

**FIFTH FIVE-YEAR REVIEW REPORT FOR  
MARTIN-MARIETTA, SODYECO, INC. SUPERFUND SITE  
MECKLENBURG COUNTY, NORTH CAROLINA**



**SEPTEMBER 2017**

**Prepared by**

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## **LIST OF ABBREVIATIONS & ACRONYMS**

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FYR	Five-Year Review
IC	Institutional Control
NC DENR	North Carolina Department of Environment and Natural Resources
NC DEQ	North Carolina Department of Environmental Quality
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision

## **I. INTRODUCTION**

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the fifth FYR for the Martin-Marietta, Sodyeco, Inc. Superfund site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared due to the fact that hazardous substances, pollutants or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure.

The Site consists of one operable unit, which addresses soil. On July 5, 2011, the EPA issued a Record of Decision (ROD) Amendment for the Site, which states that risks posed by groundwater contamination originally identified in the 1987 ROD no longer need to be addressed under CERCLA authority. Therefore, the groundwater risks are being addressed under Resource Conservation and Recovery Act (RCRA) authority and will not be evaluated in this FYR. This FYR will evaluate only the soil remedy that falls under CERCLA response authority.

The FYR was led by EPA remedial project manager Michael Townsend. Participants included EPA community involvement coordinator Kyle Bryant and EPA FYR contractor Skeo (Amanda Goynes and Hagai Nassau). The Site's potentially responsible party (PRP) was notified of the initiation of the FYR and attended the FYR site inspection. The review began on 9/23/2016.

### **Site Background**

The Site is located on Highway 27, about 10 miles west of Charlotte in Mecklenburg County, North Carolina (see Figure D-1). The Site is within an inactive portion of an active manufacturing facility regulated under the RCRA program. The site property is bounded by the Catawba River on the west and Long Creek to the east (see Figure 1). Starting in 1936, various site owners manufactured dyes and specialty chemical products at the site property.

The site property has been redeveloped as ReVenture Park, an eco-industrial park with various business tenants. Most of the site property is covered by woodlands and grassed areas. Manufacturing, administrative and storage facilities cover about 150 acres of the approximately 1,500-acre site property. The site property is currently fenced and has a manned entrance gate.

The Site comprises five areas that are regulated under CERCLA (Areas A, B, C, D and E). Wastes landfilled in Areas A, B, C and D during site operations were the source of contamination at the Site. Area A is a landfill that operated from the 1930s until 1973. Area B is a landfill that operated between 1973 and 1978. Three covered pits that contained the remains of laboratory and production samples, distillation tars, and waste solvents were located in Area C. Area D formerly contained two wastewater

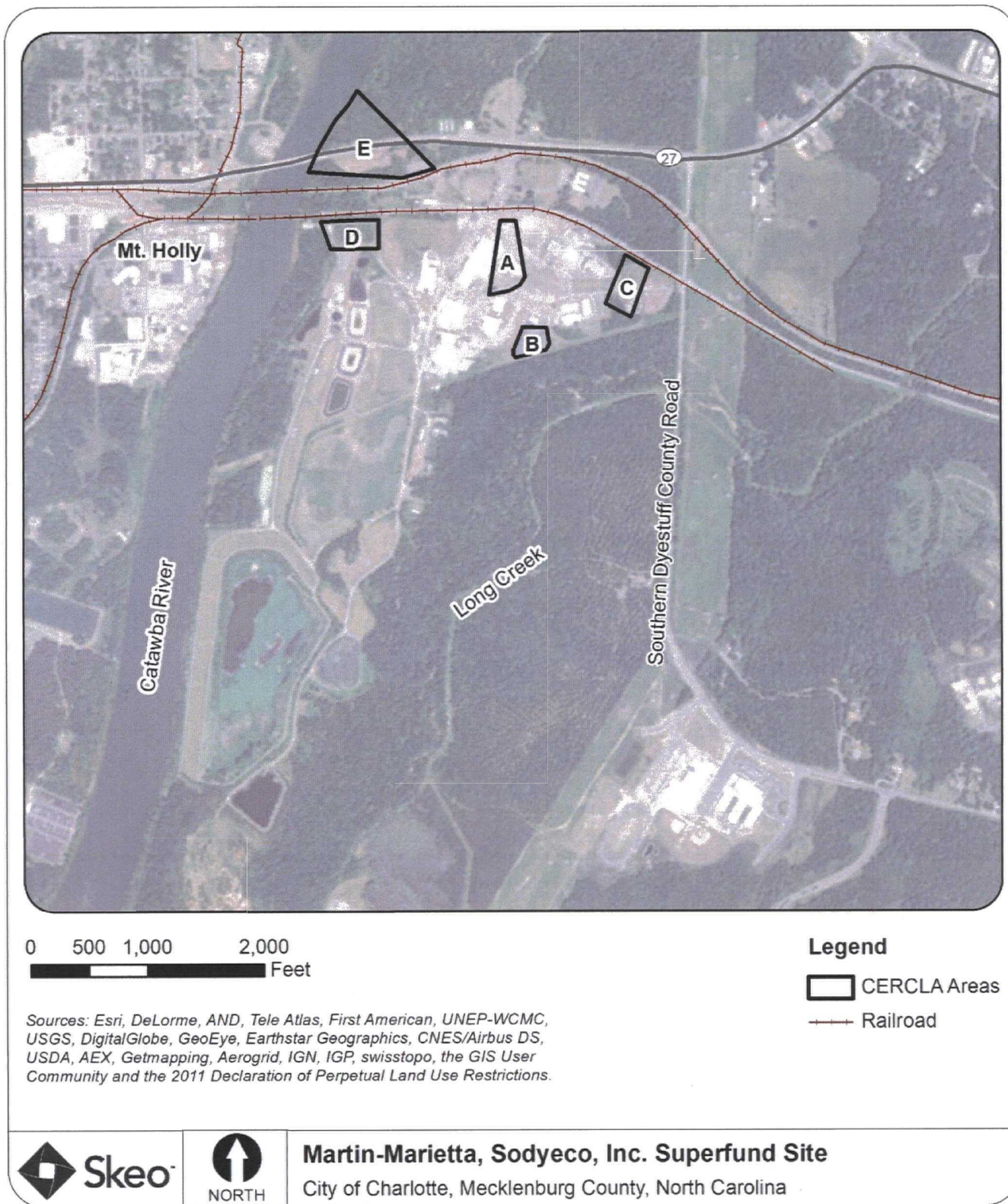
settling ponds. Area E was not part of the soil remedy and is therefore not evaluated in this FYR. The areas surrounding the Site are primarily undeveloped woodland, sparse residential and light industrial areas.

There are no residential drinking water wells near the Site. Nearby residences were purchased by the facility to create a buffer area. The Catawba River is used for recreational purposes.

Sodyeco Inc. (a former subsidiary of Sandoz) purchased the plant from Martin-Marietta in 1983. The Site's PRP, Sandoz, changed its name to Clariant Corporation (Clariant) in July 1995.

For reference, Appendix A includes a list of documents reviewed during this FYR. Appendix B includes current site status indicators. Appendix C includes a timeline of site events.

**Figure 1: Detailed Site Map**



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

## FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Martin-Marietta, Sodyeco, Inc.		
EPA ID: NCD001810365		
Region: 4	State: North Carolina	City/County: Charlotte/Mecklenburg
SITE STATUS		
NPL Status: Deleted		
Multiple OUs? No	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: EPA		
Author name: Michael Townsend (EPA) and Hagai Nassau (Skeo)		
Author affiliation: EPA and Skeo		
Review period: 9/23/2016 - 8/29/2017		
Date of site inspection: 11/10/2016		
Type of review: Statutory		
Review number: 5		
Triggering action date: 8/29/2012		
Due date (five years after triggering action date): 8/29/2017		

## II. RESPONSE ACTION SUMMARY

### Basis for Taking Action

Disposal of wastes in on-site landfills and pits resulted in site soil and groundwater contamination with volatile organic compounds. Hazardous substances released into soil at the Site include toluene, chlorobenzene, ethylbenzene, xylene, 1,2-dichlorobenzene and tetrachloroethylene. The EPA's Public Health Assessment, which is part of the 1987 Remedial Investigation report, assessed the risk from 10 "indicator chemicals" (trichloroethylene, tetrachloroethylene, chlorobenzene, ethylbenzene, 1,2-dichlorobenzene, toluene, xylenes, anthracene, fluorene and phenanthrene). The Site posed an unacceptable carcinogenic risk to human receptors via ingestion of groundwater and ingestion of local waterfowl and small mammals. The Site also posed an unacceptable non-carcinogenic risk to human health via inhalation intake from Area D and the ingestion of on-site groundwater.



The EPA listed the Site on the National Priorities List (NPL) on September 8, 1983.

### **Response Actions**

The initial indication of potential contamination at the Site was the discovery of organic solvents in the facility's potable water well in November 1979. The facility's operator at the time (Sodyeco Inc.) conducted a hydrogeologic study to determine the source and extent of contamination. Sodyeco's corrective actions included installation of carbon filters on five private wells adjacent to the plant; drilling of a new well at another adjacent property (convenience store); conversion of the plant water supply from groundwater to surface water (the Catawba River intake); relocation of residents at five company-owned homes, which no longer exist; and excavation and off-site disposal of buried waste.

The EPA signed the ROD on September 24, 1987. The ROD defined the following cleanup objectives:

- To protect human health and the environment from exposure to contaminated on-site soils through inhalation or direct contact.
- To restore contaminated groundwater to levels protective of human health and the environment.

The selected remedy for groundwater for CERCLA Areas A, B, C, D and E was treatment and discharge. Recovery wells extract groundwater for transport through the plant's sewer system to the on-site wastewater treatment facility.

The EPA's remedial investigation/feasibility study found that no soil remediation was necessary for CERCLA Areas A and E. Area A is a former landfill that was covered by asphalt and buildings during facility operations. The impermeable barriers that cover Area A act as a cap. The EPA's investigation found no soil contamination in Area E and no identified history of disposal in that area. The selected soil remedy for Area B was capping. The selected soil remedy for Area D was excavation and off-site incineration. Area C required further study to select a soil remedy.

The 1987 ROD stated that treatability studies would be performed to determine which of the following remedies would be used for Area C soils: 1) flushing, 2) soil washing, 3) thermal processing, or 4) in-situ steam stripping. The response action for Area C was an interim action, designed to provide additional information to allow selection of an appropriate response action at a future date. The EPA selected the response action for Area C on September 28, 1994, with an Explanation of Significant Differences (ESD). The selected response action was in-situ flushing with the flushing water being captured and treated by the existing groundwater treatment system. The 1994 ESD also provided for the continuation of a pilot study using vacuum extraction to treat the stockpiled soils in Area C. Vacuum extraction of the stockpiled soils was proven ineffective. In November 1998, the EPA signed a second ESD calling for the stockpiled soils in Area C to be excavated and disposed of off site. The EPA signed a third ESD on December 3, 1998, which revised the amount of Area C soil that would be addressed.

On July 5, 2011, the EPA issued a ROD Amendment for the Site, which states that risks posed by groundwater contamination originally identified in the 1987 ROD no longer need to be addressed under CERCLA authority. At the time of the Site's listing on the NPL in 1983, the EPA had not yet promulgated the RCRA Hazardous and Solid Waste Amendments provisions; therefore, it was necessary for the EPA to use CERCLA response authority to address the contamination at the Site outside the RCRA-regulated units. However, now that the Hazardous and Solid Waste Amendments provide the

legal authority to continue the treatment until cleanup levels are achieved in the CERCLA areas outside of the RCRA-regulated units, the EPA has concluded that the groundwater risks identified in the 1987 ROD no longer need to be addressed by CERCLA authority. The facility's RCRA permit is being used to implement the groundwater cleanup. Since groundwater remediation is being addressed under RCRA authority, this FYR does not evaluate groundwater risks.

The 2011 ROD Amendment states the need for institutional controls to ensure long-term protectiveness by preventing disturbance of the caps and precluding contact with contaminated soils remaining on site.

The 1987 ROD states that cleanup goals for soil indicator chemicals were based on a site-specific risk assessment contained in the EPA's Public Health Assessment, which is part of the 1987 Remedial Investigation report. However, the Remedial Investigation report and the decision documents do not provide numerical soil cleanup levels.

### **Status of Implementation**

The ROD and subsequent remedial design and remedial action documents were incorporated into the Site's 1984 RCRA permit. The PRP performed the groundwater cleanup work with RCRA program oversight. Subsequently, oversight of the CERCLA Areas was returned to the Superfund program.

Sandoz completed the asphalt cap for CERCLA Area B on October 25, 1989.

During the evaluation of the various treatment systems at Area C, Sandoz used vacuum extraction technology on a trial basis, as called for in the 1994 ESD. During installation of the vacuum extraction piping, Sandoz identified and excavated additional waste materials. Sandoz backfilled the excavated area with clean soil. Sandoz's disposal contractor disposed of emptied drums and 2,000 cubic yards of contaminated soil at an off-site landfill. Sandoz's disposal contractor disposed of about 82 tons of tarry contents of drums by incineration. Sandoz stockpiled some of the excavated contaminated soil within Area C. After vacuum extraction proved to be ineffective for the stockpiled soil, the EPA issued the 1998 ESD calling for off-site disposal of the stockpiled soil. Sandoz completed the off-site disposal of stockpiled Area C soil in March 1999. Sandoz completed the installation of the flushing system for the Area C in-situ soils during the third week of September 1999.

Sandoz completed the off-site treatment and disposal of Area D soils in April 1999. A total of 397 tons of soil were removed in two phases and exported to Stablex, Inc. for treatment and disposal. The excavated area was backfilled with clean soil. This area currently holds a lined freshwater pond.

All soil components of the remedy outlined in the 1987 ROD, as modified by the subsequent ESDs, have been implemented and are currently in long-term operation and maintenance (O&M).

The Site achieved construction complete status when the EPA signed the Preliminary Closeout Report on September 29, 1999.

The Site was deleted from the NPL on January 20, 2012.

Institutional Control (IC) Review

The remedy left capped soil in place in CERCLA Areas A and B, and left contaminated soils covered by clean soils in place in Area D. As required by the 2011 ROD Amendment, the PRP implemented an institutional control for the CERCLA Areas. In August 2011, Clariant recorded a Declaration of Perpetual Land Use Restrictions for CERCLA Areas A, B and D to prevent damage to caps and exposure to contaminated soil. Appendix I of this FYR provides a copy of the Declaration. Figure 2 depicts the areas subject to the Declaration. As part of this FYR, the EPA confirmed that the Declaration is still recorded with the Mecklenburg County Register of Deeds (Book 26664, Pages 714-723, Instrument Number 2011089373).<sup>1</sup>

**Table 1: Summary of Institutional Controls (ICs)**

Media, engineered controls, and areas that do not support unlimited use and unrestricted exposure based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel	IC Objective	Title of IC Instrument Implemented and Date
Soil	Yes	Yes	CERCLA Areas A, B and D on parcel 05305102A	Prevent damage to caps and exposure to contaminated soil	Declaration of Perpetual Land Use Restrictions for a Federal Superfund Site, August 2011

The Declaration of Perpetual Land Use Restrictions for CERCLA Areas A, B and D contains provisions that:

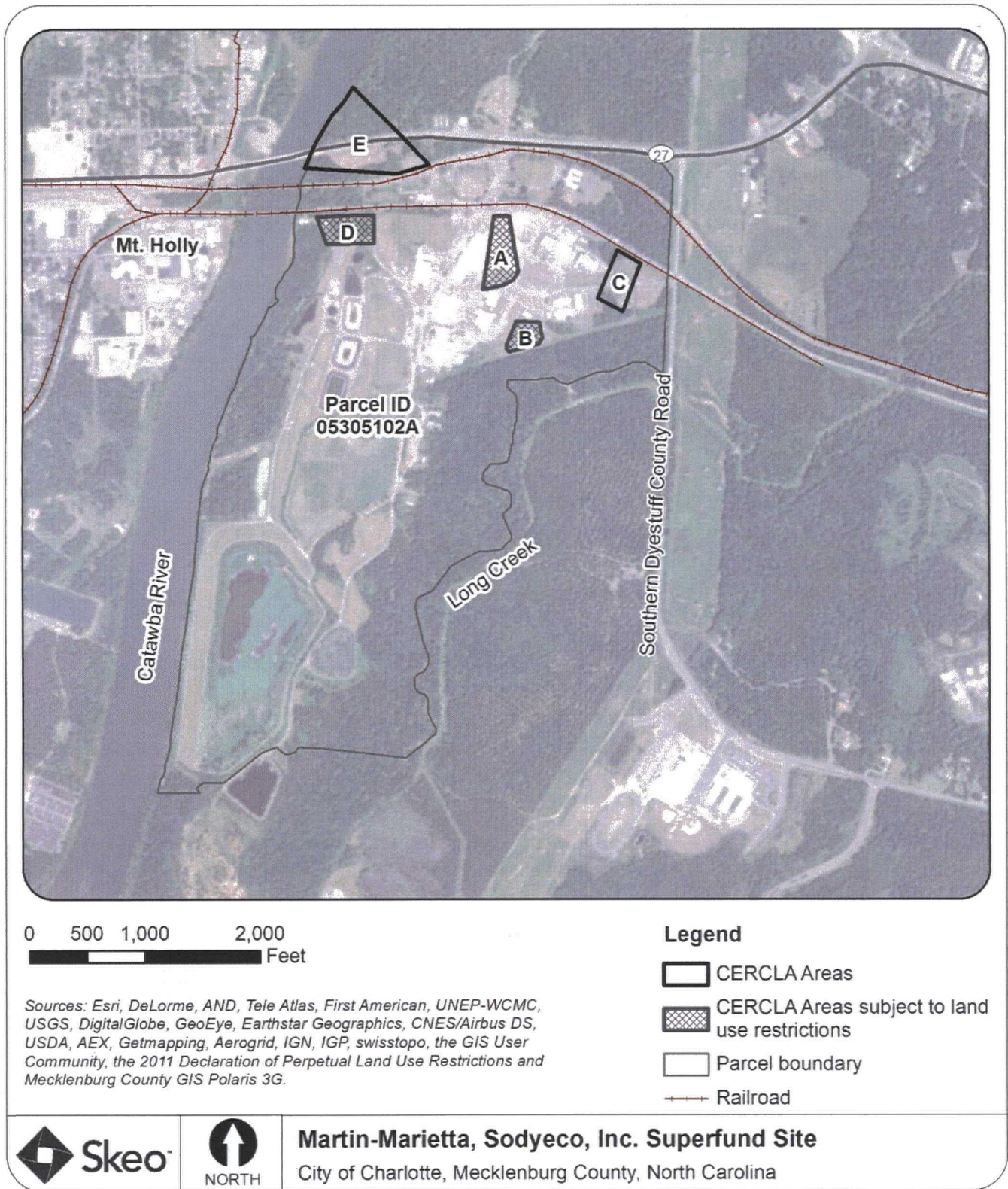
- Restrict disturbing, damaging or removing any cap at the Site without prior approval of the North Carolina Department of Environment and Natural Resources (NC DENR, now known as the North Carolina Department of Environmental Quality, NC DEQ).
- Restrict any action that results in a completed exposure pathway to contaminants of concern, or results in an increased risk to adverse exposure to contaminants of concern, without the owner conducting a RCRA Facility Investigation and implementing the appropriate RCRA action required as a result of the Facility Investigation.
- Restrict land use for residential purposes, childcare centers, nursing homes, schools, parks, recreational areas or athletic fields, and grazing or agricultural purposes related to human consumption without prior approval by NC DENR.
- Restrict land use for kennels, private animal pens, riding clubs, and mining or extraction of any mineral or non-mineral substances.
- Restrict below-ground construction, except for NC DENR-approved remedial action activities.
- Restrict repairs to underground utilities and remedial action underground piping and plumbing without prior approval of NC DENR, with some exceptions in emergency situations.
- Require each person who owns any portion of the Site to submit a letter report in January of each year (on or before January 31) to NC DENR and the EPA Region 4 Superfund Division,

<sup>1</sup> Mecklenburg County Register of Deeds Web Access is at <http://meckrod.manatron.com>

confirming that the Declaration of Perpetual Land Use Restrictions is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions therein.

- Require that site access be provided to certain entities involved in environmental assessment, remediation or determining compliance with applicable land use restrictions.
- Require that instruments of sale, lease, grant or other transfer of any interest in the Site include a provision requiring the lessee, grantee or transferee to comply with the Declaration of Perpetual Land Use Restrictions.

**Figure 2: Institutional Control Map**



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

## **Operation & Maintenance**

Clariant conducts the long-term monitoring and maintenance activities for the soil remedy at the Site. O&M is conducted pursuant to the RCRA Subtitle C permit. The primary activities associated with the soil remedy O&M include the following:

- Semi-annual visual inspection of the Area B cap, assuring that it is stable and sound.
- Monitoring of institutional controls.

Clariant conducts regular inspection and maintenance on the Area B cap to address superficial cracks in the asphalt. Areas A, B, C and D are inspected at least every five years as part of the EPA's FYR process.

The 2011 Declaration of Perpetual Land Use Restrictions requires each person who owns any portion of the Site to submit a letter report in January of each year to NC DENR (now known as NC DEQ) and the EPA Region 4 Superfund Division, confirming that the Declaration of Perpetual Land Use Restrictions is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions therein.

## **III. PROGRESS SINCE THE LAST REVIEW**

This section includes the protectiveness determination and statement from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

**Table 2: Protectiveness Determination/Statement from the 2012 FYR**

<b>OU #</b>	<b>Protectiveness Determination</b>	<b>Protectiveness Statement</b>
1, Sitewide	Short-term Protective	<p>The soil remedy is protective of human health and the environment in the short term because contaminated soils were either removed from the Site or contained under on-site caps that are regularly inspected and maintained. In addition, a Declaration of Perpetual Land Use Restrictions is in place for the capped areas to prevent damage to caps and exposure to contaminated soil. In order for the soil remedy to remain protective in the long term, the following actions need to be taken:</p> <ul style="list-style-type: none"><li>• Cracks in the Area B cap need to be repaired and the bulge in the southwest corner of the Area B cap needs to be evaluated.</li><li>• The report letter required by the Declaration of Perpetual Land Use Restrictions needs to be submitted to NC DENR and EPA in January of each year.</li></ul>

**Table 3: Status of Recommendations from the 2012 FYR**

<b>OU #</b>	<b>Issue</b>	<b>Recommendation</b>	<b>Current Status</b>	<b>Current Implementation Status Description</b>	<b>Completion Date (if applicable)</b>
1	There are new cracks in the Area B asphalt cap beyond some cracks that were previously repaired.	Repair new cracks and continue to perform regular inspections to identify and repair additional cracks as they develop.	Completed	The PRP sealed the Area B asphalt cap in May 2015. During the 2016 FYR site inspection, participants observed a few small cracks in the asphalt.	5/31/2015
1	There is a bulge in the southwest corner of the Area B cap.	Evaluate the bulge and perform repairs, as necessary.	Completed	In May 2015, the PRP removed the bulge and repaved the area with asphalt. In July 2015, after black fluid was seen emerging from the repaved area, the PRP removed a small portion of the cap and installed a concrete pad targeting the source/path of the black material. So far, the repaired area of the cap has not risen or fallen, and black material has not reappeared.	7/31/2015
1	NC DENR and EPA did not receive a letter report from Site owners in January 2012, as required in the Declaration of Perpetual Land Use Restrictions that was put in place August 2011.	Submit the required letter report to NC DENR and EPA in January of each year.	Completed	In January 2017, the EPA and NC DEQ received the required annual letter report confirming that the Declaration of Perpetual Land Use Restrictions is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions therein.	1/26/2017

#### **IV. FIVE-YEAR REVIEW PROCESS**

##### **Community Notification, Involvement & Site Interviews**

A public notice was published in the *Charlotte Observer* on July 30, 2017, stating that there was a FYR and inviting the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, located at the Mount Holly Branch Library, 245 West Catawba Avenue, Mount Holly, North Carolina 28120.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The results of these interviews are summarized below.

Doug Rumford, NC DEQ's project manager for the Site, stated that he is satisfied with all aspects of the current project status. He stated that the Site's remedy is effective and appropriate at this time. He is comfortable with the status of the institutional controls at the Site.

Ken Hausle, Clariant's environmental engineer for the Site, stated that the current performance of the Site's remedy is sufficient. He stated that, "Going forward the site will continue to coordinate with regulatory agencies to evaluate and possibly implement remediation methodologies that optimize risk reduction, land use flexibility and ongoing cost."

MariJon Owens, the site manager for Forsite Development Inc. (the developer of ReVenture Park), stated that constant vigilance to maintain the caps is occurring. Forsite continues to plan for additional redevelopment; the company is exploring many ideas and options. Ms. Owens stated that good communication exists between Forsite and the current land owner, Clariant.

### **Data Review**

No data were collected over the past five years for the Site's soil remedy. The soil remedy has achieved its objectives through capping, excavation and off-site disposal, so data collection is not necessary.

### **Site Inspection**

The FYR site inspection took place on 11/10/2016. In attendance were Michael Townsend, EPA remedial project manager; Ken Hausle, Clariant Corporation (PRP); Scott Drury, Hart Hickman (PRP's O&M contractor); Tom McKittrick and MariJon Owens, Forsite Development Inc. (facility developer and prospective landowner); and Amanda Goyne and Hagai Nassau, Skeo (the EPA's FYR contractor). The purpose of the inspection was to assess the protectiveness of the remedy. For a full list of site inspection activities, see the Site Inspection Checklist in Appendix E. Site photographs are available in Appendix G.

Site inspection participants met at the front gate of ReVenture Park at 11701 Mt. Holly Road, Charlotte, North Carolina. Participants traveled by car to the ReVenture Park office at Building 51, where they discussed site history, current site status and reuse. Participants then walked around the facility, observing site reuse and the CERCLA Areas. The site visit participants first inspected the Area A asphalt cap. The asphalt cap in Area A has many shallow cracks in its surface; the asphalt areas in Area A have not historically been inspected or repaired as part of the soil remedy O&M. Next, the site visit participants inspected the Area B cap. Clariant conducts semi-annual inspections of the Area B cap and repairs the asphalt as needed. Site visit participants observed some new minor cracks in the Area B asphalt cap (beyond areas previously sealed) and a slightly depressed area. The bulging area in the southwest portion of the Area B cap that was noted in the 2012 FYR was removed in May 2015. In July 2015, the bulge area was capped with a concrete pad to prevent further bulging and prevent seepage that occurred after the bulge was initially removed. Areas C and D were also observed during the site inspection; no indications of remedy problems were noted in either area.

During the FYR site inspection, Skeo staff members also visited the local information repository for the site, the Mt. Holly Public Library located at 235 West Catawba Ave. Mt. Holly, North Carolina 28120. No site documents were available at the local information repository. Site documents are available online at [www.epa.gov/superfund/search-superfund-documents](http://www.epa.gov/superfund/search-superfund-documents).



## V. TECHNICAL ASSESSMENT

**QUESTION A:** Is the remedy functioning as intended by the decision documents?

Yes, the soil remedy is functioning as intended by the decision documents and is performing as expected. Contaminated soil remaining on site is effectively contained. As part of regular O&M activities, Clariant performs visual inspection of the Area B cap, to assure the cap's overall stability and competence. Clariant conducts regular maintenance on the Area B cap to address superficial cracks in the asphalt. Clariant sealed the Area B cap in 2015. During the FYR site inspection in November 2016, there were minor cracks in the asphalt that do not appear to constitute a breach in the cap. These cracks should be sealed as part of the regular maintenance of the Area B cap.

In May 2015, Clariant removed the bulge that had been present in the southwest corner of the Area B cap and repaved the area with asphalt, in accordance with a work plan approved by NC DEQ. In July 2015, after black fluid was seen emerging from the repaved area, Clariant removed a small portion of the cap and installed a concrete pad targeting the source/path of the black material. So far, the repaired area of the cap has not risen or fallen, and black material has not reappeared.

Areas A, B, C and D are inspected at least every five years as part of the EPA's FYR process. Although the asphalt cap in Area A has not historically been inspected or repaired as part of the soil remedy O&M, the asphalt cap in Area A has many cracks in its surface. The Area A asphalt cap should be inspected annually.

In August 2011, a Declaration of Perpetual Land Use Restrictions (Appendix I) was put in place for CERCLA Areas A, B and D to prevent damage to caps and exposure to contaminated soil. These restrictions effectively prevent exposure to contaminated soils remaining on site. The Declaration of Perpetual Land Use Restrictions requires site owners to submit a letter report to NC DEQ and the EPA in January of each year confirming that the Declaration is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions therein.

**QUESTION B:** Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

The remedial action objectives are still valid. Although the toxicity values have changed, the Site's cleanup is still valid because there are no complete pathways to any potential soil contamination. This was accomplished by the caps, which are covered by the institutional controls, or the removal of soils at Areas D and C. These Areas are deleted CERCLA areas but the Site as a whole is still required to be assessed under RCRA if the current use scenario changes. For that reason, no additional actions are required.

There have been no changes in exposure assumptions. Forsite Development, Inc. is operating ReVenture Park, an eco-industrial park, on uncontaminated (non-CERCLA) areas of the facility. This redevelopment does not result in completed exposure pathways or compromise the soil remedy in place at the Site because the redevelopment occurs on uncontaminated areas of the facility. The CERCLA Areas that have contaminated soils left in place are capped to prevent exposure.

The soil remedy is performing as expected.

The Site is a RCRA facility, and there are no existing residential structures that are above or near the groundwater contamination plume. Therefore, it is not anticipated that any unacceptable risks will result from vapor intrusion. Because the groundwater risks are being addressed under RCRA authority and are not evaluated in this FYR, no further evaluation of vapor intrusion was conducted for the 2017 FYR.

**QUESTION C:** Has any other information come to light that could call into question the protectiveness of the remedy?

Clariant is in the process of transferring ownership of the facility to Forsite. The Site's Declaration of Perpetual Land Use Restrictions requires that instruments of sale, lease, grant or other transfer of any interest in the Site include a provision requiring the lessee, grantee or transferee to comply with the Declaration of Perpetual Land Use Restrictions.

## **VI. ISSUES/RECOMMENDATIONS**

<b>Issues/Recommendations</b>
<b>OU(s) without Issues/Recommendations Identified in the FYR:</b>
OU1 (Sitewide)

This FYR did not identify any issues or recommendations.

### **OTHER FINDINGS**

In addition, the following recommendations identified during the FYR may improve O&M, ensure continued awareness of institutional controls, and facilitate community involvement, but do not affect current or future protectiveness:

- The Area A asphalt cap should be inspected annually.
- The Area B asphalt cap has some minor cracks. Clariant should continue to perform regular inspections of the Area B cap to monitor the former bulge area, and to identify and seal any cracks that develop.
- The Site's Declaration of Perpetual Land Use Restrictions requires site owners to submit a letter report to NC DEQ and the EPA in January of each year confirming that the Declaration is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions therein. The site owners should continue to submit the required letter report to the EPA and NC DEQ in January of each year.
- Clariant is in the process of transferring ownership of the facility to Forsite. The Site's Declaration of Perpetual Land Use Restrictions requires that instruments of sale, lease, grant or other transfer of any interest in the Site include a provision requiring the lessee, grantee or transferee to comply with the Declaration of Perpetual Land Use Restrictions. If CERCLA Areas A, B or D are sold or leased, the instrument should include a provision requiring the lessee, grantee or transferee to comply with the Declaration of Perpetual Land Use Restrictions.

- During the 2016 FYR site inspection, no site documents were available at the local information repository for the site (Mt. Holly Public Library located at 235 West Catawba Ave., Mt. Holly, North Carolina 28120). After this FYR is issued, the EPA will send site documents to the information repository. Site documents are also available online at [www.epa.gov/superfund/search-superfund-documents](http://www.epa.gov/superfund/search-superfund-documents).

## VII. PROTECTIVENESS STATEMENT

Sitewide Protectiveness Statement
<i>Protectiveness Determination:</i> Protective
<i>Protectiveness Statement:</i> The soil remedy is protective of human health and the environment because contaminated soils were either removed from the Site or contained under on-site caps that are regularly inspected and maintained. In addition, a Declaration of Perpetual Land Use Restrictions is in place for the capped areas to prevent damage to caps and exposure to contaminated soil.

## VIII. NEXT REVIEW

The next FYR Report for the Martin-Marietta, Sodyeco, Inc. Superfund site is required five years from the completion date of this review.

## APPENDIX A – REFERENCE LIST

Amended Record of Decision, Martin Marietta/ Sodyeco Superfund Site, July 5, 2011.

Declaration of Perpetual Land Use Restrictions for a Federal Superfund Site, Book 26664, Pages 714-723, Instrument Number 2011089373, August 10, 2011.

EPA Superfund Five-Year Review, Martin-Marietta, Sodyeco, Inc. October 30, 1996.

EPA Superfund Five-Year Review, Martin-Marietta, Sodyeco, Inc. September 30, 2002.

EPA Superfund Five-Year Review, Martin-Marietta, Sodyeco, Inc. September 13, 2007.

EPA Superfund Five-Year Review, Martin-Marietta, Sodyeco, Inc. August 29, 2012.

EPA Superfund Record of Decision: Martin-Marietta, Sodyeco, Inc., EPA ID: NCD001810365, OU 01, Charlotte, NC, September 24, 1987.

Explanation of Significant Difference: Sodyeco Superfund Site, Charlotte, North Carolina, September 28, 1994.

Explanation of Significant Difference: Sodyeco (Martin Marietta) Superfund, November 6, 1998.

Explanation of Significant Difference: Sodyeco (Martin Marietta) Superfund, December 3, 1998.

Final Closeout Report, Martin Marietta/Sodyeco Superfund Site. August 25, 2011.

Preliminary Closeout Report, Martin Marietta\Sodyeco Superfund Site, Mecklenburg County, North Carolina. September 29, 1999.

Remedial Investigation, Sodyeco Site. Volume I, Remedial Investigation Report and Appendices A and B. August 1987.

## APPENDIX B – CURRENT SITE STATUS

### Environmental Indicators

Current human exposures at the Site are under control.  
Current groundwater migration is under control.

### Are Necessary Institutional Controls in Place?

All  Some  None

### Has EPA Designated the Site as Sitewide Ready for Anticipated Use?

Yes  No

### Has the Site Been Put into Reuse?

Yes  No

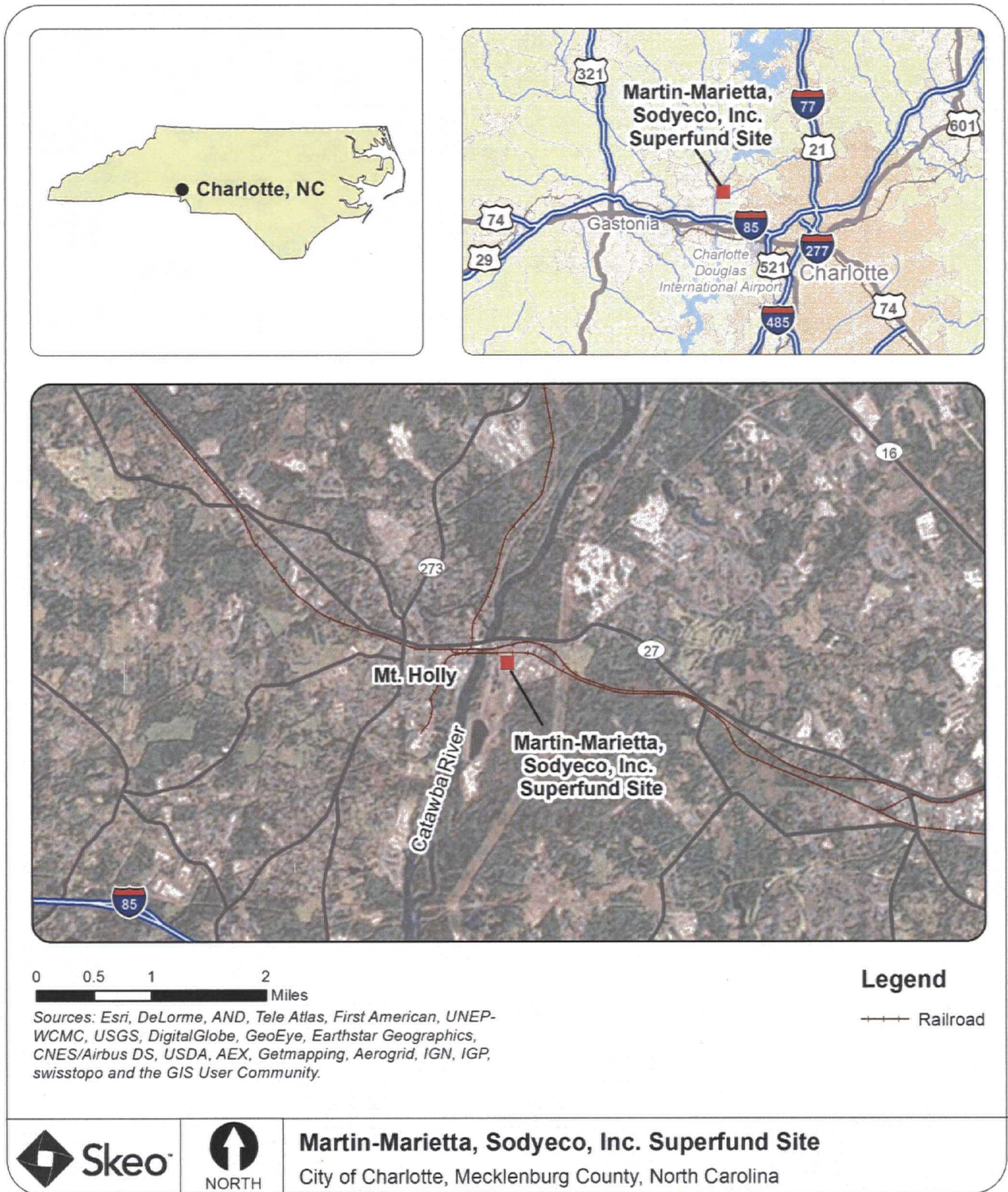
## APPENDIX C – SITE CHRONOLOGY

**Table C-1: Site Chronology**

Event	Date
Organic solvents discovered in the company's potable water well	November 1, 1979
The EPA completed a hazardous waste site investigation	July 1982
The EPA proposed the Site for listing on the NPL	December 30, 1982
The EPA listed the Site on the NPL	September 8, 1983
The EPA issued an Administrative Order on Consent	February 10, 1986
PRP started the remedial investigation/feasibility study	
PRP completed the remedial investigation/feasibility study	September 24, 1987
The EPA issued a ROD	
PRP started remedial design	September 1, 1988
PRP completed remedial design	August 4, 1989
PRP started remedial action	September 25, 1989
PRP completed Area B asphalt cap	October 1989
PRP completed construction of the groundwater pump-and-treat system	March 1990
PRP made the groundwater pump-and-treat system fully functional	April 1990
PRP began Area C treatability work	May 1990
Based on the ROD's required treatability work, the EPA issued an ESD to select a final remedy for Area C	September 28, 1994
The EPA completed the first FYR for the Site	October 30, 1996
The EPA issued a second ESD to modify the remedy selected for Area C	November 1998
The EPA issued a third ESD to revise the amount of soil to be addressed at Area C	December 3, 1998
The EPA issued a Preliminary Closeout Report	
The EPA declared the Site to be Construction Complete	September 29, 1999
PRP started O&M	July 31, 2002
The EPA completed the second FYR for the Site	September 30, 2002
The EPA completed the third FYR for the Site	September 13, 2007
The EPA issued ROD Amendment, which transferred groundwater risks at the Site to RCRA authority	July 5, 2011
PRP recorded a Declaration of Perpetual Land Use Restrictions for CERCLA Areas A, B and D to prevent damage to caps and exposure to contaminated soil	August 10, 2011
The EPA issued Final Closeout Report	August 29, 2011
The EPA deleted the Site from the NPL	January 20, 2012
The EPA completed the fourth FYR for the Site	August 29, 2012

# APPENDIX D – SITE MAP

Figure D-1: Site Vicinity Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

## APPENDIX E – SITE INSPECTION CHECKLIST

<b>FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST</b>			
<b>I. SITE INFORMATION</b>			
<b>Site Name:</b> <u>Martin-Marietta, Sodyeco, Inc.</u>	<b>Date of Inspection:</b> <u>11/10/2016</u>		
<b>Location and Region:</b> <u>Charlotte, North Carolina 4</u>	<b>EPA ID:</b> <u>NCD001810365</u>		
<b>Agency, Office or Company Leading the Five-Year Review:</b> <u>EPA Region 4</u>	<b>Weather/Temperature:</b> <u>clear, about 65°F</u>		
<b>Remedy Includes:</b> (Check all that apply)			
<input checked="" type="checkbox"/> Landfill cover/containment	<input type="checkbox"/> Monitored natural attenuation		
<input type="checkbox"/> Access controls	<input type="checkbox"/> Groundwater containment		
<input checked="" type="checkbox"/> Institutional controls	<input type="checkbox"/> Vertical barrier walls		
<input type="checkbox"/> Groundwater pump and treatment			
<input type="checkbox"/> Surface water collection and treatment			
<input type="checkbox"/> Other: _____			
<b>Attachments:</b> <input checked="" type="checkbox"/> Inspection team roster attached <input type="checkbox"/> Site map attached			
<b>II. INTERVIEWS (check all that apply)</b>			
1. <b>O&amp;M Site Manager</b>	<u>Ken Hausle</u> Name	<u>Clariant environmental engineer</u> Title	<u>02/03/2017</u> Date
Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone   Phone: _____ <u>via email</u>			
Problems, suggestions <input type="checkbox"/> Report attached: <u>see Appendix H</u>			
2. <b>O&amp;M Staff</b>	_____ Name	_____ Title	_____ Date
Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone   Phone: _____			
Problems/suggestions <input type="checkbox"/> Report attached: _____			
3. <b>Local Regulatory Authorities and Response Agencies</b> (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.			
Agency <u>NC DEQ</u>			
Contact	<u>Doug Rumford</u> Name	<u>project manager</u> Title	<u>02/02/2017</u> Date
Problems/suggestions <input type="checkbox"/> Report attached: <u>see Appendix H</u>			
Agency _____			
Contact	_____ Name	_____ Title	_____ Date
Problems/suggestions <input type="checkbox"/> Report attached: _____			
Agency _____			
Contact	_____ Name	_____ Title	_____ Date
Problems/suggestions <input type="checkbox"/> Report attached: _____			
Agency _____			
Contact	_____ Name	_____ Title	_____ Date
Problems/suggestions <input type="checkbox"/> Report attached: _____			
Agency _____			



Contact _____ Name _____	Title _____	Date _____	Phone No. _____
Problems/suggestions <input type="checkbox"/> Report attached: _____			
4. <b>Other Interviews</b> (optional) <input checked="" type="checkbox"/> Report attached: <u>see Appendix H</u>			
MariJon Owens, site manager for Forsite Development Inc. (developer of ReVenture Park)			
<b>III. ON-SITE DOCUMENTS AND RECORDS VERIFIED</b> (check all that apply)			
1. <b>O&amp;M Documents</b>			
<input type="checkbox"/> O&M manual	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> As-built drawings	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Maintenance logs	<input type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
Remarks: _____			
2. <b>Site-Specific Health and Safety Plan</b>			
	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
<input checked="" type="checkbox"/> Contingency plan/emergency response plan	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
Remarks: _____			
3. <b>O&amp;M and OSHA Training Records</b>			
	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
Remarks: _____			
4. <b>Permits and Service Agreements</b>			
<input type="checkbox"/> Air discharge permit	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Effluent discharge	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Waste disposal, POTW	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Other permits: _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____			
5. <b>Gas Generation Records</b>			
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____			
6. <b>Settlement Monument Records</b>			
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____			
7. <b>Groundwater Monitoring Records</b>			
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____			
8. <b>Leachate Extraction Records</b>			
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____			

9.	<b>Discharge Compliance Records</b>	<input type="checkbox"/> Air	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
		<input type="checkbox"/> Water (effluent)	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
Remarks: _____					
10.	<b>Daily Access/Security Logs</b>	<input type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A	
Remarks: _____					
<b>IV. O&amp;M COSTS</b>					
1.	<b>O&amp;M Organization</b>	<input type="checkbox"/> State in-house	<input type="checkbox"/> Contractor for state		
		<input type="checkbox"/> PRP in-house	<input checked="" type="checkbox"/> Contractor for PRP		
		<input type="checkbox"/> Federal facility in-house	<input type="checkbox"/> Contractor for Federal facility		
		<input type="checkbox"/> _____			
2.	<b>O&amp;M Cost Records</b>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date		
		<input type="checkbox"/> Funding mechanism/agreement in place	<input type="checkbox"/> Unavailable		
Original O&M cost estimate: _____ <input type="checkbox"/> Breakdown attached					
Total annual cost by year for review period if available					
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
3.	<b>Unanticipated or Unusually High O&amp;M Costs during Review Period</b>				
Describe costs and reasons: _____					
<b>V. ACCESS AND INSTITUTIONAL CONTROLS</b> <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A					
<b>A. Fencing</b>					
1.	<b>Fencing Damaged</b>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Gates secured	<input type="checkbox"/> N/A	
Remarks: _____					

<b>B. Other Access Restrictions</b>				
1.	<b>Signs and Other Security Measures</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A	
Remarks: <u>guard at front gate</u>				
<b>C. Institutional Controls (ICs)</b>				
1.	<b>Implementation and Enforcement</b>			
	Site conditions imply ICs not properly implemented	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
	Site conditions imply ICs not being fully enforced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
	Type of monitoring (e.g., self-reporting, drive by): <u>annual reporting by site owner</u>			
	Frequency: <u>annual</u>			
	Responsible party/agency: <u>site owner</u>			
	Contact	<u>Michael Townsend</u>	<u>remedial project manager</u>	
	Name		Title	
			Date	Phone no.
	Reporting is up to date	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Reports are verified by the lead agency	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Specific requirements in deed or decision documents have been met	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Violations have been reported	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
	Other problems or suggestions: <input type="checkbox"/> Report attached			
2.	<b>Adequacy</b>	<input checked="" type="checkbox"/> ICs are adequate	<input type="checkbox"/> ICs are inadequate	<input type="checkbox"/> N/A
Remarks: _____				
<b>D. General</b>				
1.	<b>Vandalism/Trespassing</b>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident	
Remarks: _____				
2.	<b>Land Use Changes On Site</b>	<input type="checkbox"/> N/A		
Remarks: <u>No land use changes have happened at the CERCLA areas (A, B, C and D). The site property is a business park with multiple tenants, which change over time. Forsite is in the process of acquiring the property from Clariant.</u>				
3.	<b>Land Use Changes Off Site</b>	<input checked="" type="checkbox"/> N/A		
Remarks: _____				
<b>VI. GENERAL SITE CONDITIONS</b>				
<b>A. Roads</b> <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A				
1.	<b>Roads Damaged</b>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Roads adequate	<input type="checkbox"/> N/A
Remarks: _____				
<b>B. Other Site Conditions</b>				
Remarks: _____				

**VII. LANDFILL COVERS**

Applicable  N/A

**A. Landfill Surface**

1.	<b>Settlement</b> (low spots) <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Settlement not evident Area extent: <u>about 20 feet by 20 feet</u> Depth: <u>about 1 foot</u> Remarks: <u>in Area B</u>
2.	<b>Cracks</b> <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Cracking not evident Lengths: _____ Widths: <u>about 1/8 inch</u> Depths: _____ Remarks: <u>Few cracks in Area B asphalt cap. Many small cracks in Area A asphalt cap.</u>
3.	<b>Erosion</b> <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Erosion not evident Area extent: _____ Depth: _____ Remarks: _____
4.	<b>Holes</b> <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Holes not evident Area extent: _____ Depth: _____ Remarks: _____
5.	<b>Vegetative Cover</b> <input checked="" type="checkbox"/> Grass <input checked="" type="checkbox"/> Cover properly established <input checked="" type="checkbox"/> No signs of stress <input checked="" type="checkbox"/> Trees/shrubs (indicate size and locations on a diagram) Remarks: <u>Area C is grass-covered. Area D is vegetated with trees and shrubs.</u>
6.	<b>Alternative Cover</b> (e.g., armored rock, concrete) <input type="checkbox"/> N/A Remarks: <u>Areas A and B have asphalt caps.</u>
7.	<b>Bulges</b> <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Bulges not evident Area extent: _____ Height: _____ Remarks: <u>Former bulge in Area B has been covered with a concrete pad (about 12 feet by 12 feet).</u>
8.	<b>Wet Areas/Water Damage</b> <input checked="" type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Wet areas <input type="checkbox"/> Location shown on site map Area extent: _____ <input type="checkbox"/> Ponding <input type="checkbox"/> Location shown on site map Area extent: _____ <input type="checkbox"/> Seeps <input type="checkbox"/> Location shown on site map Area extent: _____ <input type="checkbox"/> Soft subgrade <input type="checkbox"/> Location shown on site map Area extent: _____ Remarks: _____
9.	<b>Slope Instability</b> <input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No evidence of slope instability Area extent: _____ Remarks: _____



<b>D. Cover Penetrations</b>		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	<b>Gas Vents</b>	<input type="checkbox"/> Active	<input type="checkbox"/> Passive
	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled
	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> Good condition
			<input type="checkbox"/> N/A
	Remarks: _____		
2.	<b>Gas Monitoring Probes</b>	<input type="checkbox"/> Active	<input type="checkbox"/> Passive
	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled
	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> Good condition
			<input type="checkbox"/> N/A
	Remarks: _____		
3.	<b>Monitoring Wells (within surface area of landfill)</b>		
	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled
	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> Good condition
			<input type="checkbox"/> N/A
	Remarks: _____		
4.	<b>Extraction Wells Leachate</b>		
	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled
	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> Good condition
			<input type="checkbox"/> N/A
	Remarks: _____		
5.	<b>Settlement Monuments</b>	<input type="checkbox"/> Located	<input type="checkbox"/> Routinely surveyed
			<input type="checkbox"/> N/A
	Remarks: _____		
<b>E. Gas Collection and Treatment</b>		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	<b>Gas Treatment Facilities</b>		
	<input type="checkbox"/> Flaring	<input type="checkbox"/> Thermal destruction	<input type="checkbox"/> Collection for reuse
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
	Remarks: _____		
2.	<b>Gas Collection Wells, Manifolds and Piping</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
	Remarks: _____		
3.	<b>Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A
	Remarks: _____		
<b>F. Cover Drainage Layer</b>		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	<b>Outlet Pipes Inspected</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks: _____		
2.	<b>Outlet Rock Inspected</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks: _____		

<b>G. Detention/Sedimentation Ponds</b> <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	<b>Siltation</b>	Area extent: _____	Depth: _____ <input type="checkbox"/> N/A
	<input type="checkbox"/> Siltation not evident		
	Remarks: _____		
2.	<b>Erosion</b>	Area extent: _____	Depth: _____
	<input type="checkbox"/> Erosion not evident		
	Remarks: _____		
3.	<b>Outlet Works</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks: _____		
4.	<b>Dam</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks: _____		
<b>H. Retaining Walls</b> <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	<b>Deformations</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident
	Horizontal displacement: _____	Vertical displacement: _____	
	Rotational displacement: _____		
	Remarks: _____		
2.	<b>Degradation</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident
	Remarks: _____		
<b>I. Perimeter Ditches/Off-Site Discharge</b> <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	<b>Siltation</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Siltation not evident
	Area extent: _____	Depth: _____	
	Remarks: _____		
2.	<b>Vegetative Growth</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
	<input type="checkbox"/> Vegetation does not impede flow		
	Area extent: _____	Type: _____	
	Remarks: _____		
3.	<b>Erosion</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
	Area extent: _____	Depth: _____	
	Remarks: _____		
4.	<b>Discharge Structure</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks: _____		

<b>VIII. VERTICAL BARRIER WALLS</b>		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	<b>Settlement</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident
	Area extent: _____		Depth: _____
	Remarks: _____		
2.	<b>Performance Monitoring</b>	Type of monitoring: _____	
	<input type="checkbox"/> Performance not monitored		
	Frequency: _____		<input type="checkbox"/> Evidence of breaching
	Head differential: _____		
	Remarks: _____		
<b>IX. GROUNDWATER/SURFACE WATER REMEDIES</b>		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
<b>A. Groundwater Extraction Wells, Pumps and Pipelines</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Pumps, Wellhead Plumbing and Electrical</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> All required wells properly operating	<input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A
	Remarks: _____		
2.	<b>Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
	Remarks: _____		
3.	<b>Spare Parts and Equipment</b>		
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Good condition	<input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided
	Remarks: _____		
<b>B. Surface Water Collection Structures, Pumps and Pipelines</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Collection Structures, Pumps and Electrical</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
	Remarks: _____		
2.	<b>Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances</b>		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
	Remarks: _____		
3.	<b>Spare Parts and Equipment</b>		
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Good condition	<input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided
	Remarks: _____		



<b>C. Treatment System</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Treatment Train</b> (check components that apply)	<input type="checkbox"/> Metals removal <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Bioremediation <input type="checkbox"/> Air stripping <input type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Filters: _____ <input type="checkbox"/> Additive (e.g., chelation agent, flocculent): _____ <input type="checkbox"/> Others: _____ <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance <input type="checkbox"/> Sampling ports properly marked and functional <input type="checkbox"/> Sampling/maintenance log displayed and up to date <input type="checkbox"/> Equipment properly identified <input type="checkbox"/> Quantity of groundwater treated annually: _____ <input type="checkbox"/> Quantity of surface water treated annually: _____ Remarks: _____	
2.	<b>Electrical Enclosures and Panels</b> (properly rated and functional)	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____	
3.	<b>Tanks, Vaults, Storage Vessels</b>	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs maintenance Remarks: _____	
4.	<b>Discharge Structure and Appurtenances</b>	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____	
5.	<b>Treatment Building(s)</b>	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs repair <input type="checkbox"/> Chemicals and equipment properly stored Remarks: _____	
6.	<b>Monitoring Wells</b> (pump and treatment remedy)	<input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells located <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____	
<b>D. Monitoring Data</b>			
1.	<b>Monitoring Data</b>	<input type="checkbox"/> Is routinely submitted on time <input type="checkbox"/> Is of acceptable quality	

2. <b>Monitoring Data Suggests:</b> <input type="checkbox"/> Groundwater plume is effectively contained <input type="checkbox"/> Contaminant concentrations are declining
<b>E. Monitored Natural Attenuation</b>
1. <b>Monitoring Wells</b> (natural attenuation remedy) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells located <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____
<b>X. OTHER REMEDIES</b>
If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.
<b>XI. OVERALL OBSERVATIONS</b>
<b>A. Implementation of the Remedy</b> Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions). <u>The caps and soil excavation at Areas A, B, C and D were selected to reduce contact with soil contamination. The caps are functioning as designed.</u>
<b>B. Adequacy of O&amp;M</b> Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <u>The PRP (Clariant) continues to monitor the condition of the asphalt cap at Area B, and repairs it when needed. Areas A, B, C and D are inspected at least every five years as part of the EPA's FYR process.</u>
<b>C. Early Indicators of Potential Remedy Problems</b> Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. <u>None.</u>
<b>D. Opportunities for Optimization</b> Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. <u>The EPA will consider whether it is possible to combine the facility's RCRA and FYR inspections.</u>

FYR Site Inspection Participants:  
Michael Townsend, EPA remedial project manager  
Ken Hausle, Clariant  
Scott Drury, Hart Hickman (PRP's O&M contractor)  
Tom McKittrick, Forsite  
MariJon Owens, Forsite  
Amanda Goyne, Skeo (the EPA's FYR contractor)  
Hagai Nassau, Skeo

## APPENDIX F – PRESS NOTICE

### PUBLIC NOTICE

U. S. Environmental Protection Agency, Region 4  
Announces the Next Five-Year Review  
for the Martin-Marietta Sodyeco, Inc. Superfund Site  
Mecklenburg County, North Carolina

A Five Year Review is being conducted by the U.S. Environmental Protection Agency (EPA) of the clean-up activities taken at the Martin-Marietta, Sodyeco, Inc. Site located in Mecklenburg County, North Carolina. The Superfund law, known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), requires that Superfund cleanup actions be reviewed every five years, to ensure that the selected remedy remains protective of human health and the environment. Thus the purpose of this Five-Year Review, the fifth for this site, is to evaluate the performance and effectiveness of the selected cleanup remedy. When completed, a copy of the review report will be placed in the Information Repository files located in the EPA Record Center, 11th Floor, 61 Forsyth Street, SW, Atlanta, GA 30303, and at the Mount Holly Branch Library, 245 West Catawba Avenue, Mount Holly, North Carolina 28120.

EPA also conducted a number of interviews with nearby businesses, residents, local and state officials to solicit feedback on the clean-up process. EPA will complete the current Five-Year Review process by September 2017.

If you would like more information or have any questions, comments, and/or concerns about the Five-Year Review, you may contact:

Michael Townsend

Remedial Project Manager

U.S. EPA, Region 4

61 Forsyth Street, S.W., Atlanta, GA 30303

Phone: 404-562-8813 / E-mail: [townsend.michael@epa.gov](mailto:townsend.michael@epa.gov)

U.S. EPA – Region 4 Mailing Address

Superfund Division (4SD-SRB)

61 Forsyth Street, Atlanta, GA 30303

Kyle Bryant

Physical Scientist/Community Involvement Coordinator

U.S. EPA, Region 4

61 Forsyth Street, S.W., Atlanta, GA 30303

Phone: 404-562-9073 / E-mail: [bryant.kyle@epa.gov](mailto:bryant.kyle@epa.gov)

Local Document Repository

Mount Holly Branch Library

245 West Catawba Avenue, Mount Holly, North Carolina 28120

LP3198224

## APPENDIX G – SITE INSPECTION PHOTOS



ReVenture Park sign at the facility entrance



CERCLA Area A



Cracks in the asphalt at CERCLA Area A



Minor cracks in the surface of CERCLA Area B



Repaired former bulge area at CERCLA Area B



Minor depression at CERCLA Area B



CERCLA Area C



CERCLA Area D

## APPENDIX H – INTERVIEW FORMS

### Martin-Marietta, Sodyeco, Inc. Superfund Site      Five-Year Review Interview Form

Site Name: Martin-Marietta, Sodyeco, Inc.      EPA ID No.: NCD001810365

Interviewer Name: Hagai Nassau      Affiliation: Skeo

Subject Name: Doug Rumford      Affiliation: NC DEQ

Subject Contact Information: doug.rumford@ncdenr.gov

Time: 11:40 a.m.      Date: 02/02/2017

Interview Location: NCDEQ Office, Raleigh, NC

Interview Format (circle one):    In Person    Phone    Mail    Other: email

Interview Category:    State Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

Satisfied with all aspects of the current project status.

2. What is your assessment of the current performance of the remedy in place at the Site?

Effective and appropriate at this time.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?

No.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.

No.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Site's remedy?

No.

6. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

Yes.

7. Are you aware of any changes in projected land use(s) at the Site?

No.



8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

No.

**Martin-Marietta, Sodyeco, Inc. Superfund Site Five-Year Review Interview Form**

Site Name: Martin-Marietta, Sodyeco, Inc. EPA ID No.: NCD001810365  
Interviewer Name: Hagai Nassau Affiliation: Skeo  
Subject Name: Ken Hausle Affiliation: Clariant  
Subject Contact Information: kenneth.hausle@clariant.com  
Time: 1:00 p.m. Date: 02/03/2017  
Interview Location: Clariant offices, Charlotte, NC

Interview Format (circle one): In Person Phone Mail Other: email

Interview Category: **Potentially Responsible Parties (PRPs)**

1. What is your overall impression of the remedial activities at the Site?

Remedial activity at the site is implemented in good faith.

2. What have been the effects of this Site on the surrounding community, if any?

In general the site has had a positive effect on the surrounding community particularly with respect to the ReVenture efforts to utilize infrastructure at the site in support of its "Eco-Park" concept (brownfield redevelopment fostering environmentally-minded companies).

3. What is your assessment of the current performance of the remedy in place at the Site?

The current performance is sufficient. Going forward the site will continue to coordinate with regulatory agencies to evaluate and possibly implement remediation methodologies that optimize risk reduction, land use flexibility and ongoing cost.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?

No.

5. Do you feel well-informed regarding the Site's activities and remedial progress? If not, how might the EPA convey site-related information in the future?

Yes.

6. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

No.

**Martin-Marietta, Sodyeco, Inc. Superfund Site      Five-Year Review Interview Form**

Site Name: Martin-Marietta, Sodyeco, Inc.      EPA ID No.: NCD001810365  
Interviewer Name: Hagai Nassau      Affiliation: Skeo  
Subject Name: MariJon Owens      Affiliation: Forsite  
Subject Contact Information: marijon@forsiteinc.com  
Time:      Date: 02/03/2017  
Interview Location: ReVenture Park

Interview Format (circle one):      In Person      Phone      Mail      Other: email

Interview Category: **Facility Operator**

1. What is your overall impression of the remedial activities at the Site?  
  
Safe river quality – no negative impact from groundwater contamination on-site.  
Making useful the abandoned property – building recovery.
  
2. What have been the effects of this Site on the surrounding community, if any?  
  
Positive impression of active and functional property rather than abandoned eyesore.  
Providing outlet for Mount Holly leaf and yard waste disposal.  
Hosting community 10K each spring.
  
3. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?  
  
No problems – positive impression from quick response and familiarity from local support stations during recent small fire.
  
4. What is your assessment of the current performance of the remedy in place at the Site?  
  
Constant vigilance to maintain caps is occurring; on-going groundwater remediation successfully containing and reducing contamination.
  
5. Are you aware of any changes in projected land use(s) at the Site?  
  
Continued redevelopment plans allow for many ideas and options to be explored, but none are concrete at the moment.
  
6. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?  
  
Not aware of any.
  
7. Do you feel well-informed regarding the Site’s activities and remedial progress? If not, how might the EPA convey site-related information in the future?  
  
Yes -- current land owner Clariant communicates very well with us.  
We just had a 5-year review EPA visit with Skeo participation in November.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

Current Brownfields Agreement for redevelopment with ongoing RCRA permit are working well.

# APPENDIX I – DECLARATION OF PERPETUAL LAND USE RESTRICTIONS

## DECLARATION OF PERPETUAL LAND USE RESTRICTIONS FOR A FEDERAL SUPERFUND SITE

For Property Owned By: Clariant Corporation

**Martin Marietta/Sodyeco Superfund Site, Charlotte, Mecklenburg County, North Carolina**

The real property which is the subject of this Declaration of Perpetual Land Use Restrictions ("Declaration") consists only of CERCLA areas A, B and D, which areas are located on a larger parcel of property located, in turn, at 11701 Mount Holly Road in Mecklenburg County, North Carolina. Areas A, B and D are referred to in this Declaration as the "Site." The Site contains hazardous substances, pollutants, or contaminants as defined by the Comprehensive Environmental Response, Compensation and Liability Act, as amended ("CERCLA/SARA"), 42 U.S.C. § 9601 *et seq.*, and, along with other property, is the subject of a Record of Decision ("ROD") issued by the United States Environmental Protection Agency ("EPA") in September 1987. The ROD was modified by three Explanations of Significant Differences ("ESDs") that EPA issued in September 1994, November 1998, and December 1998. Pursuant to the ROD, the remedy selected for the Site was to be implemented by the Site owner under an amendment to a March 31, 1987 Resource Conservation and Recovery Act ("RCRA") Part B Permit, Number NCD0011810365. The remedy for the Site selected in the ROD, as modified by the three ESDs, has been further modified in an Amended ROD ("AROD"), issued by EPA on July 5, 2011, to add a requirement for land use restrictions for the soil. The land use restrictions set forth in this Declaration are included in the remedial action plan for the Site in the AROD that has been approved by the Secretary of the North Carolina Department of Environment and Natural Resources (or its successor in function), or his/her delegate, as authorized by N.C.G.S. Section 143B-279.9. The North Carolina Department of Environment and Natural Resources shall hereinafter be referred to as "DENR."

Clariant Corporation is the owner in fee simple of the Site, which is a portion of the real property legally described in Deed Book 4677, Page 309, Plat Book 53, Page 643 in the Office of the Register of Deeds for Mecklenburg County. The Site is shown on a Notice of Contaminated Site, constituting a survey plat that is concurrently being recorded with this Declaration in the Office of the Register of Deeds for Mecklenburg County at Map Book 53, Page 410. An unrecorded copy of said survey plat is attached hereto as Exhibit A.

For the purpose of protecting public health and the environment, Clariant Corporation hereby declares that all of the Site shall be held, sold and conveyed subject to the following perpetual land use restrictions, which shall run with the land; shall be binding on all parties having any right, title or interest in the Site or any part thereof, their heirs, successors and assigns; and shall, as provided in N.C.G.S. Section 143B-279.9, be enforceable without regard to lack of privity of estate or contract, lack of benefit to particular land, or lack of any property interest in particular land. These restrictions shall continue in perpetuity and cannot be amended or canceled unless and until the Mecklenburg County Register of Deeds receives and records the written concurrence of the Secretary of DENR (or its successor in function), or his/her delegate, of modification or cancellation of these restrictions and this Declaration.

FOR REGISTRATION J. DAVID GRAIBERRY  
REGISTER OF DEEDS  
MECKLENBURG COUNTY, NC  
2011 AUG 10 03:12:23 PM  
BK 26664 PG 714-723 FEE \$38.00

INSTRUMENT # 2011089373

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RETURNED TO CUSTOMER

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2011089373

If any provision of this Declaration is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

It is the intention of Clariant Corporation and DENR that, to the extent allowed by law, EPA is a third party beneficiary of this Declaration, and, as such, has the authority to enforce these restrictions, to the extent such enforcement is allowed by law. It is expressly agreed that neither EPA nor DENR is a recipient of a real property interest under this Declaration.

### **PERPETUAL LAND USE RESTRICTIONS**

1. These land use restrictions are intended to prevent direct contact with Site contaminants and soils impacted by Site contaminants and, except as otherwise set forth herein, to preclude any future activity that would disturb, remove, or damage any cap, engineered or otherwise.

2. No cap at the Site, engineered or otherwise, shall be disturbed, removed, or damaged in any way without prior written approval of the Hazardous Waste Section of DENR's Division of Waste Management or its successor in function (the "Section"); provided, however, that routine maintenance of caps may be conducted without the Section's prior approval so long as such maintenance does not expose contaminants of concern in the soil underlying such caps, which contaminants of concern are the subject of the ROD, ESDs and AROD at the Site ("Contaminants of Concern"); and provided further that the Section shall be notified in writing upon completion of any such routine maintenance.

3. To ensure hazardous waste is handled and disposed of in a safe and appropriate manner and to prevent direct contact with contaminated soils, no caps at the Site, engineered or otherwise, may be altered, or other actions taken, in a manner that would result in a completed exposure pathway to Contaminants of Concern and/or result in increased risk of adverse exposure to Contaminants of Concern, without the owner conducting a RCRA Facility Investigation ("RFI") and implementing the appropriate RCRA action required as a result of the RFI, in both cases if and to the extent directed by the Section.

4. The Site shall not be developed or utilized for residential purposes or for childcare centers, nursing homes, schools, parks, recreational areas or athletic fields, without prior written approval of the Section.

5. The Site shall not be used for grazing purposes or for agricultural purposes related to human consumption, without prior written approval of the Section.

6. The Site shall not be used for kennels, private animal pens, or for riding clubs.

7. The Site shall not be used for mining or extraction of coal, oil, gas or any other minerals or non-mineral substances.

8. Unless otherwise permitted under this Declaration, below-ground construction is prohibited at the Site, except for remedial action activities undertaken with prior written approval of

the Section.

9. No repairs to underground utilities and remedial action underground piping and plumbing may be undertaken at the Site without prior approval of the Section; provided that such prior approval is not necessary if repairs are required to address an emergency situation. In the case of an emergency situation, the Section shall be notified by phone within 4 business hours of the discovery of the emergency, and within 72 hours of the emergency a written account of the emergency and actions taken shall be submitted to the Section.

10. Activities necessary to remediate contamination at the Site are permitted if approved in writing in advance by the Section.

11. Each person who owns any portion of the Site shall submit a letter report, containing the notarized signature of the owner, in January of each year on or before January 31<sup>st</sup>, to the Section and the EPA Region 4 Superfund Division, or its successor in function, confirming that this Declaration is still recorded in the Office of the Mecklenburg County Register of Deeds, and that activities and conditions at the Site remain in compliance with the land use restrictions herein.

12. No person conducting environmental assessment or remediation at the Site, or involved with determining compliance with applicable land use restrictions, at the direction of, or pursuant to, a permit or order issued by DENR or EPA or their successors in function, may be denied access to the Site for the purpose of conducting such activities.

13. Each person who owns any portion of the Site shall cause the instrument of any sale, lease, grant, or other transfer of any interest in the Site to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Declaration. The failure to include such provision shall not affect the validity or applicability of any land use restriction in this Declaration.

14. The owner of any portion of the Site that is the subject of this Declaration may submit a written request to the Section for modification or cancellation of these restrictions. DENR will concur with and grant such request for modification if DENR determines, based upon a showing by the owner, that the modification is justified. DENR will concur with and grant such request for cancellation if DENR determines, based upon a showing by such owner, that all Contaminants of Concern at the Site have been eliminated or remediated to unrestricted use standards pursuant to N.C.G.S. Section 143B-279.9(d), or, if no unrestricted use standard pursuant to N.C.G.S. Section 143B-279.9(d) is applicable to a Contaminant of Concern, then upon achievement of all applicable requirements in the state RCRA permit for the Site, in effect at the time of request for cancellation. If DENR concurs with any such modification or cancellation, it shall submit such written concurrence to the Mecklenburg County Register of Deeds. Such owner must provide written notification to EPA Region 4's Superfund Division that it is requesting a modification or cancellation of the restrictions at the same time its request is submitted to DENR.

## **REPRESENTATIONS AND WARRANTIES**

Clariant Corporation hereby represents and warrants to the other signatories hereto:

that it is the sole owner of the Site;

that it holds fee simple title to the Site free, clear, and unencumbered;

that it has the power and authority to enter into this Declaration, to grant the rights and interests herein provided and to carry out all obligations hereunder; and

that this Declaration will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Clariant Corporation is a party or to which it is bound or affected.

## **ENFORCEMENT**

The land use restrictions set forth in this Declaration are an integral part of the remedy for the contamination at the Site. Adherence to the restrictions is necessary to protect public health and the environment. These land use restrictions shall be enforced by any owner, operator or other party responsible for any part of the Site. The land use restrictions may also be enforced by DENR through the remedies provided by any provision of law that is implemented or enforced by DENR, or by means of a civil action, and may also be enforced by any unit of local government having jurisdiction over any part of the Site or by EPA to the extent allowed by law. Any attempt to cancel this Declaration without the prior written approval of DENR, and notification to the EPA Region 4 Superfund Division, or their successors in function, shall constitute noncompliance with EPA's ROD, as modified by three ESDs and the AROD for the Site, which have been approved by DENR for the Site, and shall be subject to enforcement by DENR and/or, to the extent allowed by law, by EPA. Failure by any party required or authorized to enforce any of the above restrictions or provisions of this Declaration shall in no event be deemed a waiver of the right to do so thereafter as to the same violation or as to one occurring prior or subsequent thereto.

## **FUTURE SALES, LEASES, CONVEYANCES AND TRANSFERS**

When any portion of the Site is sold, leased, conveyed or transferred, pursuant to N.C.G.S. Section 143B-279.10(e), the deed or other instrument of transfer shall contain in the description section, in no smaller type than that used in the body of the deed or instrument, a statement that the real property being sold, leased, conveyed, or transferred is a Contaminated Site, together with a reference by book and page to the recordation of the Notice of Contaminated Site referenced in this Declaration.



**MODIFICATION OR CANCELLATION OF NOTICE OF  
CONTAMINATED SITE**

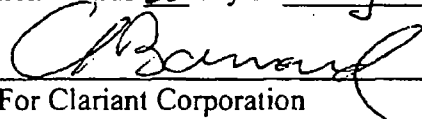
The owner of any portion of the Site that is the subject of this Declaration may also submit a written request to the Section that the Notice of Contaminated Site ("survey plat") be modified or cancelled.

DENR will concur with and grant such request for modification if DENR determines, based upon a showing by the owner, that the modification is justified. DENR will concur with and grant such request for cancellation if DENR determines, based upon a showing by such owner, that all Contaminants of Concern at the Site have been eliminated or remediated to unrestricted use standards pursuant to N.C.G.S. Section 143B-279.9(d) or, if no unrestricted use standard pursuant to N.C.G.S. Section 143B-279.9(d) is applicable to a contaminant of concern, then upon achievement of all applicable requirements in the state RCRA permit for the Site, in effect at the time of request for cancellation. If DENR concurs with any such modification or cancellation, it shall submit such written concurrence to the Mecklenburg County Register of Deeds. Such owner must provide written notification to EPA Region 4's Superfund Division that it is requesting a modification or cancellation of the survey plat at the same time the request is submitted to DENR.

**OWNER'S SIGNATURE**

IN WITNESS WHEREOF, I CHRISTOPHER S. BALWALD, exercising power of attorney for Clariant Corporation, have executed this Declaration on this 26<sup>th</sup> day of July, 2011.

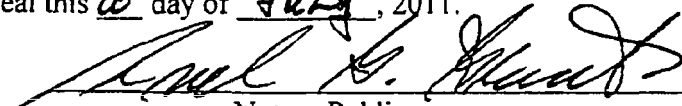
Signatory's name:

  
For Clariant Corporation

STATE OF NORTH CAROLINA  
COUNTY OF MECKLENBURG

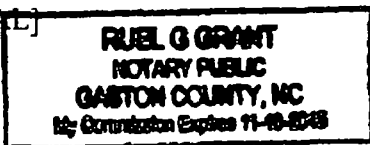
I, RUEL G. GRANT, a Notary Public, do hereby certify that CHRISTOPHER S. BALWALD personally appeared before me this day and Declared that he is SL. VICE PRESIDENT + SECRETARY of Clariant Corporation and that by authority duly given, and as the act of Clariant Corporation, he has signed this Declaration.

WITNESS my hand and official seal this 26<sup>th</sup> day of July, 2011.

  
Notary Public

My Commission expires: 11-18-2015

[SEAL]



**APPROVAL AND CERTIFICATION OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

The foregoing Declaration of Perpetual Land Use Restrictions is hereby approved and certified this 9th day of August, 2011.

By: *Dexter R. Matthews*  
Dexter R. Matthews, Director  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

I, Holly A. Murray, a Notary Public, do hereby certify that Dexter R. Matthews personally appeared before me this day and produced proper identification in the form of personally known to notary, and signed this Declaration.

WITNESS my hand and official seal this 9th day of August, 2011.

*Holly A. Murray*  
Notary Public

My Commission expires: 1/19/2014

[SEAL]

HOLLY A. MURRAY  
Notary Public  
Wake County, NC  
My Commission Expires 1/19/2014

pared by  
d Mail to: Thomas N. Griffin, Esq  
Parker Pop Adams + Bernstein  
Three Wells Fargo Center  
401 South Tryon Street, Suite 3000  
Charlotte, NC 28202

**REGISTER OF DEEDS CERTIFICATION**

The foregoing Declaration of Perpetual Land Use Restrictions is certified to be duly recorded at the date and time, and the Book and Page, shown on the first page hereof.

Register of Deeds for Mecklenburg County

By: \_\_\_\_\_  
(signature)  
\_\_\_\_\_  
(type or print name and title)

Exhibit A

Copy of Survey Plat

PPAB 1814158v3

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