VOLUNTARY CLEANUP CONTRACT 16-6127-RP

No.

IN THE MATTER OF NORFOLK SOUTHERN DERAILMENT - LIBERTY SITE, PICKENS COUNTY and NORFOLK SOUTHERN RAILWAY COMPANY

This Contract is entered into by the South Carolina Department of Health and Environmental Control and Norfolk Southern Railway Company, pursuant to the Brownfields/Voluntary Cleanup Program, S.C. Code Ann. §§ 44-56-710 through 760, as amended, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601 to 9675, as amended, and the South Carolina Hazardous Waste Management Act (HWMA), S.C. Code Ann. § 44-56-200, with respect to the location known as the Norfolk Southern Derailment - Liberty Site ("Site"). The Norfolk Southern Railway Company property is located at Old Norris Road, Liberty, South Carolina ("Property"). The Property includes approximately 3 acres and is bounded generally by the north side of Old Norris Road, the south side of the NSRC's Right-of-Way, and to the west by an unnamed tributary (creek) of Golden Creek. The Property is located on the County of Pickens Tax Map straddled by Parcel ID Number 4087-15-63-1645 (See Appendix A); and a legal description of the Property is attached to this Contract in Appendix A.

DEFINITIONS

- 1. Unless otherwise expressly provided, terms used in this Contract shall have the meaning assigned to them in CERCLA, the HWMA, and in regulations promulgated under the foregoing statutes, or the Brownfields/Voluntary Cleanup Program.
 - A. "NSRC" shall mean Norfolk Southern Railway Company.
 - B. "Contract" shall mean this Responsible Party Voluntary Cleanup Contract.
 - C. "Pollutant" or "Contaminant" includes, but is not limited to, any element, substance, compound, or mixture, including disease-

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causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, including malfunctions in reproduction, or physical deformations, in organisms or their offspring; "contaminant" does not include petroleum, including crude oil or any fraction of crude oil, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) of CERCLA, Section 101, 42 U.S.C. Section 9601, et seq. and does not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality or mixtures of natural gas and such synthetic gas.

- D. "Contamination" shall mean impact by a Contaminant or Hazardous Substance.
- E. "Department" shall mean the South Carolina Department of Health and Environmental Control or a successor agency of the State of South Carolina that has responsibility for and jurisdiction over the subject matter of this Contract.
- F. "Hazardous Substance" shall have the same meaning as defined under subparagraphs (A) through (F) of Paragraph (14) of CERCLA, Section 101, 42 U.S.C. Section 9601(14).
- G. "Property" as described in the legal description attached as Appendix A, shall mean that portion of the Site, which is subject to ownership, prospective ownership, or possessory or contractual interest of NSRC.
- H. "Response Action" shall mean any assessment, cleanup, inspection, or closure of a site as necessary to remedy actual or potential damage to public health, public welfare, or the environment.

- I. "Site" shall mean all areas where a Hazardous Substance, Pollutant or Contaminant has been released, deposited, stored, disposed of, or placed, or otherwise comes to be located; "Site" does not include any consumer product in consumer use or any vessel, as defined in CERCLA.
- J. "Voluntary Cleanup" shall mean a Response Action taken under and in compliance with the Brownfields/Voluntary Cleanup Program, S.C. Code Ann. §§ 44-56-710 to 760, as amended.
- K. "Work Plan" shall mean the plan for additional Response Actions to be conducted at the Site as described in Paragraph 3 of this Contract.

FINDINGS

- 2. Based on the information known by or provided to the Department, the following findings are asserted for purposes of this Contract:
 - A. On June 10, 2010, a NSRC train derailed from the track just outside the town of Liberty, South Carolina. A total of 24 rail cars including two cars containing non-hazardous materials and eight cars containing hazardous materials left the rail. The derailment resulted in releases of isopropanol and a plasticizer to the soil on the south side of the rail, and ethylene glycol to the soil on the north side of the rail. An emergency response was conducted to stop the releases, re-rail the cars, and conduct environmental cleanup.
 - B. The environmental cleanup conducted during the emergency response consisted of soil excavation and removal. During the excavation work, Shield Engineering, Inc. (Shield) conducted soil sampling to evaluate the remedial effort and assess if and where additional excavation should take place. Excavation and confirmation sampling was conducted in phases in an attempt to remediate as quickly and to the greatest extent possible.

- C. As a result of the initial excavation effort, all of the soil impacted by isopropanol was adequately remediated and a decision of "No Further Action" for the isopropanol was obtained from the Department.
- D. After the excavation work was complete, the confirmation and verification sampling conducted for the plasticizer release indicated that polynuclear aromatic hydrocarbon (PAH) concentrations exceeding United States Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) were as follows: exception of one sample that exceeded the Residential RSL, the PAH detections only exceeded the most stringent Protection of Groundwater RSL. In all cases where the RSLs were exceeded, the samples were collected within three feet of the ground surface. No remaining PAH concentrations were detected at depths greater than 3 feet below grade (BG). The samples with PAH detections exceeding the Protection of Groundwater RSLs were collected from backfilled areas that were previously excavated after the release was cleaned up, indicating that the railroad tracks themselves could be acting as a continued source of PAHs.

While all confirmation and verification borings were not extended vertically beyond 3 feet BG, it can be extrapolated based on data from the deeper borings that the viscous plasticizer did not migrate deeper, and as a result, the groundwater is protected by the soil column. The sample exceeding the Residential RSL poses little to no risk to human health or the environment due to its 2 to 3 foot BG depth, and the remote and relatively secure area of the sample location. Based on this information, no further assessment was recommended for the plasticizer release, and a decision of "No Further Action" has been requested from the Department for the plasticizer release.

E. Due to constraints in excavating along a water-main and roadway,

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the ethylene glycol release was not able to be fully remediated during the initial response efforts. Two additional soil sampling events were conducted to evaluate the ethylene glycol spill. The assessment work conducted for the ethylene glycol release identified three distinct zones around the water-main and within the vicinity of the drainage ditch along Old Norris Road where ethylene glycol concentrations in the soil exceeded the established Site-Specific Soil Screening Levels (SSLs). Each zone has been horizontally delineated. Vertical delineation is also complete based on indications that the release has reached the capillary fringe in those areas.

- F. There is no United States Environmental Protection Agency (USEPA) maximum contaminant level (MCL) for ethylene glycol in groundwater, there are no potable wells in the surrounding area, and ethylene glycol was not detected in the nearby streams during previous surface water sampling events.
- G. On June 30, 2014 the Department invited NSRC to participate in this Voluntary Cleanup Program (VCP). In a subsequent meeting with the Department, NSRC, and Shield, details of entering the VCP were determined. On November 5, 2014 NSRC sent a letter to the Department advising the Department of NSRC's intent to participate in the VCP.
- H. In response to the February 25, 2014 Comprehensive Soil Assessment Report, on June 11, 2014 the Department requested a Water Assessment Work Plan for the groundwater and the nearby stream. On July 28, 2014 NSRC and Shield submitted a Water Assessment Work Plan. On October 23, 2014 the Department requested revisions to the Water Assessment Work Plan. November 24, 2014 NSRC and Shield submitted a Revised Water Assessment Work Plan to the Department to address their comments. The Revised Water Assessment Work Plan focuses on

the groundwater and surface water around the area with the elevated ethylene glycol levels in the soil. The Revised Water Assessment Work Plan (Work Plan) and the ethylene glycol impact is the focus of NSRC's participation in the VCP.

RESPONSE ACTIONS

- 3. NSRC agrees to submit to the Department for review and written approval within thirty (30) days of the execution date of this Contract an Assessment Plan (Work Plan) for the Site that is consistent with the technical intent of the National Contingency Plan. The Work Plan shall include the names, addresses, and telephone numbers of the consulting firm, the analytical laboratory certified by the Department, and NSRC's contact person for matters relating to this contract. NSRC will notify the Department in writing of changes in the contractor or laboratory. The Department will review the Work Plan and will notify NSRC in writing of any deficiencies in the Work Plan, and NSRC shall respond in writing within thirty (30) days to the Department's comments. The Work Plan and all associated reports shall be prepared in accordance with industry standards and endorsed by a Professional Engineer (P.E.) and/or Professional Geologist (P.G.) duly-licensed in South Carolina and shall set forth methods and schedules for accomplishing the following tasks:
 - A. Upon Department approval, NSRC shall implement the approved Work Plan.
 - B. Submit to the Department an Assessment Report. The Department shall review the report for determination of completion of the Work Plan and sufficiency of the documentation. If the Department determines that the field investigation is not complete, it will send written notification of such to NSRC, and NSRC shall subsequently conduct additional field investigation to further determine the source, nature, and extent of Contamination. If the Department determines that the field investigation is complete but the report is incomplete, the Department shall send to NSRC a letter indicating

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that revision of the report is necessary. Within thirty-(30)-days of receipt, unless otherwise agreed, of such letter from the Department, NSRC shall submit a revised report addressing the Department's comments.

- C. If determined necessary by the Department, conduct a Feasibility Study or other evaluation of remedial and/or removal alternatives for addressing Contamination at the Site
- 4. NSRC shall prepare and submit under separate cover from the Work Plan, a Health and Safety Plan that is consistent with Occupational Safety and Health Administration regulations. The Health and Safety Plan is submitted to the Department for information purposes only. The Department expressly disclaims any liability that may result from implementation of the Health and Safety Plan by NSRC.
- 5. NSRC shall inform the Department in writing at least five (5) working days in advance of all field activities pursuant to this Contract and, if deemed necessary by the Department, shall allow the Department and its authorized representatives to take duplicates of any samples collected by NSRC pursuant to this Contract.
- Within sixty (60) days of the execution date of this Contract and once a quarter 6. thereafter, NSRC shall submit to the Department a written progress report that must (A) actions taken under this Contract during the previous include the following: reporting period; (B) actions scheduled to be taken in the next reporting period; (C) sampling, test results, and any other data, in summary form, generated during the previous reporting period, whether generated pursuant to this Contract or not; and (D) a description of any environmental problems experienced during the previous reporting period and the actions taken to resolve them.
- 7. All correspondence which may or are required or permitted to be given by either party to the other hereunder shall be in writing and deemed sufficiently given if delivered by (A) regular U.S. mail, (B) certified or registered mail, postage prepaid, return receipt

requested, (C) or nationally recognized overnight delivery service company, or (D) by hand delivery to the other party at the address shown below or at such place or to such agent as the parties may from time to time designate in writing.

Unless otherwise directed in writing by either party, all correspondence, work plans, and reports should be submitted to:

The Department:

James "Lucas" Berresford

South Carolina Department Health & Environmental Control

Bureau of Land and Waste Management

2600 Bull Street

Columbia, South Carolina 29201

berresjl@dhec.sc.gov

NSRC:

Norfolk Southern Railway Company

Steven R. Aufdenkampe

1200 Peachtree Street, NE-Box 13

Atlanta, GA 30309

Steven.Aufdenkampe@nscorp.com

All final work plans and reports shall include two (2) paper copies and one (1) electronic copy on compact disk.

PUBLIC PARTICIPATION

8. Upon execution of this Contract, the Department will seek public participation in accordance with S.C. Code Ann. § 44-56-740(D), and not inconsistent with the National Contingency Plan. NSRC will reimburse the Department's cost associated with public participation (e.g., publication of public notice(s), building and equipment rental(s) for public meetings, etc.).

RESPONSE COSTS

9. In accordance with §§ 44-56-200 and 44-56-740, NSRC shall, on a quarterly basis, reimburse the Department for Oversight Costs of activities required under this Contract. Oversight Costs include, but are not limited to, the direct and indirect costs of negotiating the terms of this Contract, reviewing Work Plans and reports, supervising corresponding work and activities and costs associated with public participation.

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Payments will be due within thirty (30) days of the Department's invoice date. The Department shall provide documentation of its Oversight Costs in sufficient detail so as to show the personnel involved, amount of time spent on the project for each person, expenses, and other specific costs. Invoices shall be submitted to:

NSRC:

Norfolk Southern Railway Company

Steven R. Aufdenkampe

1200 Peachtree Street, NE-Box 13

Atlanta, GA 30309

Steven.Aufdenkampe@nscorp.com

All of NSRC's payments should reference the Contract number on page 1 of this Contract and be made payable to:

The South Carolina Department of Health & Environmental Control

If complete payment of the Past Costs or of the quarterly billing of Oversight Costs is not received by the Department by the due date, the Department may bring an action to recover the amount owed and all costs incurred by the Department in bringing the action including, but not limited to, attorney's fees, Department personnel costs, witness costs, court costs, and deposition costs.

ACCESS

10. The Department, its authorized officers, employees, representatives, and all other persons performing Response Actions will not be denied access to the Site during normal business hours or at any time work under this Contract is being performed or during any environmental emergency or imminent threat situation, as determined by the Department (or as allowed by applicable law). NSRC and subsequent owners of the Property shall ensure that a copy of this Contract is provided to any lessee or successor or other transferee of the Property, and to any owner of other property that is included in the Site. If NSRC is unable to obtain access from the Property owner, the Department may obtain access and perform Response Actions. All of the Department's costs

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associated with access and said Response Actions will be reimbursed by NSRC.

RESTRICTIVE COVENANT

11. If hazardous substances in excess of residential standards exist at the Property after NSRC has completed the actions required under this Contract, NSRC shall enter and file a restrictive covenant. Upon the Department's approval of the items outlined therein, the restrictive covenant shall be signed by the Department and representatives of NSRC and witnessed, signed, and sealed by a notary public. NSRC shall file this restrictive covenant with the Register of Deeds or Mesne Conveyances in Pickens County. The signed covenant shall be incorporated into this Contract as an Appendix. A Certificate of Completion shall not be issued by the Department until the restrictive covenant, if required, is executed and recorded. With the approval of the Department, the restrictive covenant may be modified in the future if additional remedial activities are carried out which meet appropriate clean-up standards at that time or circumstances change such that the restrictive covenant would no longer be applicable. Department may require NSRC or subsequent owners of the Property to modify the restrictive covenant if a significant change in law or circumstances requiring remediation occurs. NSRC or subsequent owners of the Property shall file an annual report with the Department by May 31st of each year detailing the current land uses and compliance with the restrictive covenants for as long as the restrictive covenant remains in effect on the Property. The report must be submitted in a manner prescribed by the Department.

OBLIGATIONS AND BENEFITS

12. Upon execution of this Contract by the Department, NSRC, its signatories, parents, subsidiaries, successors and assigns shall be deemed to have resolved their liability to the State in an administrative settlement for purposes of, and to the extent authorized under 42 U.S.C. § 9613(f)(2), S.C. Code Ann. § 44-56-200, for the matters addressed in this Contract. "Matters addressed" are all Response Actions taken or to be taken at or in connection with this Site under this Contract and any subsequent amendments to the Contract, and all response costs incurred or to be incurred under this Contract and any subsequent amendments to the Contract. Further, by resolving

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its liability to the State for some or all of a Response Action in this administrative settlement, NSRC may seek contribution to the extent authorized under 42 U.S.C. § 9613(f)(3)(B), S.C. Code Ann. § 44-56-200 from any person who is not a party to this administrative settlement. A thirty (30) day comment period shall be required prior to the Department's execution of the Contract, and shall commence upon publication of the notice of the proposed Contract in the *South Carolina State Register*.

- 13. Nothing in this Contract is intended to be, or shall be construed as, a release or covenant not to sue for any claim or cause of action, past or future, that the Department may have against a responsible party who is not a signatory to the Contract and who is not a signatory's parent, subsidiary, successor and assign.
- 14. Subject to Paragraph 16, nothing in this Contract is intended to limit the right of the Department to undertake future Response Actions at the Site or to seek to compel parties to perform or pay for costs of Response Actions at the Site. Nothing in this Contract shall in any way restrict or limit the nature or scope of Response Actions that may be taken or be required by the Department in exercising its authority under State and Federal law.
- 15. Subject to the provisions of Paragraph 16, nothing in this Contract is intended to be or shall be construed as a release or covenant not to sue for any claim or cause of action that the Department may have against NSRC for any matters not expressly addressed by and settled through this Contract.
- 16. Upon successful completion of the terms of this Contract, NSRC shall submit to the Department a request for a Certificate of Completion.

Once the Department determines that NSRC has successfully and completely complied with this Contract, the Department, pursuant to S.C. Code Ann. § 44-56-740(A)(5) and (B)(1), will give NSRC a Certificate of Completion that provides a covenant not to sue to NSRC, its signatories, parents, subsidiaries, successors and assigns, for the work done in completing the Response Actions specifically covered in

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the Contract and completed in accordance with the approved work plans and reports. The covenant not to sue and administrative settlement for purposes of contribution protection are contingent upon the Department's determination that NSRC successfully and completely complied with the Contract.

In consideration of the Department's covenant not to sue, NSRC its signatories, parents, subsidiaries, successors and assigns agree not to assert any claims or causes of action against the Department arising out of activities undertaken at the Site or to seek other costs, damages, or attorney's fees from the Department arising out of activities undertaken at the Site, except for those claims or causes of action resulting from the Department's intentional or grossly negligent acts or omissions.

- 17. NSRC and the Department each reserve the right to unilaterally terminate this Contract. Termination may be accomplished by giving a thirty (30) day advance written notice of the election to terminate this Contract to the other party. Should NSRC elect to terminate, it must submit to the Department all data generated pursuant to this Contract, and certify to the Department's satisfaction that any environmental or physical hazard shall be stabilized and/or mitigated such that the Site does not pose a hazard to human health or the environment that did not exist prior to any initial Response Action addressing Contamination identified in this Contract.
- 18. The Department may terminate this Contract only for cause, which may include but is not limited to, the following:
 - A. Events or circumstances at the Site that are inconsistent with the terms and conditions of this Contract;
 - B. Failure to complete the terms of this Contract or the Work Plan;
 - C. Failure to submit timely payments for Past Costs and/or for Oversight Costs as defined in Paragraph 9 above;
 - D. Additional Contamination or releases or consequences at the Site caused by NSRC its parents, subsidiaries, successors and assigns;
 - E. Providing the Department with false or incomplete information or knowingly failing to disclose material information;

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- F. Change in NSRC's or its parents, subsidiaries, successors and assigns business activities on the Property or uses of the Property that are inconsistent with the terms and conditions of this Contract; or
- G. Failure by NSRC to obtain the applicable permits from the Department for any Response Action or other activities undertaken at the Property.
- 19. Upon termination of the Contract under Paragraph 17 or 18 the covenant not to sue and administrative settlement for purposes of contribution protection shall be null and void. Termination of the Contract by NSRC or the Department does not end the obligations to reimburse Oversight Costs already incurred by the Department and payment of such costs shall become immediately due.
- 20. The signatories below hereby represent that they are authorized to and enter into this Contract on behalf of their respective parties.

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THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

BY: Oaphne D. Weel	DATE: 4/30/14				
Daphne G. Neel, Chief					
Bureau of Land and Waste Manageme Environmental Quality Control	nt				
Claire HOrine	DATE: 6/29/16				
Reviewed by Office of General Counsel	, ,				
NORFOLK SOUTHERN RAILWAY COMPANY					
R.P. Surolo	DATE: 41/26/16				
Signature					
Richard P. Russell	•				
Byotem Director Env. Protec	tion				
Printed Name and Title	1				

APPENDIX A

Legal Description of the Property County of Pickens

The Property is located in the Norfolk-Southern Railroad's Piedmont Division, Eastern Region, Greenville District, near Milepost 504 (Traber Station). The railroad property transects Pickens County TMS 4087-15-63-1645 running generally in a northeast to southwest direction. The railroad property runs parallel to Old Norris Road and is bounded generally by Pickens TMS 4087-00-34-4559, 4087-15-63-1645, and 4087-15-54-6718 to the north; TMS 4087-15-63-1645 on the south; Farmers Hill Road to the west; and S. Norman Street to the east. A diagram showing the Property is shown in Figure 1 below.

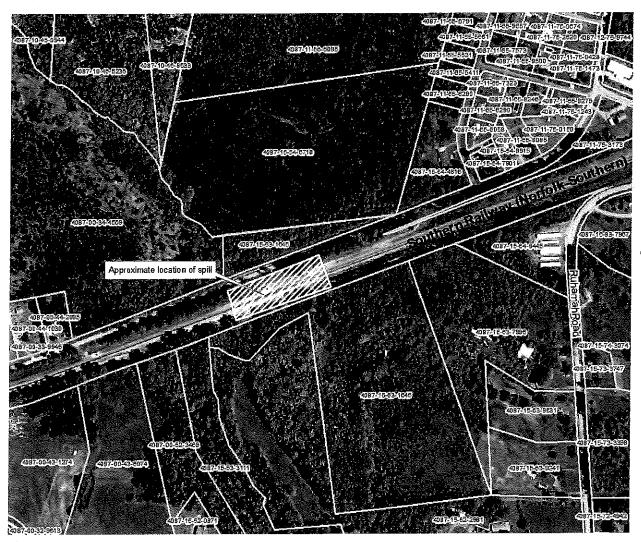


Figure 1