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AND CORRECT COPY

SIGNATURE David Wilkie

VOLUNTARY CLEANUP CONTRACT
13-5910-RP

IN THE MATTER OF
ROBERT BOSCH CORPORATION SITE, DORCHESTER COUNTY
and
ROBERT BOSCH, LLC

This Contract is entered into by the South Carolina Department of Health and Environmental Control and Robert Bosch, LLC, pursuant to the Brownfields/Voluntary Cleanup Program, S.C. Code Ann. §§ 44-56-710 to 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, as amended, with respect to the facility known as the Robert Bosch Corporation Site ("Site"). The Robert Bosch, LLC property is located at 8101 Dorchester Road, North Charleston, South Carolina ("Property"). The Property includes approximately 67.87 acres and is bounded generally by Dorchester Road on the north; residential properties along Waverly Place Lane on the east; residential properties along Kingsbridge Drive and Archdale Boulevard on the south; and residential property along Indigo Fields Boulevard and Deep Blue Lane on the west. The Property is identified by County of Dorchester as Tax Map Serial Number 181-00-00-009; and a legal description of the Property is attached to this Contract as 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. "Bosch" shall mean Robert Bosch, LLC. Bosch is a foreign Limited Liability Company authorized to do business in South Carolina with its principal place of business located at 8101 Dorchester Road, North Charleston, SC, 29418-2993.
 - B. "Contamination" shall mean impact by a Contaminant or Hazardous

Substance.

- C. "Contract" shall mean this Responsible Party Voluntary Cleanup Contract.
- D. "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.
- E. "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).
- F. "Pollutant" or "Contaminant" includes, but is not limited to, any element, substance, compound, or mixture, including disease-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 (i) through (vi) of Paragraph (D) of CERCLA § 101, 42 U.S.C. §§ 9601, as amended, and does not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality or mixtures of natural gas and such synthetic gas.
- 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 Bosch.
- 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.

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- I. "The Site" shall mean all areas where a 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. A voluntary comprehensive baseline facility-wide soil and groundwater investigation was conducted by GEL Engineering, LLC (formerly known as General Engineering Laboratories, Inc. and General Engineering and Environmental, LLC) at the request of Robert Bosch LLC (Bosch) in 1988. The results of the investigation¹ were submitted to Bosch and the Department on December 19, 1988. The report identified groundwater impact from trichloroethylene (TCE) downgradient from the Process Waste Area (PWA) and downgradient from the Aboveground Storage Tank Area (AGSTA). Daughter by-product compounds associated with biodegradation of TCE were not detected at elevated levels in groundwater samples collected from either area.
- B. In its January 13, 1989 letter² to Bosch following its review of the baseline investigation report, the Department requested that Bosch

¹ December 19, 1989 "Groundwater and Soil Assessment Report."

² January 13, 1989 letter from DHEC to Bosch

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perform further assessment and delineation of groundwater impact identified in the PWA and AGSTA. A comprehensive second phase of groundwater assessment was performed at the site by GEL in 1989, which included evaluation of the source of groundwater impact, hydrogeologic characterization (including pumps tests), delineation of groundwater impact through the installation and sampling of additional monitoring wells, and an evaluation and cost benefit analysis of potential groundwater remediation technologies. The results of the assessment³ were submitted to the Department in a report dated June 23, 1989. As discussed in the report, vertical migration of the contaminant plumes is limited by the underlying Cooper Marl, and horizontal migration is limited by the low hydraulic conductivity of the native soil. The report also concluded that the sources of groundwater impact for both areas had been eliminated. Horizontal control of the contaminant plumes in the AGSTA and the PWA through groundwater recovery and disposal of the recovered groundwater at the Dorchester County Publicly Owned Treatment Works (POTW) was the remediation approach recommended in the report.

- C. Based on the results of the additional assessment, GEL reviewed potentially applicable remediation technologies and submitted a groundwater corrective action plan⁴ to the Department on behalf of Bosch on May 4, 1990, which proposed groundwater recovery from recovery wells RW-1 and RW-2 at the AGSTA and the PWA, respectively, and groundwater monitoring at existing monitoring wells located in both areas. The Department approved the Plan on June 25, 1990. An Engineering Report and application for a Permit to Construct for the groundwater recovery system were submitted to the Department on September 24, 1990, and approved by the Department in early 1991.

³ June 23, 1989 "Delineation and Evaluation of Groundwater and Soil Impact"

⁴ May 4, 1990 Groundwater Remediation Plan

- D. Groundwater recovery wells RW-1 and RW-2 were installed in the AGSTA and the PWA in March and April 1991. Groundwater recovery from the wells was initiated on June 5, 1991, with discharge of the recovered groundwater to the Dorchester County POTW under Permit No. 1001.
- E. Following one year of quarterly groundwater monitoring, the Department approved a change to semi-annual groundwater monitoring in five monitoring wells in the AGSTA (MW-7, MW-8, MW-20, MW-21, and MW-25) and four wells in the PWA (MW-4, MW-15, MW-17A, and MW-23) to monitor the effectiveness of corrective action. Collected groundwater samples were analyzed for the constituent of concern (TCE). Groundwater samples were collected on a monthly basis from recovery wells RW-1 and RW-2 for analysis of Priority Pollutant VOCs in accordance with the POTW permit.
- F. Recovery well RW-2 was shut down in February 1998, as recommended by the Department in its letter to Bosch in February 1998, based on the low levels of VOCs detected in the recovery well and the PWA monitoring wells. No VOCs were detected during Bosch's subsequent voluntary monitoring of groundwater from RW-2 in December 1998 and November 2000.
- G. The Department notified Bosch in a letter dated May 28, 2002 that recovery well RW-1, AGSTA well MW-7, and PWA wells MW-4 and MW-17A were the only wells that must continue to be monitored as part of the semi-annual groundwater-monitoring program. The Department's decision to eliminate the other monitoring wells from the monitoring program was based on the historical non-detection of VOCs in the wells. In addition, the Department changed the required groundwater monitoring reporting frequency from semi-annual to annual, effective 2003. Monitoring of recovery well RW-1 for Priority Pollutant VOCs and monitoring wells MW-4, MW-7, and MW-17A for TCE continued between 2002 and 2009, as well as semi-annual water

level measurements in all of the existing monitoring wells at the facility.

In its letter to Bosch dated February 24, 2009, the Department approved the elimination of PWA well MW-4 from the groundwater monitoring program based on the non-detection of TCE in the well. Groundwater monitoring since 2009 has consisted of semi-annual sampling of monitoring wells MW-7 (AGSTA) and MW-17A (PWA), and recovery well RW-1, as well as groundwater elevation measurements in all existing monitoring wells at the site. MW-7 and MW-17A are monitored for the lone constituent of concern, TCE, and RW-1 is monitored for Priority Pollutant VOCs. Historically, TCE is the only VOC exceeding its MCL in RW-1. Recovered groundwater from well RW-1 continues to be discharged to the Dorchester County POTW under Permit No. 1001.

- H. In a letter to Bosch dated January 25, 2012, the Department requested Bosch to sample existing wells MW-8, MW-19, and MW-20 located downgradient from the AGSTA and analyze the samples for Priority Pollutant VOCs. The wells were sampled in May 2012, and no VOCs were detected in any of the wells.
- I. The future use of the site will be the manufacturing activities for automotive parts production and sale.
- J. The Department invited Bosch to enter the Department's Voluntary Cleanup Program (VCP) in order to reach a CERCLA-quality cleanup at the Site and, on March 7, 2013, Bosch voluntarily agreed to enter the VCP.
- K. Bosch agrees to provide the necessary information and/or additional investigation if so requested by the Department in order to obtain a CERCLA-quality Response Action.

RESPONSE ACTIONS

- 3. Bosch agrees to submit to the Department for review and written approval within

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ninety (90) 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 Bosch's contact person for matters relating to this contract. Bosch will notify the Department in writing of changes in the contractor or laboratory. The Department will review the Work Plan and will notify Bosch in writing of any deficiencies in the Work Plan, and Bosch 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. The Work Plan shall include soil and groundwater sampling to fill data gaps, identify potential source areas, and determine the extent of groundwater contamination.
- B. Within thirty (30) days following completion of the soil and groundwater sampling in subparagraph A, Bosch shall submit an Assessment Report. The Department will review the Assessment Report and will notify Bosch in writing of any deficiencies in the Work Plan, and Bosch shall respond in writing within thirty (30) days to the Department's comments.
- C. Within 60 days following approval of the Assessment Report, Bosch shall submit a Feasibility Study Work Plan (FSWP) outlining areas to be remediated and potential remedial technologies to be evaluated in the FSWP, including but not limited to:
 - No action
 - Institutional controls
 - Soil excavation
 - Soil mixing (using chemical amendments)
 - Injection of chemical amendments
- D. Within sixty (60) days of the Department's approval of the FSWP Bosch shall submit to the Department a Feasibility Study (to include a Baseline Risk Assessment or other evaluation of risk to human health

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and the environment). Within a reasonable period of time, the Department shall review the Feasibility Study (FS) for determination of completion of the FS and sufficiency of the documentation. If the Department determines that the FS is not complete, the Department shall send to Bosch a letter indicating that revision of the FS is necessary. Within thirty (30) days of receipt of such letter from the Department, Bosch shall submit a revised report addressing the Department's comments.

- E. Upon final approval of the FS, the Department will initiate the remedy selection process, including issuance of a proposed plan, establishment of a public comment period, and issuance of a Record of Decision (ROD) specifying the selected remedy for the Site.
- F. Within thirty (30) days of issuance of the ROD, Bosch shall submit to the Department for approval a Remedial Design/Remedial Action (RD/RA) Work Plan including a schedule of implementation. Any comments generated through the Department's review of the RD/RA Work Plan must be addressed in writing by Bosch within thirty (30) days of Bosch's receipt. Upon Department approval of the RD/RA Work Plan and the time schedule for implementation thereof, the RD/RA Work Plan and schedule shall be incorporated herein and become an enforceable part of this Consent Agreement.
- G. Further, upon approval of the RD/RA Work Plan, Bosch shall submit a Remedial Design to the Department in accordance with the schedule established in the approved RD/RA Work Plan. Any comments generated through the Department's review of the Remedial Design, must be addressed in writing by Bosch within thirty (30) days of receipt. Upon Department approval of the Remedial Design and the time schedule for implementation thereof, the Remedial Design and schedule shall be incorporated herein and become an enforceable part of this Consent Agreement. Bosch shall begin implementation of the remedy within thirty (30) days of the Department's approval of the

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Remedial Design and thereafter take all necessary and reasonable steps to ensure timely completion of the remedy.

- H. Within thirty (30) days of installation of the Remedial Design, Bosch shall submit to the Department for review and approval an Operation and Maintenance (O&M) Plan. The O&M shall include the proposed monitoring schedule for sampling and the evaluation criteria for determining the effectiveness of the treatment system. The Department will review the plan and provide comments to Bosch. Within thirty (30) days of receipt of the Department's comments, Bosch shall submit a revised plan addressing the Department's comments.

4. Bosch 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 for information purposes only to the Department. The Department expressly disclaims any liability that may result from implementation of the Health and Safety Plan by Bosch.

5. Bosch shall inform the Department at least five (5) working days in advance of all field activities pursuant to this Contract and shall allow the Department and its authorized representatives, if so desired, to take duplicates of any samples collected by Bosch pursuant to this Contract.

6. Within one hundred-eighty (180) days of the execution date of this Contract and once a month thereafter, Bosch shall submit to the Department a written progress report that must include the following: (A) actions taken under this Contract during the previous 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.

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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, or (C) 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: 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

Bosch: Jay Nuckols
Manager, Health, Safety & Environmental
Robert Bosch, LLC
8101 Dorchester Drive
North Charleston, SC 29418

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. Costs associated with public participation [e.g., publication of public notice(s), building and equipment rental(s) for public meetings, etc.] will be paid by Bosch.

COSTS OF RESPONSE

9. Bosch shall, within thirty (30) days of the execution date of this Contract, pay to the Department by certified or cashier's check the sum of one thousand three hundred ninety-

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one dollars and twenty-eight cents (\$1,391.28) to reimburse estimated past costs of response incurred by the Department through June 30, 2013 ("Past Costs") relating to the Site. Bosch's payment for Past Costs should be submitted to:

The Department: John K. Cresswell
South Carolina Department of Health & Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

In accordance with S.C. Code Ann. §§ 44-56-200 and 44-56-740, Bosch 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. 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:

Bosch: Jay Nuckols
Manager, Health, Safety & Environmental
Robert Bosch, LLC
8101 Dorchester Drive
North Charleston, SC 29418

All of Bosch'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 of response 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.

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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). Bosch 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 Bosch is unable to obtain access from the Property owner, the Department may obtain access and perform response activities. All of the Department's costs associated with access and said response actions will be reimbursed by Bosch.

RESTRICTIVE COVENANT

11. If hazardous substances in excess of residential standards exist at the Property after Bosch has completed the actions required under this Contract, Bosch 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 Bosch or, if the Property is not owned by the Bosch, the current owner of the Property, and witnessed, signed, and sealed by a notary public. Bosch shall file this restrictive covenant with the Register of Mesne Conveyance or Deeds in Dorchester 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. The Department may require Bosch or subsequent owners of the Property to modify the restrictive covenant if a significant change in law or circumstances requiring remediation occurs. Bosch 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

In consideration of the Department's covenant not to sue, Bosch its signatories, parents, successors, assigns, and subsidiaries 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.

16. Bosch 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 Bosch or subsequent owners of the Site 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.

17. 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 Bosch its parents, successors, assigns, and subsidiaries;
- E. Providing the Department with false or incomplete information or knowingly failing to disclose material information;
- F. Change in Bosch's or its parents, successors, assigns, and subsidiaries business activities on the Property or use of the Property that are inconsistent with the terms and conditions of this Contract; or
- G. Failure by Bosch to obtain the applicable permits from the Department for

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any Response Actions or other activities undertaken at the Property.

18. Upon termination of the Contract, the covenant not to sue will be null and void. Termination of this Contract by Bosch or the Department does not end the obligations of Bosch to pay Oversight Costs already incurred by the Department and payment of such costs shall become immediately due.

19. 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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AND CORRECT COPY

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THE SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL

BY: *Daphne G. Neel*
Daphne G. Neel, Chief
Bureau of Land and Waste Management
Environmental Quality Control

DATE: 10/23/13

Clair H. Prince
Reviewed by Office of General Counsel

DATE: 10/17/13

ROBERT BOSCH, LLC

L. O. Lautenschlager
Signature

DATE: 14 Oct 2013

L. O. Lautenschlager Sr. VP, Technical Plant Manager
Printed Name and Title

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AND CORRECT COPY**

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APPENDIX A

Legal Description of the Property

County of Dorchester

Tax Map Serial Number 181-00-00-009

Appendix A

All that tract, piece or parcel of land, together with any improvements thereon, containing 67.87 acres, more or less, and shown as "TMS# 181-00-00-009 Developed 67.87 acres" on that certain plat prepared by Engineering, Surveying & Planning, Inc. dated July 31, 1996 and recorded in the Register of Deeds Office for Dorchester County, South Carolina in Plat Book J-78.