-		<0.5U			
2-Picoline	UG/L	-	-	-		<2U			
3,3'-Dichlorobenzidine	UG/L	0.11	-	-		<2U			
3,3'-Dimethylbenzidine	UG/L	0.0056	-	-		<25U			
3-Methylcholanthrene	UG/L	0.00098	-	-		<0.5U			
3-Nitroaniline	UG/L	-	-	-		<0.5U			
4,6-Dinitro-2-Methylphenol	UG/L	1.2	-	-		<5U			
4-Aminobiphenyl	UG/L	0.0026	-	-		<0.5U			
4-Bromophenyl Phenyl Ether	UG/L	-	-	-		<0.5U			
4-Chloro-3-Methylphenol	UG/L	1100	-	-		<0.5U			

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-11	UNIT1-TW-1	MW-70	MW-71	MW-72
				Sample Date	06/19/2014	10/17/2013	06/20/2014	06/20/2014	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**					
4-Chloroaniline	UG/L	0.32	-	-		<0.5U			
4-Chlorophenyl Phenyl Ether	UG/L	-	-	-		<0.5U			
4-Dimethylaminoazobenzene	UG/L	0.0043	-	-		<0.5U			
4-Methylphenol (P-Cresol)	UG/L	-	40	-		23			
4-Nitroaniline	UG/L	3.3	-	-		<0.5U			
4-Nitrophenol	UG/L	-	-	-		<10U			
4-Nitroquinoline-N-Oxide	UG/L	-	-	-		<20U			
5-Nitro-Ortho-Toluidine	UG/L	7	-	-		<0.5U			
7,12-Dimethylbenz[A]Anthracene	UG/L	0.000086	-	-		<0.5U			
Acenaphthene	UG/L	-	80	-		<2.9U			
Acenaphthylene	UG/L	-	200	-		<3.4U			
Acetaldehyde	UG/L	2.2	-	-		<50U			
Acetone	MG/L	-	6	-	<0.006U	<0.06U			
Acetonitrile	UG/L	130	-	-	<25U	<250U			
Acetophenone	UG/L	-	-	700		<0.5U			
Acrolein	UG/L	-	-	4		<1.6UJ			
Acrylonitrile	UG/L	0.045	-	-		<1.9U			
Alkalinity, Carb.As CaCO3 At pH 8.3	MG CACO3/L	-	-	-					
Alkalinity, Total	MG CACO3/L	-	-	-					
Allyl Chloride	UG/L	0.63	-	-	<1U	<10U			
Alpha,Alpha-Dimethylphenethylamine	UG/L	-	-	-		<5U			
Aniline	UG/L	12	-	-		<0.5U			
Anthracene	MG/L	-	2	-		<0.0029U			
Antimony	UG/L	-	-	1	<5.1U	<5.3U			
Aramite	UG/L	1.1	-	-		<5U			
Arsenic	UG/L	-	10	-	<0.82U	4.8			
Barium	UG/L	-	700	-	7.1B	23.2			
Benzene	UG/L	-	1	-	<0.5U	[10J]			
Benzo(A)Anthracene	UG/L	-	0.05	-		<3.4U			
Benzo(B)Fluoranthene	UG/L	-	0.05	-		<2.9U			
Benzo(G,H,I)Perylene	UG/L	-	200	-		<2.9U			
Benzo(K)Fluoranthene	UG/L	-	0.5	-		<4.4U			
Benzo(A)Pyrene	UG/L	-	0.005	-		<2.9U			
Benzyl Alcohol	UG/L	-	-	700		<5U			
Beryllium	UG/L	-	-	4	<0.67U	<0.67U			
Biphenyl	UG/L	-	400	-	<0.5U	2			
Bis(2-Chloroethoxy)Methane	UG/L	46	-	-		<0.5U			
Bis(2-Chloroethyl)Ether	UG/L	-	0.03	-		<0.5U			
Bis(2-Chloroisopropyl)Ether	UG/L	-	-	-		<0.5U			
Bis(2-Ethylhexyl)Phthalate	UG/L	-	3	-		<2U			
Bromodichloromethane	UG/L	-	0.6	-	<0.5U	<10U			
Bromoform	UG/L	-	4	-	<0.5U	<10U			
Butyl Benzyl Phthalate	MG/L	-	1	-		<0.002U			
C11 to C22 Aromatics	UG/L	-	-	-		4400			
C19 to C36 Aliphatics	UG/L	-	-	-		<49U			
C5 - C8 Aliphatic Hydrocarbons	UG/L	-	-	-		284			

Appendix A
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South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-11	UNIT1-TW-1	MW-70	MW-71	MW-72
				Sample Date	06/19/2014	10/17/2013	06/20/2014	06/20/2014	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**					
C5 - C8 Aliphatic Hydrocardbons, unadjusted	UG/L	-	-	-		314			
C9 through C10 Aromatic Hydrocarbons	UG/L	-	-	-		<20.0U			
C9 through C12 Aliphatic Hydrocarbons	UG/L	-	-	-		54.9J			
C9 to C18 Aliphatics	UG/L	-	700	-		<29U			
Cadmium	UG/L	-	2	-	<0.33U	<0.76U			
Carbon Disulfide	UG/L	-	700	-	<1U	<10U			
Carbon Tetrachloride	UG/L	-	0.3	-	<0.5U	<10U			
Chemical Oxygen Demand (COD)	MG/L	-	-	-					
Chloride	MG/L	-	250	-					
Chlorobenzene	UG/L	-	50	-	<0.5U	11J			
Chlorobenzilate	UG/L	0.27	-	-		<3U			
Chlorodibromomethane	UG/L	-	0.4	-	<0.5U	<10U			
Chloroform	UG/L	-	70	-	<0.5U	[160]			
Chloroprene	UG/L	0.016	-	-	<1U	<10U			
Chromium	UG/L	-	10	-	3.5J	2J			
Chrysene	UG/L	-	5	-		<2.4U			
cis-1,2 Dichloroethene	UG/L	-	70	-	<0.5U	[250]			
cis-1,3-Dichloropropene	UG/L	-	-	-	<0.5U	<10U			
Cobalt	UG/L	-	-	1	<1U	[2.5J]			
Copper	MG/L	-	1	-	<0.0028U	<0.0027U			
Di-N-Butyl Phthalate	UG/L	-	700	-		<2U			
Diallate	UG/L	0.46	-	-		<1U			
Dibenz(A,H)Anthracene	UG/L	-	0.005	-		<2.4U			
Dibenzofuran	UG/L	-	-	28		<0.5U			
Dichlorodifluoromethane	MG/L	-	1	-	<0.0005U	<0.02U			
Diethyl Phthalate	MG/L	-	6	-		<0.002U			
Diethylene Glycol	UG/L	-	-	-		<8000U			
Dimethoate	UG/L	3.1	-	-		<3U			
Dimethyl Phthalate	UG/L	-	-	-		<2U			
Dimethyl Terephthalate	UG/L	1400	-	-					
Diphenyl Ether	UG/L	-	-	100	<0.5U	46			
Ethyl Chloride	UG/L	-	3000	-	<0.5U	<10U			
Ethyl Methacrylate	UG/L	420	-	-	<1U	<10U			
Ethyl Methanesulfonate	UG/L	-	-	-		<0.5U			
Ethylbenzene	UG/L	-	600	-	<0.5U	<8U			
Ethylene Glycol	MG/L	-	10	-		<8U			
Fluoranthene	UG/L	-	300	-		<2.4U			
Fluorene	UG/L	-	300	-		<2.9U			
Fluoride	MG/L	-	2	-					
Hexachlorobenzene	UG/L	-	0.02	-		<0.1U			
Hexachlorobutadiene	UG/L	-	0.4	-		<0.5U			
Hexachlorocyclopentadiene	UG/L	22	-	-		<5U			
Hexachloroethane	UG/L	0.79	-	-		<1U			
Hexachloropropylene	UG/L	-	-	-		<2U			
Indeno (1,2,3-CD) Pyrene	UG/L	-	0.05	-		<2.9U			
Iodomethane	UG/L	-	-	-	<0.5U	<10U			

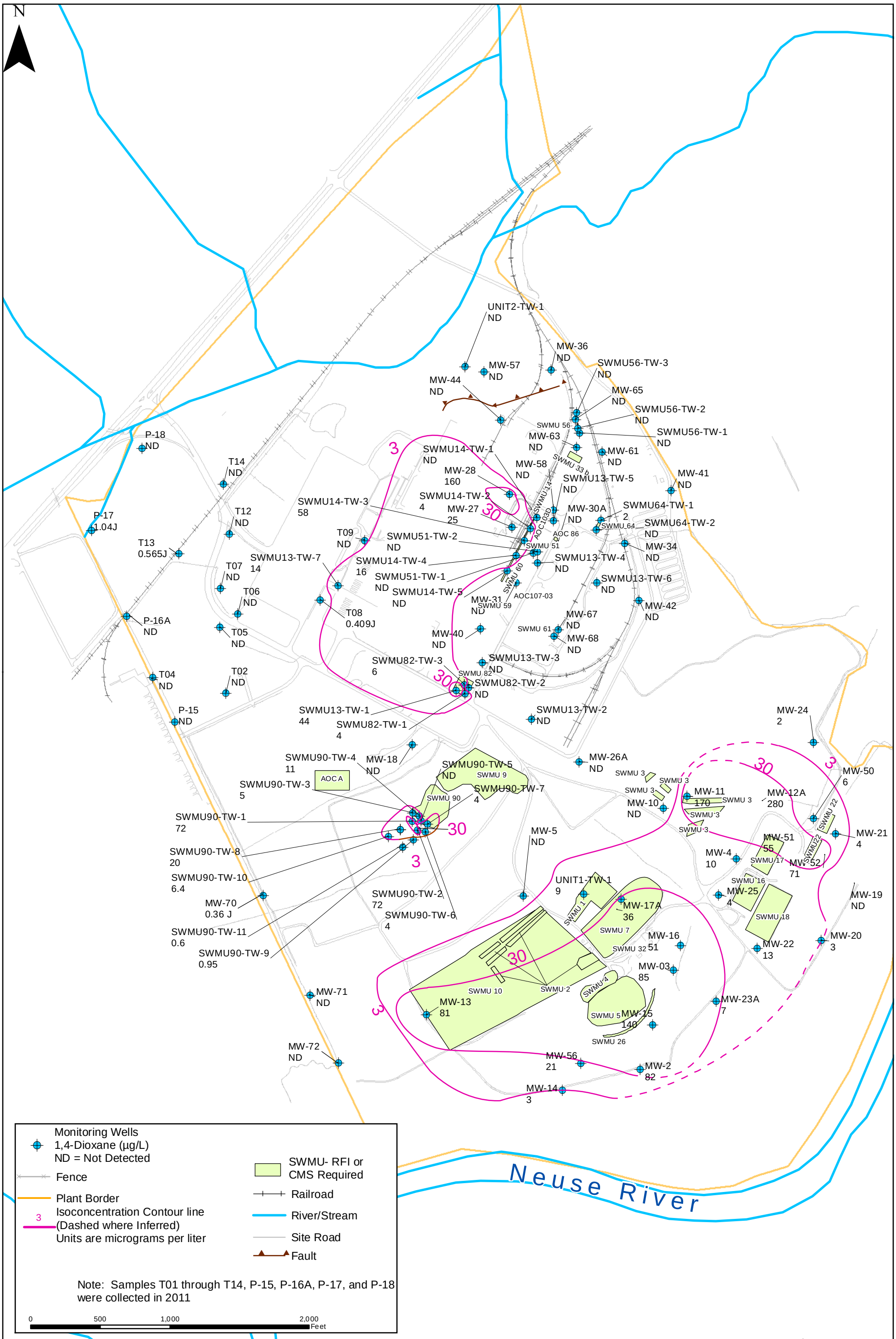
Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-11	UNIT1-TW-1	MW-70	MW-71	MW-72
				Sample Date	06/19/2014	10/17/2013	06/20/2014	06/20/2014	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**					
Iron	UG/L	-	300	-					
Isobutyl Alcohol	UG/L	4600	-	-	<100U	<1000U			
Isodrin	UG/L	-	-	-		<0.5U			
Isophorone	UG/L	-	40	-		<0.5U			
Isosafrole	UG/L	-	-	-		<2U			
Lead	UG/L	-	15	-	<0.082U	0.21J			
Manganese	UG/L	-	50	-					
Mercury	UG/L	-	1	-	<0.06U	<0.06U			
Meta- And Para-Xylene	UG/L	-	-	-		6.15J			
Methacrylonitrile	UG/L	1.5	-	-	<10U	<100U			
Methanol	MG/L	-	4	-					
Methapyrilene	UG/L	-	-	-		<15U			
Methyl Bromide	UG/L	7	-	10	<0.5U	<10U			
Methyl Chloride	UG/L	-	3	-	<0.5U	<10U			
Methyl Ethyl Ketone	MG/L	-	4	-	<0.003U	<0.03U			
Methyl Isobutyl Ketone	UG/L	-	-	100	<3U	<30U			
Methyl Methacrylate	UG/L	-	-	25	<1U	<10U			
Methyl Methanesulfonate	UG/L	0.68	-	-		<1U			
Methyl Tertiary Butyl Ether	UG/L	-	20	-		<2.00U			
Methylene Bromide	UG/L	-	-	70	<0.5U	<10U			
Methylene Chloride	UG/L	-	5	-	<2U	[220]			
N-Dioctyl Phthalate	UG/L	-	100	-		<2U			
N-Nitroso(Methyl)Ethylamine	UG/L	0.003	-	-		<2U			
N-Nitroso-Di-N-Butylamine	UG/L	0.0024	-	-		<2U			
N-Nitrosodi-N-Propylamine	UG/L	0.0093	-	-		<0.5U			
N-Nitrosodiethylamine	UG/L	0.00014	-	-		<0.5U			
N-Nitrosodimethylamine	UG/L	-	0.0007	-		<2U			
N-Nitrosodiphenylamine	UG/L	10	-	-		<0.5U			
N-Nitrosomorpholine	UG/L	0.01	-	-		<2U			
N-Nitrosopiperidine	UG/L	0.0071	-	-		<0.5U			
N-Nitrosopyrrolidine	UG/L	0.032	-	-		<0.5U			
Naphthalene	UG/L	-	6	-		<3.00U			
NC C9-C12 Aliphatic Hydrocarbons, unadjusted	UG/L	-	-	-		61.1J			
Nickel	UG/L	-	100	-	2.7J	<1.5U			
Nitrate	MG/L	-	10	-					
Nitrobenzene	UG/L	0.12	-	-		<0.5U			
O,O,O-Triethylphosphorothioate	UG/L	-	-	-		<2U			
O-Toluidine	UG/L	-	-	-		<0.5U			
Ortho-Xylene	UG/L	190	-	-		<2.00U			
para-Phenylenediamine	UG/L	3000	-	-		<76U			
Pentachlorobenzene	UG/L	2.3	-	-		<0.5U			
Pentachloroethane	UG/L	0.56	-	-	<1U	<10U			
Pentachloronitrobenzene	UG/L	0.1	-	-		<2U			
Pentachlorophenol	UG/L	-	0.3	-		<1U			
Ph	STD UNITS	-	-	-					
Phenacetin	UG/L	30	-	-		<0.5U			
Phenanthrene	UG/L	-	200	-		<2.9U			

Appendix A
Groundwater Analytical Results
South Disposal Area
DuPont Kinston Plant

				Location	SWMU90-TW-11	UNIT1-TW-1	MW-70	MW-71	MW-72
				Sample Date	06/19/2014	10/17/2013	06/20/2014	06/20/2014	06/20/2014
				Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
Parameter Name	**Units**	**EPA_SL_Tap_ 11/2013**	**NC_2L_ 2013**	**NC_IMAC_ 2013**					
Phenol	UG/L	-	30	-		<0.5U			
Pronamide	UG/L	900	-	-		<0.5U			
Propionitrile	UG/L	-	-	-	<30U	<300U			
Propylene Glycol	UG/L	-	-	140000		<8000U			
Pyrene	UG/L	-	200	-		<19U			
Pyridine	UG/L	15	-	-		<2U			
Safrole	UG/L	0.083	-	-		<2U			
Selenium	UG/L	-	20	-	<0.5U	1.3J			
Silver	UG/L	-	20	-	<1.8U	<2.1U			
Styrene	UG/L	-	70	-	<1U	<10U			
Sulfate	MG/L	-	250	-					
Terephthalic Acid	UG/L	15000	-	-		<90U			
Tetrachloroethene	UG/L	-	0.7	-	<0.5U	<8U			
Tetraethyl Dithiopyrophosphate	UG/L	5.3	-	-		<1U			
Thallium	UG/L	-	-	0.2	<0.15U	<0.15U			
Thionazin	UG/L	-	-	-		<2U			
Tin	UG/L	-	-	2000	<2.4U	<2.9U			
Toluene	UG/L	-	600	-	<0.5U	19.5			
Total Dissolved Solids	MG/L	-	500	-					
Total Organic Carbon	MG/L	-	-	-					
Total Organic Halogen	UG/L	-	-	-					
Total Suspended Solids	MG/L	-	-	-					
trans-1,2-Dichloroethene	UG/L	-	100	-	<0.5U	<8U			
trans-1,3-Dichloropropene	UG/L	-	-	-	<0.5U	<10U			
trans-1,4-Dichlorobutene-2	UG/L	0.0012	-	-	<15U	<150U			
Trichloroethene	UG/L	-	3	-	<0.5U	<10U			
Trichlorofluoromethane	MG/L	-	2	-	<0.0005U	<0.02U			
Triethylene Glycol	UG/L	-	-	-		<8000U			
Unadjusted C11 - C22 Aromatics	UG/L	-	-	-		4400			
Vanadium	UG/L	-	-	0.3	<1.9U	<2U			
Vinyl Acetate	UG/L	-	-	88	<2UJ	<20U			
Vinyl Chloride	UG/L	-	0.03	-	<0.010U	[3.9]	<0.010U		
Xylenes	UG/L	-	500	-	<0.5U	<8U			
Zinc	MG/L	-	1	-	0.0067J	0.0056J			

APPENDIX B
ISO-CONCENTRATION MAPS



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Charlotte, NC 28209

1,4-Dioxane Sitewide Isoconcentration Contour Map
Kinston EI 750
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 11/11/2014	Parsons Project No.: 446664.01000
Revision: MH	Figure No.: B-1
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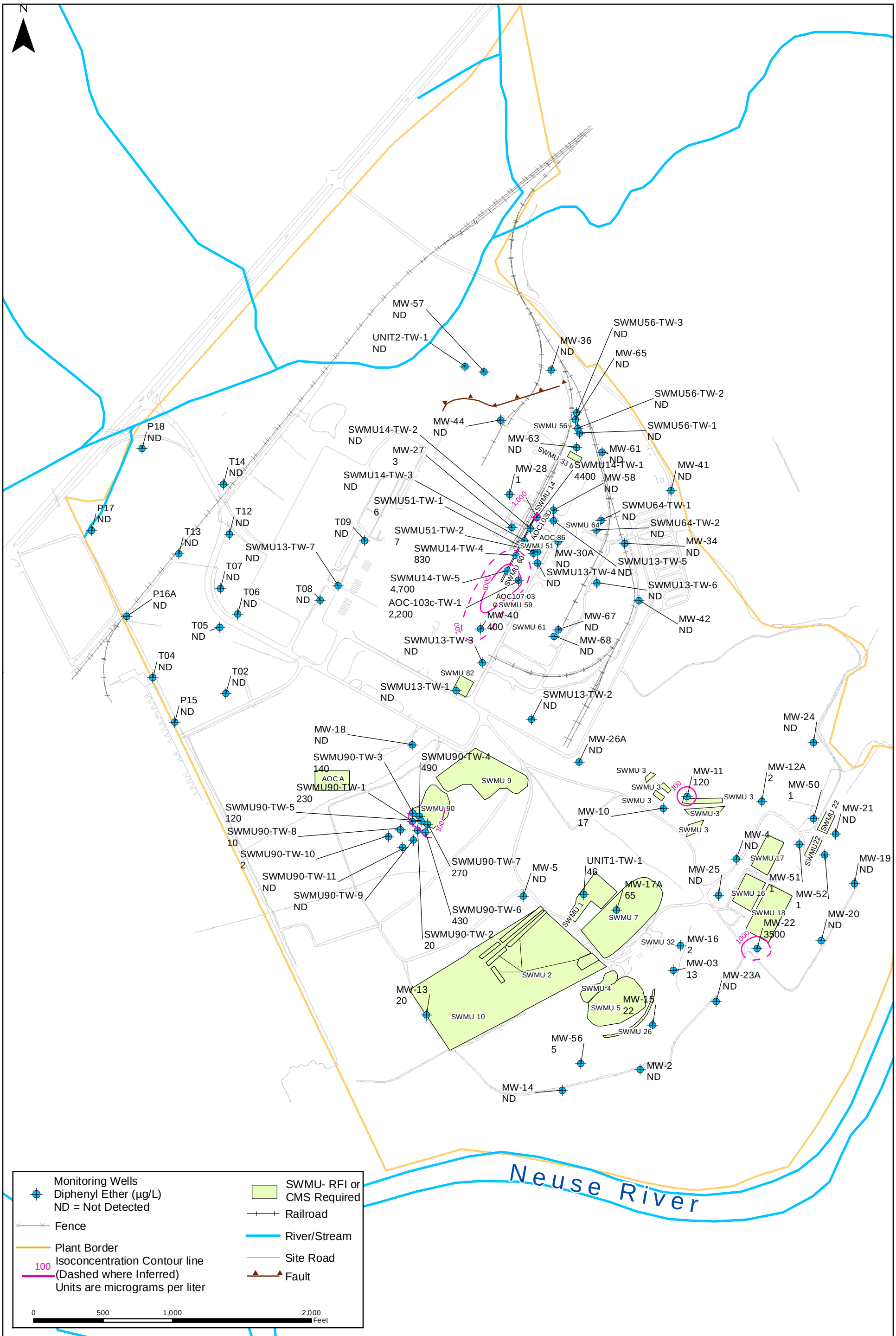

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Diphenyl Ether Sitewide Isoconcentration Contour Map
Kinston EI 750
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 11/10/2014	Parsons Project No.: 446664.01000
Revision: MH	Figure No.: B-2
File Name: KIN_DiEth_EI750	

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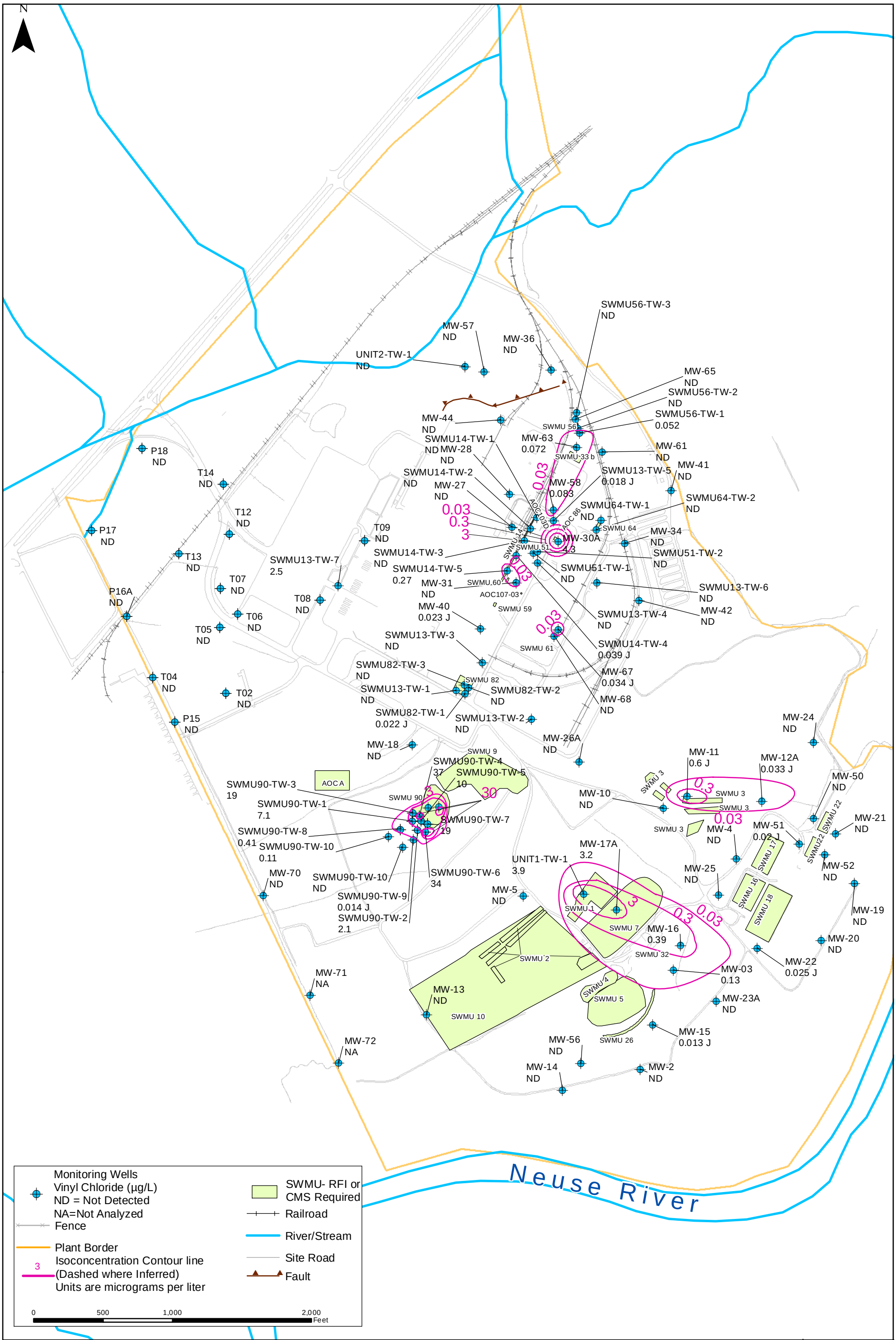

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Vinyl Chloride Sitewide Isoconcentration Contour Map
Kinston EI 750
DuPont Kinston Plant
Kinston, North Carolina

Drawn: C. Oneal	DuPont Project No.: 4406
Date: 11/10/2014	Parsons Project No.: 446664.01000
Revision: MH	Figure No.: B-3
File Name: KIN_VC_EI750	

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