

IHSB SITE NAME Engineered Controls International Site; Elon, NC; Site ID No. NONCD0002904

DATE & NAME OF DOCUMENT October 2013 Quarterly Status Report and Proposed Schedule

TYPE OF SUBMITTAL (circle all that apply): Report, Work plan, Work Phase Comp. Statement, Schedule Change

REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

TIMOTHY G. CRATER ENGINEERED CONTROLS INTL
Name of Remediating Party

[Signature]
Signature of Remediating Party

10/21/13
Date

NOTARIZATION

North Carolina (Enter State)
Alamance COUNTY

I, Patricia J. Hill, a Notary Public of said County and State, do hereby certify that Timothy G. Crater did personally appear and sign before me this day, produced proper identification in the form of License, was duly sworn or affirmed, and declared that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 21 day of October 2013

Patricia T. Hill
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 2-7-17



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REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

David Buchalter
Name of Registered Site Manager

[Signature]
Signature of Registered Site Manager

10/22/13
Date

REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act N.C.G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

David Buchalter
Name of Registered Site Manager

[Signature]
Signature of Registered Site Manager

10/22/13
Date

NOTARIZATION

Georgia (Enter State)

Forsyth COUNTY

I, Chasity R. Johnson a Notary Public of said County and State, do hereby certify that David Buchalter did personally appear and sign before me this day, produced proper identification in the form of GA State ID was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 22 day of October, 2013

[Signature]
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 8-1-14



October 15, 2013

Mr. Matt Aufman
Inactive Hazardous Sites Branch – REC Program
NCDENR – Division of Waste Management
217 West Jones Street
Raleigh, North Carolina 27603

***Subject: Quarterly Letter Status Report and Proposed Schedule
Engineered Controls International Site
100 Rego Drive; Elon, Alamance County, North Carolina
IHSB Site # NONCD0002904***

Dear Matt:

On behalf of Engineered Controls International, LLC (ECI) **GAIA TECH OF N.C., PLLC** (GaiaTech) is submitting this letter which is intended to serve as a Quarterly Letter Status Report and Certified Schedule regarding the status of REC Program activities at the ECI property located at 100 Rego Drive in Elon, Alamance County, North Carolina (hereinafter referred to as the “Site”).

ACTIVITIES COMPLETED TO DATE

The following sections present a brief summary of the activities conducted to date at the Site prior to the final execution of the REC Administrative Agreement (AA) and is intended to serve as a quarterly letter status update report as required pursuant to the AA.

- *Phase I Environmental Site Assessment, Engineered Controls International, Inc., 100 Rego Drive, Elon, Alamance County, North Carolina, prepared by GaiaTech for Kirkland and Ellis LLP on behalf of Sentinel Capital Partners, LLC and dated July 2010 (the 2010 GaiaTech report).*

At the time of the 2010 GaiaTech report, the Site was occupied by Engineered Controls International, Inc. and operations were consistent with those currently performed at the Site. The 2010 GaiaTech report identified former Site operations (specifically historical use of a TCE vapor degreaser, solvent-based paints, and a zinc plating line) as a Recognized Environmental Condition (REC). The 2010 GaiaTech report identified potential releases from subgrade pits and sumps, uncertain historical operations associated with cleared areas on the eastern portion of the Site in the 1960s and 1970s, and uncertainty regarding the nature of operations by a prior Site occupant that manufactured cardboard boxes as noteworthy issues. The potential presence of ACM in building materials was also identified in the 2010 GaiaTech report.

- *Limited Phase II Site Investigation, Engineered Controls International, LLC, 100 Rego Drive, Elon, Alamance County, North Carolina, prepared by GaiaTech for Kirkland and Ellis LLP on behalf of Engineered Controls International, LLC and dated December 2011 (the 2011 Phase II report).*

A 2011 Phase II was conducted to evaluate potential environmental impacts identified in the prior GaiaTech report. Additional research and reconnaissance during the 2011 Phase II identified the location of a former 8,000-gallon fuel oil UST near the southwestern corner of the building, an abandoned metal drum in the eastern wooded area, and a debris pile in the eastern wooded area. Investigation of these and previously identified potential environmental impacts included the installation of 18 soil borings (by GeoProbe) and 3 hand-augered borings. Of these borings, 10 were converted to temporary groundwater monitoring wells and 8 were converted to permanent groundwater monitoring wells. GaiaTech collected 26 soil samples that were selectively analyzed (based on anticipated potential impacts for the particular area of concern) for VOCs, SVOCs, GRO, DRO, RCRA metals, and hexavalent chromium. GaiaTech collected 18 groundwater samples that were analyzed for VOCs, SVOCs, DRO, GRO, and RCRA metals; 3 of these samples were also analyzed for hexavalent chromium. Results of analysis were compared to the NCDENR Preliminary Soil Remediation Goals (PSRGs) and Groundwater Quality Standards (GQSs).

Analytical results revealed the presence of TCE, PCE, and various daughter constituents in groundwater in the area of the former degreaser and the WWTP/Bright Dip area (and associated pits and trenches) in concentrations exceeding GQSs. Groundwater in the vicinity of the former degreaser also exhibited GRO impact at concentrations exceeding the non-UST standards. TCE was identified in soil in this area at concentrations exceeding one or more applicable PSRG. In the area of the hazardous waste storage shed, lead was identified in groundwater; mercury and arsenic were identified in soil in this area. Lower-level detections of selenium and bis(2-ethylhexyl)phthalate were identified throughout the Site; however, these detections are believed to be attributable to naturally-occurring selenium in soil and the remnants of potential leaching of bis(2-ethylhexyl)phthalate from newly installed PVC monitoring well materials at that time. GaiaTech concluded that chlorinated solvent and petroleum impacts in the area of the former degreaser and chlorinated solvent impacts in the area of the WWTP/Bright Dip area indicated that a release or releases had occurred in those areas. GaiaTech also indicated that metal detections in groundwater north of the hazardous waste shed suggested the potential for a release in that area. No other evidence of impact or releases was identified on other portions of the Site.

The 2011 GaiaTech Phase II report was submitted on ECI's behalf to the NCDENR along with documentation of the Company's intent to fully investigate and remediate the identified impacts. As a result, the Site was enrolled in a voluntary assessment and

remediation program utilizing a Registered Environmental Consultant (REC) and overseen by the NCDENR's Inactive Hazardous Sites Branch. Enrollment in this program was finalized in the *Administrative Agreement for Registered Environmental Consultant-Directed Assessment and Remedial Action Pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C.0300* dated July 23, 2013.

GaiaTech has conducted additional subsurface sampling at the property in October/November 2012 and in February/March 2013. These additional efforts have included the installation of 27 supplemental soil borings, 9 shallow groundwater monitoring wells, and 2 fractured bedrock groundwater monitoring wells. As part of supplemental activities, GaiaTech also collected five 5 sub-slab soil gas samples and conducted two rounds of indoor air quality sampling. The purpose of these supplemental activities was to delineate impacts so that a remedial action plan can be prepared.

Based on the results of sampling to date, chlorinated solvent impacts (principally TCE) in soil at the Site range in concentration from 0.0016 to 9.0 milligrams per kilogram (mg/kg) and occur beneath the central/eastern central portion of the building (the areas of the former vapor degreaser and the existing WWTP/Bright dip line). These impacts extend to the northeast beneath the parking/driveway portion of the Site. Arsenic has been identified in soil in the vicinity of the hazardous waste storage area. To date, soil impacts have not been fully delineated, but sampling shows that soil impacts do not extend off of the Site. Impacts in groundwater include chlorinated solvents (principally TCE) at concentrations ranging from 1.1 to 2,350 micrograms per liter ($\mu\text{g/L}$) and occur over the same general area as soil impacts. Additionally, low-level metals impacts (chromium and manganese) have been identified in groundwater but are believed to be indicative of naturally-occurring concentrations rather than the result of a release. In addition, impacts in groundwater appear to be migrating in a northeasterly direction, and have not migrated off of the Site.

Because volatile organic compounds (VOCs) were detected in soil and groundwater near the building, soil vapor samples (including five sub-slab vapor samples from borings within the building) were collected in November 2012. Analytical results revealed concentrations of chloroform, naphthalene, tetrachloroethene (PCE), TCE, and 1,2,4-trimethylbenzene at concentrations that exceeded their respective NCDENR vapor intrusion screening levels. As a result of these exceedances, indoor air sampling was conducted in February and March 2013. During indoor air sampling in February 2012, acetone, benzene, methyl ethyl ketone (MEK), 1,4-dichlorobenzene, Freon 12, n-heptane, methylene chloride, PCE, total hydrocarbons as gas, toluene, TCE, trichlorofluoromethane, and 1,2,4-trimethylbenzene were detected at concentrations below the NCDENR's acceptable indoor air concentrations for industrial/commercial Sites. No other analytes were detected during indoor air sampling in February 2012.

Subsequent sampling in March 2013 revealed concentrations of acetone, MEK, chloromethane, cyclohexane, 1,4-dichlorobenzene, Freon 12, n-heptane, n-hexane, methylene chloride, naphthalene, PCE, THC gas, toluene, trichlorofluoromethane, 1,2,4-trimethylbenzene, and m&p-xylene at detectable concentrations below acceptable indoor air concentration levels, but identified TCE at concentrations ranging from 185.9 to 355.9 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which exceed the acceptable indoor air concentration of $176 \mu\text{g}/\text{m}^3$. GaiaTech and NCDENR agree that the conflicting results may have been the result of laboratory error. Thus, additional confirmation sampling is planned but must be conducted during worst case conditions (i.e., between November and March) as referenced in the NCDENR Structural Vapor Intrusion Guidance Document.

Full delineation of soil is expected to be completed by early 2014. Remediation design and implementation, which is expected to begin in 2014, will likely include in-situ chemical oxidation (ISCO) along with groundwater monitoring. Groundwater monitoring is expected to continue through 2016. In addition to groundwater/soil remediation activities, further indoor air sampling is planned to determine whether mitigation measures are required. This activity will also be conducted as part of the REC program activities on Site. Monitoring and remedial activities are expected to be minimally invasive to ongoing business at the Site.

CURRENT ACTIVITIES AND PROPOSED SCHEDULE

Currently, ongoing activities include the evaluation of existing data and summarization of such in the form of a Remedial Investigation Workplan & Phase I Remedial Investigation Report summarizing all activities completed to date and proposing any additional activities necessary to complete the remedial investigation. It is currently contemplated that additional activities will consist of the installation and sampling of supplemental soil borings designed to complete horizontal and vertical delineation of soil impacts, determination/calculation of a site-specific protection of groundwater value for use in determining whether any soils require remediation, and additional indoor air quality sampling. The Remedial Investigation Workplan & Phase I Remedial Investigation Report is anticipated to be submitted as the next quarterly status report on or before January 14, 2013. Additional proposed activities and schedule are presented below:

- October 15, 2013 => Quarterly Letter Status Report and Certified Schedule Submittal;
- October 15, 2013 – January 15, 2014 => Remedial Investigation Workplan & Phase I Remedial Investigation Report development/preparation activities;
- January 15, 2014 => Certified Remedial Investigation Workplan & Phase I Remedial Investigation Report Submittal and Work Phase Completion Certification;
- January 15, 2014 – April 15, 2014 => Supplemental Remedial Investigation (RI) activities, evaluation of data, and preparation of Phase II Remedial Investigation Report;

- April 15, 2014 => Certified Phase II Remedial Investigation Report and Work Phase Completion (assuming that all media have been delineated to applicable standards);
- April 15, 2014 - July 15, 2014 => Remedial Action Plan (RAP) and Remedial Design development for soil/groundwater;
- July 15, 2014 => Certified Remedial Action Plan and Remedial Design Submittal and Work Phase Completion Certification;
- July 15, 2014 - October 15, 2014 => Remedial action implementation activities;
- October 15, 2014 => Remedial Action Construction Completion Work Phase Completion Certification submittal;
- October 15, 2014 - Project Completion => Ongoing Quarterly Status Report updates (through 1st year of post-groundwater remedy implementation and annually thereafter) and Remedial Action Completion Certification upon attainment of remediation meeting applicable standards.

Please do not hesitate to contact any of the undersigned should you have any questions or concerns.

Sincerely,
GAIA TECH OF N.C., PLLC



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