STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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In the Matter of the Authorization for Operation,
Implementation of Corrective Action and Closure and
Post Closure Care for a Hazardous Waste
Management Facility.

Parties and Jurisdiction
ORDER ON CONSENT
Index No.: CO 4-XXXXXXXX
20220212-109

DEC Facility Name:
General Electric Global Research Center (GE-GRC)
Niskayuna, NY 12309
EPA RCRA ID No.: NYD071094197

Facility Address:
General Electric Global Research Center (GE-GRC)
1 Research Circle
Niskayuna, NY 12309
Town or Niskayuna, Schenectady County, New York USA

- By -

General Electric Company,
Respondent
----------x

WHEREAS:

Jurisdiction

1. The New York State Department of Environmental Conservation ("Department'") is responsible for the implementation of the Resource Conservation and Recovery Act ("RCRA") via the Industrial Hazardous Waste Management Program pursuant to Article 27 Title 9 of the Environmental Conservation Law ("ECL") and Parts 370-374 and 376 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR").

2. The Department is also responsible for the implementation of the Inactive Hazardous Waste Disposal Site Program pursuant to ECL Article 27 Titles 13 and 14 and 6 NYCRR Part 375.

3. Consistent with the authority granted to the Commissioner, the Department may issue orders pursuant to, *inter alia,* ECL §71-2727(3) and ECL Article 27, Titles 9 and 13.

4. The Department is responsible for carrying out the policy of the State of New York to conserve, improve, and protect its natural resources and environment and control water, land, and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.

5. This Order on Consent ("Order") is issued pursuant to the Department's authority under, *inter alia,* ECL§ 71-2727 and ECL Article 27, Titles 9 and 13.

Parties

6. Respondent, General Electric Company ("GE," "Permittee" or "Respondent"), is a domestic business corporation organized and existing under the laws of the State and maintaining principal place of business at 5 Necco St, Boston, MA 02210

7. Respondent owns and operates a facility, General Electric Global Research Center ("GE-GRC" or the "***Facility***"), at 1 Research Circle, Niskayuna, New York 12309. The Facility has been designated as a large quantity generator of hazardous waste by the US Environmental Protection Agency ("EPA") and assigned EPA ID# NYD071094197. Respondent uses the Facility to conduct research in various fields such as ceramics, metallurgy, electronics, environmental, and organic and inorganic chemistry. Large portions of the GE property, as more fully set forth in paragraph 14 below, are vacant and undeveloped. Attached as Exhibit A is a figure depicting the Facility and the surrounding Vacant Lands that together make up the Site.

8. Respondent is a person, owner, and operator as defined pursuant to 6 NYCRR Parts 370.2(b)(133), (134) & (138).

9. The Department and Respondent intend to integrate and move Respondent's obligations under its Resource Conservation and Recovery Act (RCRA) Part 373 Permit No. 4-4224-00001 (the RCRA Permit) that relate to release(s) of hazardous substances, hazardous wastes, pollutants, or contaminants at and from the Facility into this comprehensive Order. Compliance with this Order shall be deemed compliance with Respondent's remaining obligations under its RCRA Permit.

Applicable Law

10. Respondent is subject to New York State laws, rules and regulations governing solid and hazardous waste.

11. Respondent's operations at the Facility are governed, at present, by the RCRA Permit. The RCRA Permit expired on January 9, 2022 but is now extended under the provisions of the State Administrative Procedure Act. The RCRA Permit covers both on-site hazardous waste storage and RCRA corrective action activities.

12. Module C of the RCRA Permit required Respondent to, in part, conduct a RCRA facility investigation ("RFI") ; prepare a Corrective Measures Study ("CMS") to evaluate possible final remedial actions, to the extent determined to be necessary; maintain and conduct interim corrective measures ("ICMs") at the Site; and develop and implement a groundwater monitoring program for the Site in compliance with federal and state requirements. Respondent has already implemented most of the requirements for Module C under DEC oversight and continues to conduct monitoring in accordance with the Department approved OM&M plan. To the extent that any further investigation or remediation work is required, such work shall be subject to the terms of this Order.

Facts

13. In a letter to the Department dated February 12, 2021, GE expressed its intention to relinquish the RCRA Permit and requested that any of its ongoing monitoring and corrective action obligations be addressed under an Article 27, Title 9 Order on Consent with the Department.

14. The current GE property consists of approximately 522 acres of land within a chain-link fence and the adjacent areas between the fence line and River Road ("***The Site***"). Approximately 322 acres of the Site is associated with the Facility's operations, the majority of which is enclosed within the fence. The remaining 200 acres of land on the Site are vacant and, to the Department's knowledge, were never used for research, manufacturing, or facility-related operations. Attached hereto as Exhibit B is a map reflecting the approximate location of these 200 acres of Vacant Lands along with the Solid Waste Management Units ("SWMUs") and Areas of Concern ("AOCs"). These Vacant Land parcels are, at present, considered part of the Facility subject to a RCRA Permit. The Vacant Land areas have been identified, solely for convenience within Respondent's property system and not because of any subdivision or local land use program, to correspond with the numbers as set forth in Exhibit A, attached, which is a map that depicts the approximate locations of Vacant Land Areas 1 through 4. Respondent will provide more specificity as to the boarders of the Vacant Lands prior to signing the Order. This Order provides for the removal of such Vacant Lands, unless otherwise stated, from the Permit and such Vacant Lands shall not be subject to the terms of this Order. Hereinafter, reference to the Facility shall not include these Vacant Lands.

15. Vacant Land Area 1 contains a stone foundation where a farmhouse once stood. The Respondent previously conducted sampling around the stone foundation in 2002 and 2003. The analytical results indicated the presence of soils that exceed restricted use soil cleanup objectives ("SCOs") for certain metals. Respondent began additional assessment activities in January 2022 in accordance with a Department approved sampling plan to delineate the area where metals concentrations were above unrestricted and residential soil cleanup objectives. If corrective action at the farmhouse location is required to address such soil, the cleanup will either be completed prior to the signing of this Order or, if Respondent chooses, the cleanup at the farmhouse area will remain subject to this Order and a cleanup to residential SCOs will be implemented under this Order. If the Respondent elects to perform the cleanup subject to the terms of this Order, the foundation area will be subject to the Order until a no further action letter is issued that the foundation area complies with residential use soil cleanup objectives.

16. Either (1) upon completion of the Department approved investigation activities at the farmhouse location, and any remediation that may be needed, this Order will be signed by Respondent and the Vacant Land Areas 1 through 4 will be removed from the Permit and shall also not be subject to the terms of this Order, or (2) if Respondent chooses not to complete the investigation and and/or remediation of the farmhouse location prior to signing this Order, the Vacant Land Areas, other than the area at and around the farmhouse, will be removed from the Permit and also not subject to this Order, while the farmhouse area will remain subject to the Order pending the implementation of corrective action at the farmhouse, if any is required, and the issuance of a no further action determination from the Department. If Respondent decides to proceed with #2 herein, the farmhouse location will be removed from the Permit and will be subject to this Order.

17. Respondent's former activities at the Facility have impacted the developed portion of the Site and current information shows no impact to the Vacant Lands or off-Site areas. The Site has six (6) Areas of Concern ("AOCs"), and thirty-eight (38) Solid Waste Management Units ("SWMUs"). The general status for each of the areas is included in the Corrective Action Module of the RCRA Permit, attached as Exhibit C, and further detailed in GE's March 2021 Existing Conditions Report, attached as Exhibit F.

18. The Department identified the SWMUs and AOCs during the Site's RCRA Facility Assessment ("RFA") and RCRA Facility Investigation ("RFI"). Of the 38 SWMUs identified, the Department

has determined that thirty-five (35) require "No Further Action." Of the 6 AOCs identified, the Department has determined that five (5) require "No Further Action." Three (3) SWMUs and one (1) AOC may require RFIs unless Respondent can establish, by previous workplans or reports or correspondence with the Department, that such investigations have been conducted.

19. The Department is in receipt of the June 15, 2021, letter from Patricia Popp-Stanton of the GE Renewables Learning Center (the "Learning Center") regarding that adjacent facility's separate EPA ID number and status as a small quantity generator. The Leaning Center, as illustrated by Exhibit A, is "contiguous to" or "physically connected with" the Site as those terms are defined by RCRA. The Learning Center and the Site are owned by the same parent company and therefore are "under common control" as that term is defined by RCRA. Although the Learning Center facility has not been subject to the RCRA Permit, the parties agree that pursuant to this Order on Consent, the Learning Center will be deemed subject to the RCRA Permit and will be removed from the Permit as part of the carve-out function of this Order in which the Vacant Lands will also be removed from the Permit. The Learning Center and Vacant Lands shall not be subject to any further obligations, terms or provisions of this Order.

20. The Department has categorized certain SWMUs and AOCS as being adequately addressed and requiring no further action. In the event that newly discovered material information or a material change in environmental conditions, reflecting that the prior Department approved corrective actions that led to its no further action determinations are no longer protective of human health or the environment, the Department retains the right, subject to dispute resolution, to modify this Consent Order in order to implement the following actions:

    a. Require Respondent to perform such investigations as necessary to comply with the requirements of this Consent Order if new information or subsequent analysis indicates that the prior no further action determinations must be reopened because there are, or are likely to be, releases from SWMUs/AOCs that pose a threat to human health or the environment; and/or

    b. Require monitoring of air, soil, groundwater, surface water, sediment or subsurface gas, if necessary, to protect human health and the environment, when site-specific circumstances indicate the release(s) of hazardous waste(s), including hazardous constituents, are occurring or are likely to occur from any SWMU(s) and/or AOC(s) and that the no further action determinations earlier made by the Department must be re-opened based upon data reflecting a threat to public health or the environment.

21. Exhibit C to this Order contains the remaining corrective action areas in various stages of investigation, evaluation, history and status of investigation and corrective action programs implemented for each of the SWMUs and AOCs. Pursuant to the attached Exhibit C, all future work plans and reports for any of the corrective action areas identified will be submitted to the Department for its approval. Such work plans shall not be duplicative or repetitive of, or require, work already performed by Respondent in the past, unless the Department determines that such work is necessary based on new information or subsequent contamination analysis indicating that prior no further action determinations were no longer protective of the environment or public health.

Consent Order Objectives

22. The objectives of this Order are to:

    a. Resolve outstanding issues regarding the RCRA Permit by supplanting the requirement for the Permit's renewal with this Order such that this Order will govern any remaining Facility hazardous waste management facility corrective action;

    b. Replace the RCRA Permit with this Order which will become the enforceable document addressing investigation, evaluation, and as appropriate, corrective action for SWMUs or AOCs at the Facility and as set forth in Exhibit C;

    c. Clarify that the Learning Center is being considered part of the Site subject to the RCRA Permit and to approve the relinquishment of the RCRA Permit through this Order. The Learning Center and the Vacant Lands shall not be subject to this Order;

    d. Establish the terms and conditions under which Respondent will complete any remaining investigations, corrective action or monitoring required by the Permit;

    e. Maintain the necessary financial assurance for any remaining, or additional corrective measures being undertaken by Respondent at the Facility;

    f. Maintain and appropriately manage previously implemented ICMs until such time as they are modified or terminated pursuant to this Order, and continue operation, maintenance, and monitoring ("OMM") measures at certain SWMUs/AOCs that remain under the permit as set forth in Exhibit C.

23. Respondent consents to the issuance of this Order without: (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release of hazardous waste at or from the Site or to any specific off-Site areas; and/or (iii) an acknowledgment that a release or threatened release of hazardous waste at or from the Site constitutes a significant threat to the public health or environment.

24. Solely with regards to the matters set forth below Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to, and agrees not to contest, the authority or jurisdiction of the Department and furthermore agrees not to contest the validity of this Order or its terms.

NOW, THEREFORE, HAVING CONSIDERED THIS MATTER AND BEING DULY ADVISED, IT IS ORDERED THAT:

I. EFFECT OF ORDER

A. Resource Conservation and Recovery Act Part 373 Hazardous Waste Management Permit No. 4-4224-00001/00100 is modified to include the GE Renewables Learning Center. GE shall be liable for all obligations regarding previously permitted facilities contained in Article 27 Title 9 of the ECL and its implementing regulations.

B. GE relinquishes Resource Conservation and Recovery Act Part 373 Hazardous Waste Management Permit No. 4-4224-00001/00100. The requirements of this Order shall supersede and replace those

in Resource Conservation and Recovery Act Part 373 Hazardous Waste Management Permit No. 4-4224-00001/00100. This Order shall govern all work contemplated by Module C of the RCRA Permit, set forth in Exhibit C and investigation and remediation activities at the farmhouse location unless otherwise completed prior to the signing of this Order by Respondent.

C. This Order shall control in the event of any conflicts between this Order and any prior agreements between Respondent and the Department concerning the Site and off-Site areas, *provided, however,* that this Order shall not affect prior written approvals, authorizations, or determinations by the Department. All activities required pursuant to the Order shall comply with state law, regulation, and guidance.

D. The Learning Center and Vacant Land Areas 1, 2, 3, and 4 are not subject to the terms of this Order in the event that the farmhouse area is remediated to residential standards prior to the entry of this Order. If the farmhouse remediation is not completed prior to the signing of this Order, then that farmhouse area in Vacant Land Area 1 will remain subject to this Order until the Department issues a determination that no further action is required at the farmhouse location based on the Respondent's achievement of residential soil cleanup objectives. Such determination will be issued, as set forth below, within 30 business days of Respondent's submission of the remediation report and written request for a no further action determination.

E. The Recitals above are hereby incorporated into this Order.

F. The Parties shall provide written notification of any change in the foregoing addresses listed in Section XIX of this Order.

II. FINANCIAL ASSURANCE

Financial Requirements 6 NYCRR 373-2.8. Within 30 days of the Effective Date of this Order, Respondent shall provide the Department with an updated cost estimate of the remaining Closure Costs for SWMU-5, SWMU-24, SWMU 16 [monitoring and landfill cap inspection], any additional monitoring that remains and the Industrial Sewer Assessment, in accordance with 6 NYCRR Subpart 373-2.8. Respondents shall comply with 6 NYCRR Subpart 373-2.8 requirements to cover any continued monitoring and corrective action remaining to be completed.

Starting in 2023, the applicable financial assurance requirements will be reassessed based on the regulatory requirements of 6 NYCRR Part 373-2.6--2.8 and 2.11 and or as may otherwise be required by this Order.

III. REMEDIATION SCOPE

A. The Scope of the remaining monitoring and/or remedial work to be completed by Respondent is set forth in Exhibit C. In the event that Respondent signs the Order prior to completion of any remedial work at the farmhouse location, such remediation will be subject to the terms of this Order. If the remediation is completed and the Department issues a no further action determination prior to Respondent signing the Order, the farmhouse area of Vacant Land Area 1 will be removed along with Vacant Land Areas 1, 2, 3 and 4.

B. Information related to the Department-approved scope of ongoing monitoring activities for SWMU 5, SWMU 16 and SWMU 24 are provided in Exhibit C.

C. Should additional areas of contamination resulting from the Respondent's on-Site operations be identified in the future, such areas will be addressed pursuant to the requirements of Exhibit C of this Order. Any additional areas of historical contamination from the Respondent's Site operations subsequently identified will be investigated, and to the extent necessary, remediated pursuant to the requirements of Exhibit C of this Order.

D. If hazardous wastes or hazardous constituents are located within or have been released from SWMUs or AOCs and will remain in or on the land, including groundwater, after the term of this Consent Order has expired, and/or there is a change in ownership of the Site, the Respondent must record, in accordance with State law, an Environmental Easement in accordance with the Statement of Basis and, if applicable, consistent with Article 71, Title 36 of the Environmental Conservation Law.

IV. REMEDIATION SCHEDULE – EXHIBITS C AND D

A. Industrial Sewer Condition Report: The Facility contains industrial sewers; Respondent shall conduct an Industrial Sewer Assessment and submit a Current Industrial Sewer Condition Report to the Department. The Industrial Sewer Assessment shall be conducted in accordance with Exhibit D, attached. Exhibit D contains an outline for the Industrial Sewer Assessment workplan and a figure that depicts the approximate location of the industrial sewer lines at the Facility. The Respondent shall submit the Current Industrial Sewer Condition Report in accordance with the following schedule:

1. Respondent shall submit the Current Industrial Sewer Condition Report for review and approval within 180 days of the Effective Date of this Order;
2. The Department will provide comments to the Report within 120 days of the submission of the Report;
3. Respondent shall submit a revised Current Industrial Sewer Condition Report, addressing and comments to the Report, within 60 days of receipt of the Department comments; and
4. Respondent shall submit a final Current Industrial Sewer Condition Report, addressing comments to the revised Report, within 30 days of receipt of the Department comments on the revised report.

B. Stone Farmhouse Foundation: The investigation program for the Stone Farmhouse foundation has been approved by the Department. The Respondent completed implementation of the farmhouse investigation and has submitted a report to the Department. Respondents shall either complete the investigation and remediation program prior to the signing of this Order, or, if Respondent instead agrees to have the farmhouse investigation and remediation subject to this Order, shall complete the remediation by the end of the second calendar quarter of 2022. Within 30 days of completion of the program, Respondents shall submit the data, remedial actions implemented and any further recommendations to the Department for review. Within 30 days of receipt of the remediation report, the Department will notify Respondent whether additional remediation is needed, and the reasons for the need for additional remediation, and any such additional remediation will be subject to the terms of this Order. Nothing herein shall subject Vacant Land Areas 1 [other than the farmhouse area], 2, 3, and 4 or the Learning Center to the terms of this Order.

C. Routine Reporting: The Respondent must submit the following routine reports to the Department by the indicated due date (Note: the table below is intended to serve as a guide for certain routine reporting required by this Order. However, the Respondent is still obligated to comply with all

applicable regulations cited in this Order and all conditions and requirements contained in the Exhibits, Attachments and documents incorporated by reference into this Order, regardless of whether they are or are not listed in the table below):

Item	Frequency	Due Date
Corrective Action costs estimates adjustments for inflation	Annually	60 days prior to anniversary date of establishment of financial instrument
Evidence that Financial Assurance Instruments have been maintained and have not lapsed	Annually	Within 90 days of the effective date of the Order. Maintain financial assurance as set forth in the Order continuously thereafter.
Annual Performance Evaluation	Annually	April 1st

D. Remedial investigation and related scoping activities may occur in more than one SWMU/AOC within a given year.

E. CMS reports required to be submitted by this Order will include, at a minimum, a No Further Action remedy and applicable Clean-Up Standard remedy for the GRC Facility.

F. Remediation and/or formal study of historical or inaccessible contamination will not be required on-Site unless and until an area becomes available for further investigation. For purposes of this Order, an area will become available when (1) current conditions at the Site change with respect to buildings or other physical barriers at the Site (excepting maintenance work pursuant to Department-approved plans), and; (2) where these changes may cause disruption or exposure to contamination or may increase direct human or environmental exposure (the temporary removal or partial removal of a part of a cap, in and of itself, does not meet this criterion). If an area will become available on-Site, *(e.g.,* demolition of a building; utility or infrastructure work; construction of a new foundation; etc.), Respondent shall provide a work plan, in accordance with Exhibit C, detailing the proposed change or disruption and the measures that will be taken to address contamination. Such work plan will require action to address contamination found in the immediate work area impacted during the change or disruption, and will indicate that all Site soils removed as a result of the activities undertaken will be characterized and managed, but that Respondent will not be required to remove, investigate, or conduct further remedial action outside such area unless any grossly contaminated soil, free product, or drums of hazardous wastes are encountered (in which instance Respondent will appropriately address all of those issues). Nothing in this paragraph shall be interpreted to require a site-wide investigation and/or remediation. In the event Respondent's operations have ceased at the Site, the Department reserves its right to protect human health and the environment as more fully set forth in Paragraph X below.

G. Respondent will maintain its current Institutional Control Measures ("ICMs") for the Site until such time as Respondent's operations have ceased at the Facility, or corrective action has been completed for a specific SWMU or AOC. Notwithstanding the foregoing, maintenance of the current ICMs for the Facility will be subject to the following requirements: if the Department determines, based on relevant data or demonstrable evidence, that any of the ICMs are no longer protective of human health and the environment, it will provide notice to Respondent, in writing, identifying the data and cause of such determination, and Respondent and the Department will then meet to discuss,

what, if any, action(s) may be necessary to address such issue(s) so that such ICM can continue to be utilized at the Facility. This Section shall be exclusive of any action(s) being addressed pursuant to the engineering plans called for by Exhibit C to this Order. The Department's request for a modification of, or an addition, to the list of ICMs currently in place, shall be subject to dispute resolution and the provisions in Paragraph XIII of this Order.

V. ISSUANCE OF DECISION DOCUMENTS

Remedy selection pursuant to this Order will be determined by the Department in accordance with 6 NYCRR Part 375 and with applicable provisions of Division of Environmental Remediation ("DER") -10 [Technical Guidance for Site Investigation and Remediation].

VI. ENTRY UPON SITE

A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Facility and/or areas in the vicinity of the Facility which may be under the control of Respondent by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Facility, for inspecting, sampling, copying records related to the contamination at the Facility, testing, and any other activities necessary to ensure Respondent' compliance with this Order. Upon request, Respondent shall provide the Department with full access to all non-privileged records relating to matters addressed by this Order with reasonable notice. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.

B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such sampling and scientific measurements available to Respondent.

VII. INDEMNIFICATION

Respondent shall indemnify and hold the Department, the State of New York, the Trustee of the State's natural resources, and their representatives and employees harmless from any claim, suit, or action for personal injury or property damage arising out of or resulting from the Respondent's fulfillment or attempted fulfillment of this Order, except for those claims, suits, actions and costs arising from the negligence or willful or intentional misconduct by the State of New York, and/or its representatives and employees during the course of any activities conducted pursuant to this Order. The Department shall provide written notice no less than thirty (30) days prior to commencing a lawsuit seeking indemnification from Respondent.

VIII. CHANGE OF USE

Respondent shall notify the Department at least sixty (60) days in advance of any change of use, which is proposed for the Facility, in accordance with the provisions of 6 NYCRR Parts 375-1.11(d), 373-2.4(e) and 373-2.7(c)(3). For purposes of this Order, "change of use" shall be as defined in 6 NYCRR 375-2.2(a).

IX. INSTITUTIONAL & ENGINEERING CONTROLS

A. A If the corrective action plan for the Facility relies upon one or more institutional and/or engineering controls, Respondent (or the owner of the Facility) shall submit to the Department for approval an environmental easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36, and 6 NYCRR 375-1.8(h)(2). Upon acceptance of the environmental easement by the State, Respondent shall comply with the requirements of 6 NYCRR 375-1.8(h)(2).

B. If the remedial program provides for no action other than implementation of one or more institutional controls, Respondent shall cause an environmental easement to be recorded under the provisions of Section IX.A above.

C. The Department may allow, in its sole discretion, the Respondent to use institutional or engineering controls to fulfill obligations pursuant to this Order, including, without limitation, easements or restrictions, when the Department has determined such controls are protective of human health and the environment, provided that such controls are consistent with the final remedy determination made by the Department.

X. RESERVATION OF RIGHTS

A. Except as provided at 6 NYCRR 375-1.9, 6 NYCRR 375-2.9, or as otherwise provided in this Order, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.

B. Nothing in this Order shall affect, in any manner, the Department's jurisdiction, if any, over other GE property in the State not subject to this Order.

C. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental claims, or actions taken, including, but not limited to, any assertion of any remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

D. In any dispute resolution proceeding pursuant to this Order, Respondent reserves the right to contend that it complied with the Order, or that the Department's determination was arbitrary or capricious, not necessary to protect human health and the environment, or not otherwise in accordance with State law or regulation.

E. In the event that the Department initiates a judicial action to enforce this Order or to seek further sanction or penalties pursuant to this Order, Respondent reserves the right to contend that it complied with the Order, that the Department's determination was arbitrary or capricious, not necessary to protect human health or the environment, or not otherwise in accordance with State or Federal law or regulation as applicable.

XI. PENALTIES AND FORCE MAJEURE

A. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL. In any such event, the Department will provide notice in writing to Respondent explaining the basis and evidence for the allegation of a violation and Respondent shall have 30 business days to cure any such alleged violation without any imposition of a penalty.

B. Respondent shall not suffer any penalty or be subject to any proceeding or action if Respondent cannot comply with a deadline or requirement of this Order on Consent, because of natural disaster, Federal or State declared national or state emergency based on an epidemic or pandemic, war, terrorist attack, strike, riot, judicial injunction, or other, similar unforeseeable event which was not caused by the negligence or willful misconduct of Respondent, any entity controlled by Respondent, or Respondent's contractors, and which could not have been avoided by the Respondent through the exercise of due care ("Force Majeure Event"). The requirement that Respondent exercise due care to fulfill the obligation includes using best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, or the failure of Respondent to make complete and timely application for any required approval or permit.

C. Respondent shall notify the Department in writing within fifteen (15) business days after it obtains knowledge of any Force Majeure Event. Respondent shall, as applicable, include in such notice the measures taken and to be taken to prevent or minimize any delays and shall request an appropriate extension or modification of this Order, or any deadlines or obligations pursuant to such Order. Failure to give such notice within such fifteen (15) day period constitutes a violation of the Order but is not a waiver of any claim of Force Majeure. Respondent shall be deemed to know of any circumstance that it, any entity controlled by it, or its contractors knew or should have known.

D. Respondent shall have the burden of showing that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought warranted under the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subsection XII.C. of this Order regarding timely notification. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for such time as is reasonably necessary to complete those obligations.

XII. TERMINATION OF ORDER

This Order will terminate upon the Department's written determination that the necessary work being undertaken and subject to this Order is complete. The parties reserve the right to execute a separate document to replace this Order if agreed to by the parties.

XIII. DISPUTE RESOLUTION

A. In the event disputes arise under this Order, the following procedures shall apply:

1. For all dispute resolution matters under this Order, the provisions of 6 NYCRR Part 375-1.5(b)(2) shall apply. For purposes of this order, the "designated individual" referenced in this regulation shall be the Division Director of the Division of Materials Management.

2. Notwithstanding anything to the contrary in this Order, Respondent is not precluded from rearguing or advancing a position it made in a prior dispute resolution process with the Department solely on the basis that it did not prevail in such prior determination in any subsequent and new dispute resolution process, or in any judicial proceeding.

B. Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in any Final Statement of Basis issued by the Department, or any element of such remedy, except as may be otherwise authorized by State law, nor to impair any right of Respondent to seek judicial review of the Department's selection of any other or further remedy affecting the Site.

XIV. COMMUNICATIONS

A. All written communications required by this Consent Order shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.

(One (1) electronic copy, and hard copy, if requested)

1. Communication from Respondent shall be sent to:

Chief, RCRA Permitting Section
NYS Department of Environmental Conservation
Division of Materials Management
625 Broadway
Albany, New York 12233-7256

With electronic copies to:

Office of General Counsel
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1500

Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
Corning Tower
Empire State Plaza
Albany, New York 12237

Environmental Program Leader
GE Global Research
1 Research Circle K1-2C02

Niskayuna, NY 12309

All financial assurance documents shall be sent to:

RCRA C Financial Assurance Coordinator
Division of Materials Management
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7260

2. Communication from the Department to Respondent shall be sent to:

Paul.guilmette@ge.com
Paul Guilmette
Environmental Program Leader
1 Research Circle K1-2C02
Niskayuna NY 12309

With electronic copies to:

Erik Hallas – Facilities, EHS, & Security Leader
Erik.Hallas@ge.com

Paul Guilmette
Environmental Program Leader
Paul.Guilmette@ge.com

B. The Department and Respondent reserve the right to designate additional or different addressees for communication on written notice to the other. Additionally, the Department reserves the right to request that the Respondent provide more than one paper copy of any work plan or report.

C. Each party shall notify the other within ninety (90) days after any change in the addresses listed in this paragraph.

D. The Department has implemented an Environmental Information Management System ("EIMS"). The EIMS requires that electronic data be provided in specific formats. In an effort to better manage environmental data, the Department is requiring that all data submissions be in a Department-approved Electronic Data Deliverable ("EDD") format. All work plans and reports (including all attachments and appendices) shall be submitted in print as well as in an electronic format that is acceptable to the Department.

XV. RECORDS RETENTION

Respondent and the Department shall preserve or make arrangement for the preservation of, during the pendency of this Order, and for a minimum of six (6) years after its termination, all data, records, and documents in its possession or in the possession of its officers, directors, employees, agents, consultants, contractors (including subcontractors and independent contractors) or successors and assigns which relate in any way to this Order, or to its implementation.

XVI. MISCELLANEOUS

A. The Effective Date of this Order shall be the date upon which it is signed on behalf of the Department by the Commissioner or his designee.

B. Unless this Order expressly provides otherwise, nothing in this Order waives any obligations of Respondent to fully comply with all laws and regulations established in the ECL and 6 NYCRR.

C. In the event of a conflict between the main body of this Order (including any amendments thereof) and the terms of an Appendix to this Order, the main body of this Order shall control.

D. This Order is intended to be executed on separate signature pages, and electronic signature is acceptable.

E. Any requests to modify any term of this Order must be made in writing and agreed to by Respondent and the Department.

Dated: 7/15/2022

Albany, New York

Basil Seggos,
Commissioner
New York State Department of Environmental Conservation

By: _____

[DELEGATED ENTITY]
~~[Title]~~ Director
Division of Materials Management
New York State Department of Environmental Conservation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuance of the foregoing order without further notice, waives its right to a hearing herein, and agrees to be bound by the terms, provisions, and conditions contained herein.

GENERAL ELECTRIC COMPANY

By [Signature]: _____

Name [Print]: Erik S. Hallas

Title: Executive - Facilities, EH&S Security

Date: 6/3/22

Acknowledgment

STATE OF NEW YORK)

) ss:

COUNTY OF Schday)

On the 3RD day of June, in the year 2022 before me, the undersigned, personally appeared Erik S. Hallas personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Carolyn Gracey
Notary Public

Carolyn Gracey
Notary Public, State of New York
No. 01GR6037985
Qualified in Rensselaer County
Commission Expires March 6, 2026

Carolyn Gracey
Notary Public, State of New York
No. 01GR6037985
Qualified in Rensselaer County
Commission Expires March 6, 20___

EXHIBIT A

Order on Consent

Index No. CO 4-20220212-109

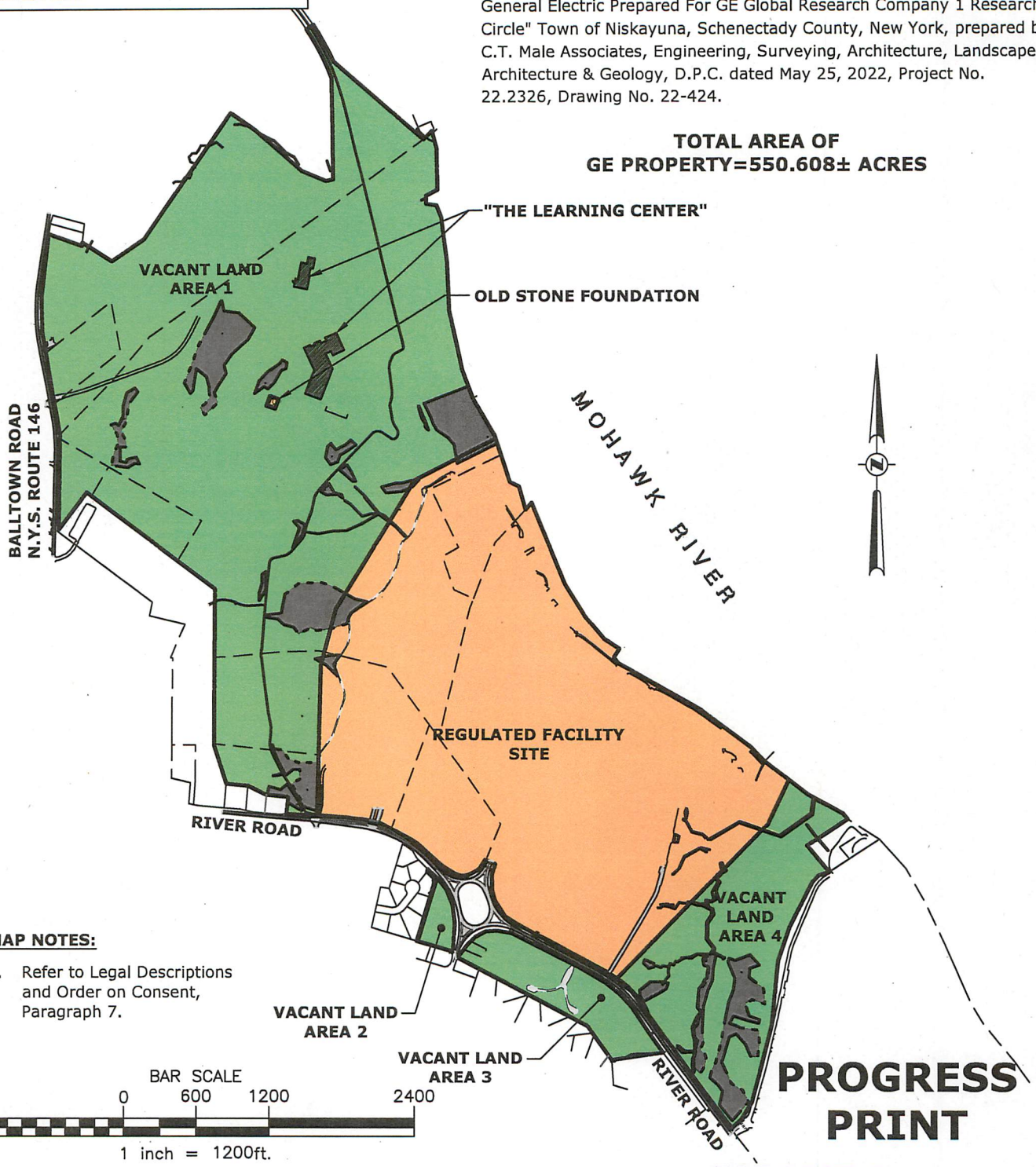
NONE :XREFS

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

MAP REFERENCE:

"Boundary and Partial Topographic Survey Lands Now or Formerly of General Electric Prepared For GE Global Research Company 1 Research Circle" Town of Niskayuna, Schenectady County, New York, prepared by C.T. Male Associates, Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. dated May 25, 2022, Project No. 22.2326, Drawing No. 22-424.

TOTAL AREA OF GE PROPERTY=550.608± ACRES



MAP NOTES:

1. Refer to Legal Descriptions and Order on Consent, Paragraph 7.

BAR SCALE
1200 0 600 1200 2400
1 inch = 1200ft.

PROGRESS PRINT

EXHIBIT A

Date	RECORD OF WORK	Appr.

THE REGULATED FACILITY SITE, VACANT LANDS AND LEARNING CENTER
LANDS NOW OR FORMERLY OF
GENERAL ELECTRIC COMPANY

TOWN OF NISKAYUNA | SCHENECTADY CO., NEW YORK

Drafter: MDD	Checker: DGD
Appr. by: CMR	Proj. No. 22.2326

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

SCALE: 1"=1200' | DATE:JUNE 9, 2022

CAD DWG. FILE NAME: K:\Projects\200300\Survey\Drawings and Maps_2022 DRAWINGS AND MAPS\2022 EXHIBIT A_GE-GLOBAL.dwg

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

DESCRIPTION
PORTION OF LANDS NOW OR FORMERLY OF
GENERAL ELECTRIC COMPANY
TOWN OF NISKAYUNA, COUNTY OF SCHENECTADY, STATE OF NEW YORK
AREA = 209.878± ACRES OF LAND

All that certain tract, piece, or parcel of land situate in the Town of Niskayuna, County of Schenectady, State of New York, lying Northeasterly and Northerly of River Road - County Highway No. 4-N, and being more particularly bounded and described as follows:

COMMENCING at a point on the Northeasterly 1951 highway boundary of River Road - County Highway No. 4-N at its point of intersection with the division line between the lands now or formerly of General Electric Company as described in Book 529 at Page 475 on the Northwest and the lands now or formerly of Knolls Atomic Power Laboratory as described in Book 593 at Page 153 on the Southeast; thence from said point of commencement along said Northeasterly 1951 highway boundary of River Road - County Highway No. 4-N the following six (6) courses: 1) North 34 deg. 45 min. 00 sec. West 3.86 feet to a point; 2) North 35 deg. 38 min. 56 sec. West 833.03 feet to a point; 3) North 36 deg. 32 min. 07 sec. West 566.01 feet to a point; 4) North 53 deg. 29 min. 04 sec. West 67.05 feet to a point; 5) North 51 deg. 25 min. 17 sec. West 48.05 feet to a point; and 6) North 51 deg. 51 min. 34 sec. West 40.83 feet to the point or place of beginning and runs thence from said point of beginning along said Northeasterly 1951 highway boundary of River Road - County Highway No. 4-N the following four (4) courses: 1) North 51 deg. 51 min. 34 sec. West 22.32 feet to a point; 2) North 61 deg. 30 min. 01 sec. West 916.24 feet to a point; 3) North 58 deg. 10 min. 41 sec. West 111.36 feet to a point; and 4) North 32 deg. 39 min. 43 sec. West 157.28 feet to its point of intersection with the Easterly 1951

highway boundary of River Road – County Highway No. 4-N; thence along said Easterly 1951 highway boundary the following three (3) courses: 1) North 14 deg. 54 min. 10 sec. West 83.55 feet to a point; 2) North 01 deg. 04 min. 14 sec. West 135.16 feet to a point; and 3) North 17 deg. 06 min. 11 sec. East 91.41 feet to its point of intersection with the Northerly 1951 highway boundary of River Road – County Highway No. 4-N; thence along said Northerly 1951 highway boundary North 68 deg. 30 min. 04 sec. West 90.05 feet to its point of intersection with the Northwesterly 1951 highway boundary of River Road – County Highway No. 4-N; thence along said Northwesterly highway boundary the following two (2) courses: 1) South 31 deg. 56 min. 08 sec. West 92.42 feet to a point; and 2) South 61 deg. 40 min. 36 sec. West 118.96 feet to its point of intersection with the Northerly 1951 highway boundary of River Road – County Highway No. 4-N; thence along said Northerly highway boundary North 89 deg. 55 min. 49 sec. West 82.02 feet to its point of intersection with the Northeasterly 1951 highway boundary of River Road – County Highway No. 4-N; thence along said Northeasterly highway boundary the following four (4) courses: 1) North 63 deg. 14 min. 29 sec. West 146.41 feet to a point; 2) North 42 deg. 53 min. 06 sec. West 140.09 feet to a point; 3) North 47 deg. 37 min. 28 sec. West 170.19 feet to a point; and 4) North 58 deg. 37 min. 31 sec. West 169.30 feet to its point of intersection with the Northerly 1951 highway boundary of River Road – County Highway No. 4-N; thence along said Northerly highway boundary the following three (3) courses: 1) North 69 deg. 53 min. 21 sec. West 178.91 feet to a point; 2) North 78 deg.

14 min. 58 sec. West 155.16 feet to a point; and 3) North 83 deg. 51 min. 32 sec. West 335.59 feet to a point; thence through the lands now or formerly of General Electric Company as described in Book 946 at Page 361, Book 842 at Page 566, and Book 729 at Page 224 the following four (4) courses: 1) North 01 deg. 22 min. 47 sec. East 1,235.23 feet to a point; 2) North 14 deg. 59 min. 40 sec. East 479.17 feet to a point; 3) North 31 deg. 37 min. 55 sec. East 1,239.81 feet to a point; and 4) North 63 deg. 08 min. 26 sec. East 748.98 feet to its point of intersection with the Westerly boundary of Barge Canal Parcel No. 2221 as shown on a map entitled "Barge Canal State Of New York Map Showing Location Of Channel Structures, Appropriated Lands And Terminals Of The Erie, Champlain, Oswego And Cayuga, And Seneca Canals As Approved Under Chapter 147 Laws Of 1903, Chapter 391 Laws Of 1909, And Chapter 746 Laws Of 1911 And Amendatory Laws, Eastern Division, Erie Canal Section 2, Station 959 To Station 992, Sheet 18 and Station 926 To Station 959, Sheet 17," on file in the offices of the New York State Canal Corporation; thence South 18 deg. 07 min. 14 sec. East along said Westerly boundary of Barge Canal Parcel No. 2221, a distance of 372.61 feet to its point of intersection with the Southwesterly boundary of Barge Canal Parcel No. 2221; thence along said Southwesterly boundary of Barge Canal Parcel No. 2221 South 64 deg. 14 min. 34 sec. East 84.91 feet to its point of intersection with the Westerly boundary of Barge Canal Parcel No. 2221; thence along said Westerly boundary of Barge Canal Parcel No. 2221 South 15 deg. 48 min. 04 sec. East 193.95 feet to its point of intersection with the Northwesterly boundary of Barge Canal Parcel No.

2217A (Parcel Released); thence along said Northwesterly boundary of Barge Canal Parcel 2217A (as released) North 42 deg. 33 min. 06 sec. East 75.92 feet to its point of intersection with the Easterly boundary of Barge Canal Parcel No. 2217A (as released); thence along said Easterly boundary of Barge Canal Parcel No. 2217A (as released) South 22 deg. 16 min. 14 sec. East 721.16 feet to its point of intersection with the Northeasterly boundary of Barge Canal Parcel No. 2217A (as released); thence along said Northeasterly boundary of Barge Canal Parcel No. 2217A (as released) the following three (3) courses: 1) South 32 deg. 04 min. 24 sec. East 323.28 feet to a point; 2) South 40 deg. 48 min. 49 sec. East 236.00 feet to a point; and 3) South 56 deg. 56 min. 14 sec. East 148.15 feet to its point of intersection with the Southeasterly boundary of Barge Canal Parcel No. 2217A (as released); thence South 31 deg. 48 min. 06 sec. West along said Southeasterly boundary of Barge Canal Parcel No. 2217A (as released) and along the Northwesterly boundary of Barge Canal Parcel No. 2216, a distance of 84.96 feet to its point of intersection with the Southwesterly boundary of Barge Canal Parcel No. 2216; thence along said Southwesterly boundary of Barge Canal Parcel No. 2216 the following four (4) courses: 1) South 38 deg. 43 min. 24 sec. East 63.20 feet to a point; 2) South 61 deg. 00 min. 14 sec. East 772.19 feet to a point; 3) South 53 deg. 47 min. 44 sec. East 515.44 feet to a point; and 4) South 44 deg. 54 min. 04 sec. East 170.64 feet to its point of intersection with the Southwesterly boundary of Barge Canal Parcel No. 2186; thence along said Southwesterly boundary of Barge Canal Parcel No. 2186 South 52 deg. 45 min. 44 sec. East 243.92 feet to a point;

thence through the lands now or formerly of General Electric Company as described in Book 529 at Page 475 the following two (2) courses: 1) South 25 deg. 07 min. 57 sec. West 401.58 feet to a point; and 2) South 44 deg. 22 min. 42 sec. West 1,792.21 feet to the point or place of beginning and containing 209.878 acres of land, more or less.

Subject to any covenants, easements, or restrictions of record.

C.T. MALE ASSOCIATES

William J. Nettleton, P.L.S.

STATE OF NEW YORK
WILLIAM J. NETTLETON
049519
LICENSED LAND SURVEYOR

June 2, 2022
WJN/amb
C.T. Male Project No. 22.2326
Dwg. No. 22-0242

EXHIBIT B

Order on Consent

Index No. CO 4-20220212-109

NONE :XREFS

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MAP REFERENCE:

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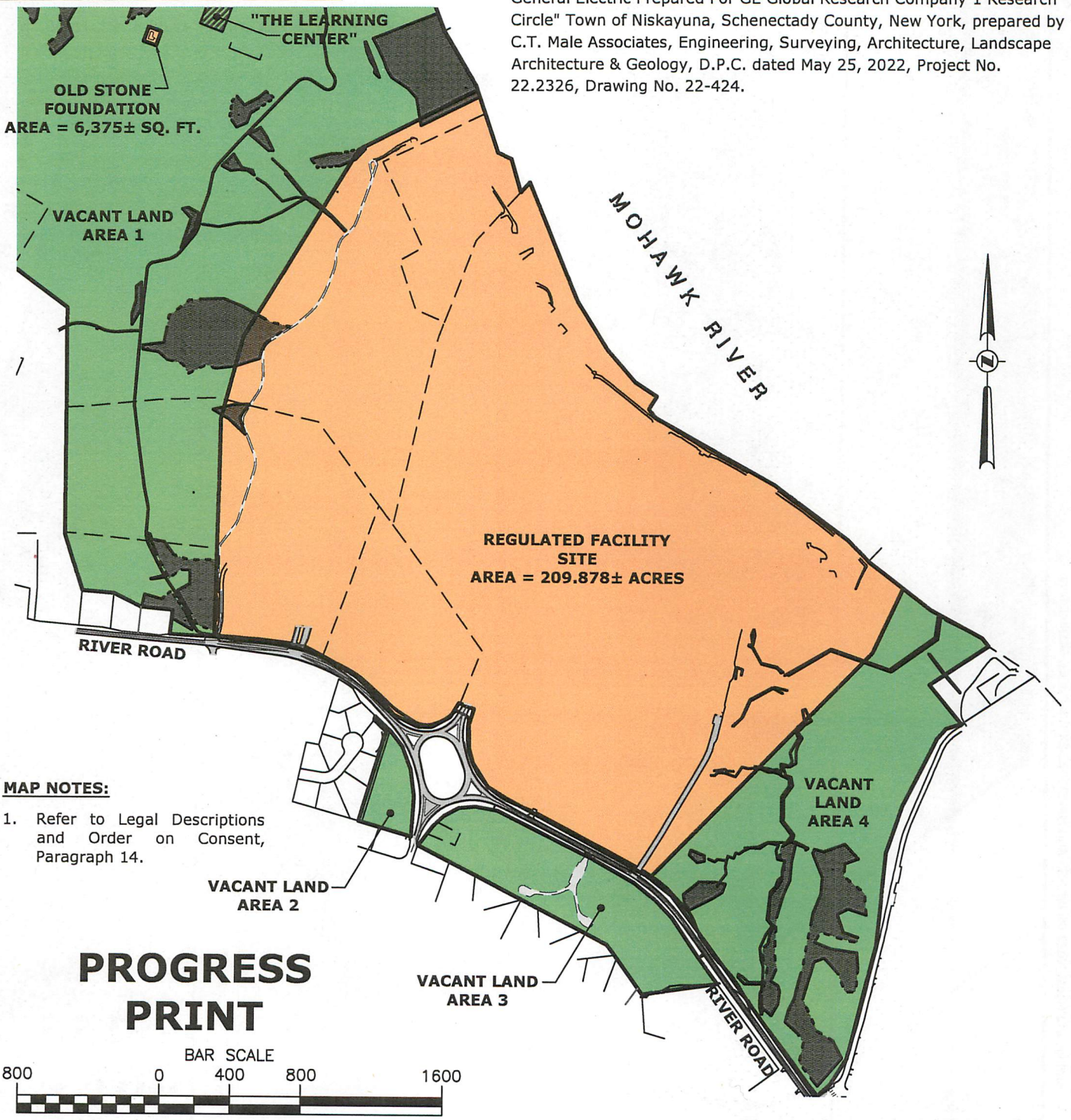

MAP NOTES:

1. Refer to Legal Descriptions and Order on Consent, Paragraph 14.

PROGRESS PRINT

BAR SCALE
800 0 400 800 1600
1 inch = 800 ft.

EXHIBIT B

SHEET 1 OF 2

Date	RECORD OF WORK	Appr.

THE REGULATED FACILITY SITE, VACANT LANDS AND LEARNING CENTER
LANDS NOW OR FORMERLY OF GENERAL ELECTRIC COMPANY

TOWN OF NISKAYUNA | SCHENECTADY CO., NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

Drafter: MDD	Checker: DGD
Appr. by: CMR	Proj. No. 22.2326

SCALE: 1"=800' | DATE:JUNE 9, 2022

CAD DWG. FILE NAME: K:\Projects\200300\Survey\Drawings and Maps_2022 DRAWINGS AND MAPS\2022 EXHIBIT B_GE-GLOBAL.dwg

NONE :XREFS

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MAP NOTES:

1. Refer to Legal Descriptions and Order on Consent, Paragraph 14.

MAP REFERENCE:

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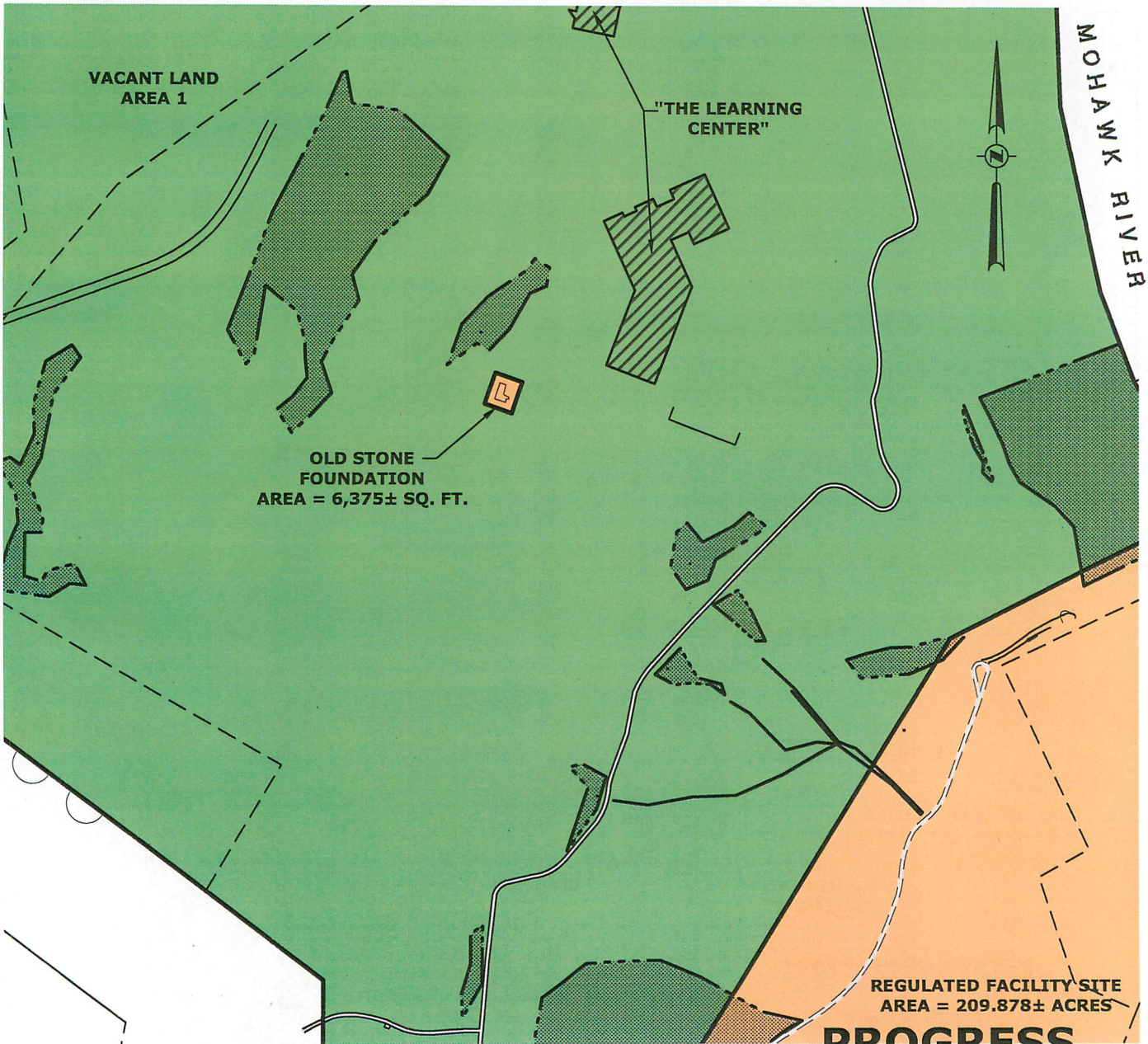


BAR SCALE
400 0 200 400 800

1 inch = 400 ft.

PROGRESS PRINT

EXHIBIT B

SHEET 2 OF 2

Date	RECORD OF WORK	Appr.

THE REGULATED FACILITY SITE, VACANT LANDS AND LEARNING CENTER
LANDS NOW OR FORMERLY OF
GENERAL ELECTRIC COMPANY

TOWN OF NISKAYUNA | SCHENECTADY CO., NEW YORK

Drafter: MDD | Checker: DGD

Appr. by: CMR | Proj. No. 22.2326

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

SCALE: 1"=400' | DATE:JUNE 9, 2022

CAD DWG. FILE NAME: K:\Projects\200300\Survey\Drawings and Maps_2022 DRAWINGS AND MAPS\2022 EXHIBIT B_GE-GLOBAL.dwg

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

DESCRIPTION
PROPOSED ENVIRONMENTAL EASEMENT
TO BE GRANTED TO
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
LANDS NOW OR FORMERLY OF
GENERAL ELECTRIC COMPANY
TOWN OF NISKAYUNA, COUNTY OF SCHENECTADY, STATE OF NEW YORK
AREA = 6,375± SQUARE FEET OF LAND

All that certain tract, piece, or parcel of land situate in the Town of Niskayuna, County of Schenectady, State of New York, lying generally East of Balltown Road - New York State Route 146 (S.H. No. 1872) and generally North of River Road, and being more particularly bounded and described as follows:

COMMENCING at a point on the Easterly highway boundary of Balltown Road - New York State Route 146 (S.H. No. 1872) at its point of intersection with the division line between the lands now or formerly of General Electric Company as described in Book 1013 at Page 90 on the Northwest and the lands now or formerly of the Town of Niskayuna as described in Book 1457 at Page 327 and Book 1519 at Page 127 on the Southeast; thence from said point of commencement along said division line North 36 deg. 52 min. 34 sec. East 383.41 feet to a point; thence through the lands now or formerly of General Electric Company as described in Book 1013 at Page 90, Book 1012 at Page 1005, and Book 727 at Page 351 North 64 deg. 34 min. 59 sec. East 1,647.18 feet to the point or place of beginning and runs thence from said point of beginning through the said lands now or formerly of General Electric Company as described in Book 727 at Page 351 the following four (4) courses: 1) North 19 deg. 23 min. 00 sec. East 85.00 feet to a point; 2) South 70 deg. 37 min. 00 sec. East 75.00 feet to a point; 3) South 19 deg. 23 min. 00 sec.

West 85.00 feet to a point; and 4) North 70 deg. 37 min. 00 sec. West 75.00 feet to the point or place of beginning and containing 6,375± square feet of land.

Intending to encompass an existing stone foundation on lands now or formerly of the General Electric Company ss described in Book 727 at Page 351.

C.T. MALE ASSOCIATES

William J. Nettleton, P.L.S.

STATE OF NEW YORK
WILLIAM J. NETTLETON
049513
LICENSED LAND SURVEYOR

June 2, 2022
WJN/amb
C.T. Male Project No. 22.2326
Dwg. No. 22-0242

EXHIBIT C

Order on Consent

Index No. CO 4-20220212-109

Exhibit C

General Electric Global Research Center (GE-GRC)

ORDER ON CONSENT
Index No.: CO 4-XXXXXXXX

CORRECTIVE ACTION REQUIREMENTS

FOR SOLID WASTE MANAGEMENT UNITS AND

AREAS OF CONCERN

A. APPLICABILITY

1. Statute and Regulations. Article 27, Title 9, Section 27-0913, and 6NYCRR 373-2.6(l) requires corrective action, including Corrective Action beyond the facility boundary where necessary to protect human health and the environment, for all releases of hazardous wastes, including hazardous constituents, from any solid waste management unit ("SWMU") at a storage, treatment or disposal facility seeking a 6NYCRR Part 373 permit, regardless of the time at which waste was placed in such unit. Pursuant to 6NYCRR 373-1.6(c)(2) the Commissioner may impose permit conditions as the Commissioner determines necessary to protect human health and the environment (I.e., Areas of Concern (AOC(s))). Permit requirements for Corrective Action may be implemented through an Administrative Order on Consent.

2. Summary of Corrective Action Process. Corrective action implementation authorized by 6NYCRR 373-2.6 includes: (a) the RCRA Facility Assessment ("RFA"); (b) the RCRA Facility Investigation ("RFI"); and (c) Corrective Measures ("CM").

   The RFA is a three phase process that includes: a Preliminary Review ("PR"); a Visual Site Inspection ("VSI"); and a Sampling Visit ("SV"). The PR is a review of all available information on the individual SWMU(s) and AOC(s). During the PR, and of the media (i.e., soil, groundwater, surface water/sediment, air and subsurface gas) that could potentially be impacted by release(s) of hazardous waste, including hazardous constituents, are evaluated. Based on this evaluation, the SWMU(s)/AOC(s) will be characterized as to release potentials. Following the PR, a VSI is conducted during which all of the SWMU(s)/AOC(s) either previously or newly discovered, are observed. While performing this reconnaissance, any signs of spills or leakage, stained soil, stressed vegetation, unit deterioration, or any other conditions that may be indicative of a release are assessed. By means of these observations and the findings of the PR, the Commissioner may require the facility to conduct a Sampling Visit (SV) at the unit(s)/area(s) where the release(s) would be suspected. The SV can involve any or all of the previously described media at any given SWMU and/or Area of Concern (AOC). For those units/areas where releases are clearly demonstrated in the PR and/or VSI, the SV can be avoided leaving the unit(s)/area(s) to be addressed in the RFI. The RFA includes preparing the RFA report. This report includes the findings of the various RFA activities and recommendations for further action at those units and areas with demonstrated releases of hazardous wastes, including hazardous constituents. In some cases, where an immediate threat to human health or the environment exists, interim corrective measures may be required. If the RFA concludes that there is a need for further investigative work the Respondent shall be required to pursue phase two of corrective action, an RFI.

   The purpose of the RFI is to determine the nature, extent, direction and rate of migration of hazardous wastes, including hazardous constituents, in soils, groundwater, surface water/sediment, subsurface gas

and/or air. From these multimedia analyses, the types and concentrations of contaminants present, the boundaries of any contamination (e.g., plumes), and the rate and direction of contaminant movement should be determined in each of the impacted media. Sufficient data shall be generated during the RFI to allow proper assessment of corrective measure alternatives. This may require bench and/or pilot studies to be implemented as part of the RFI. Once all analyses are reviewed, a RFI report is prepared that provides a summation of the data and recommendations for any needed corrective measures.

The culmination of the Corrective Action Program is Corrective Measures ("CM"). The initial stage of the corrective measures phase is the preparation of a Corrective Measures Study ("CMS"). A CMS may be required if concentrations of hazardous constituents in an aquifer, in surface water/sediment, in soils, or in air exceed their corresponding action levels. Such a study may also be required if individual concentrations of hazardous constituents are at or below their action levels, but they still may pose a threat to human health or the environment due to site-specific exposure conditions. The CMS will address alternative corrective measure strategies that are technologically feasible and reliable and which effectively mitigate and minimize damage to, and provides adequate protection of human health and the environment. The Respondent will develop the site-specific CMS using target clean-up levels chosen by the Commissioner to be protective of human health and the environment. Where available, they may be promulgated standards. Where promulgated standards are not available, the Commissioner may use health-based levels, based on Risk-Specific Doses ("RSD") for carcinogens and Reference Doses ("RFD") for systemic toxicants, or concentration levels protective of the environment, that have undergone scientific review. The CMS report should discuss the alternative corrective measure strategies studied, addressing technical, institutional, public health, and environmental issues, and develop the conceptual engineering for the alternative action proposed by the facility. The CMS may not require extensive evaluation of a number of remedial alternatives where a solution is straightforward or only few solutions exist. Such situations could require the Respondent to submit a highly focused CMS. Following completion of the CMS, the Commissioner will select the corrective measure(s) from the corrective measure alternatives evaluated in the CMS. The owner or operator of the facility will be required to demonstrate financial assurance for completing the approved corrective measure(s)and will initiate the final stage of corrective measures, Corrective Measures Implementation ("CMI"). The CMI will address the final design, construction, operation, maintenance, and monitoring of the corrective measure or measures selected.

3. Solid Waste Management Units and Areas of Concern. The conditions of this Exhibit apply to:

(a) All the SWMUs and AOCs listed in this Exhibit individually or in combinations;

(b) Any additional SWMU(s) and AOCs identified during the course of groundwater monitoring, field investigations, environmental audits or other means as described in Exhibit C Condition 3(c). below; and

(c) The following known SWMUs and AOCs located on-site and/or off-site:

<u>Solid Waste Management Units (SWMUs)</u>
SWMU 1. Environmental Control Facility - Building 2
SWMU 1a. Environmental Control Facility - Virgin Storage Area
SWMU 2. Environmental Control Facility - Reactives Room
SWMU 3. Environmental Control Facility - Loading Dock/Packaging Area
SWMU 4. Environmental Control Facility - Building 3
SWMU 5. Environmental Control Facility - Old Farm Area
SWMU 6. Former Waste Storage Area - Hydrogen Peroxide Storage Building

SWMU 7. Former Waste Packaging Area - Resin and Insulation Building
SWMU 8. Former Drum Storage Area - Applied Research Building
SWMU 9. Former Waste Storage Area - Applied Research Building
SWMU 10. Former Waste Storage - KWB 501 and 519
SWMU 11. Former Waste Storage Area - K-1, 5B6/5B7
SWMU 12. Former Waste Storage Area - Chemistry and Engineering Building
SWMU 13. Waste Storage Area - Room 328- Chemistry and Engineering Building
SWMU 14. Former Waste Storage Area at Metallurgy and Ceramics Building
SWMU 15. Drum Storage Area - Engineering Systems Building
SWMU 16. Inactive Landfill
SWMU 17. Environmental Control Facility - Neutralized Acid Tank
SWMU 18. Environmental Control Facility - Acid Neutralization Tank
SWMU 19. Waste Solvent Tank - Chemistry/Engineering Building
SWMU 20. Emergency Spill Tank - Chemistry/Engineering Building
SWMU 21. Former Acid Pickling Tank - Metallurgy/Ceramics Building
SWMU 22. Former Waste Oil Tank Location - Metallurgy/Ceramics Building
SWMU 23. Former Locations of Coal Wastewater Tanks – Engineering Systems Building
SWMU 24. Former Chemical Waste Incinerator
SWMU 25. Wastewater Treatment Facility
SWMU 26. Imhoff Tank
SWMU 27. No. 6 Fuel Oil Tank
SWMU 28. Old No. 6 Fuel Oil Tank
SWMU 29. Four Wastewater Neutralization Tanks - Main Laboratory Building
SWMU 30. Oil/Water Separator - Garage
SWMU 31. Construction and Demolition Landfill
SWMU 32. New Waste Oil Tank - Metallurgy and Ceramics Building
SWMU 33. Coal Pile Runoff Vault - Engineering Systems Building
SWMU 34. Potassium Carbonate Tank - Braun Tower Pad
SWMU 35. Former Low Level Mixed Waste Storage Area, C-Wing, Main Laboratory Building
SWMU 36: GE Research Center

Areas of Concern (AOC's)
AOC 1. C-Wing - Former Transformer Location
AOC 2. Parking Lot - Engineering Physics Building
AOC 3. Transformer - Engineering Systems Building
AOC 4. East Room - Applied Research Building
AOC 5. Hot Gas Cleanup Unit - Engineering Systems Building
AOC 6. Former Resins & Insulation Building

B. STANDARD CONDITIONS FOR CORRECTIVE ACTION

1. Work Plans. All work plans submitted pursuant to this Exhibit shall include:

(a) Quality Assurance/Quality Control protocols to ensure that data generated is valid and supported by documented procedures;

(b) Other plans, specifications and protocols, as applicable;

(c) A schedule for starting specific tasks, completing the work and submitting progress and final reports; and

(d) Plans for the treatment, storage, discharge or disposal of wastes to be generated by activities described therein.

2. Quality Assurance/Quality Control

(a) Any laboratory to be used pursuant to such work plans required by this Exhibit must be approved by the Commissioner prior to work plan implementation. Certification by the New York State Department of Health Environmental Laboratory Approval Program in the relevant analytical services is required.

(b) The minimum Quality Assurance/Quality Control data and information, that shall be delivered with all sample analyses required by this Exhibit, are tabulated in Appendix III-A of this Exhibit.

3. Health/Safety Plans. The Respondent shall develop, according to applicable Federal, State and local requirements, and submit to the Commissioner, health and safety plans that will be implemented to ensure that the health and safety of project personnel, plant personnel and the general public are protected. These plans are not subject to approval by the Commissioner.

4. Guidance Documents. When preparing the submissions described in this Exhibit, the Respondent shall take account of applicable guidance documents issued by the U.S. Environmental protection Agency and the New York State Department of Environmental Conservation in a manner reflecting reasonable technical considerations.

5. Prior Submittals. The Respondent may have already submitted portions of information, plans, or reports required by this Exhibit and its Appendices to the Commissioner pursuant to the terms of previous applications, consent orders, or plans. For those items the Respondent contends were submitted to the Commissioner, the Respondent may cite the specific document(s) and page(s) it believes adequately addresses each of the individual items requested by this Exhibit and its Appendices. The references, by document(s) and page(s), shall be placed in the appropriate sections of the submittals that require the referenced information and data. If the Commissioner, after a file search, determines that it does not possess any of the referenced information, plans, or reports that the Respondent claims were previously submitted, the Commissioner will notify the Respondent and the Respondent shall submit the referenced documents within the time frame specified within the notification.

6. Compliance Schedule for Interim Corrective Measures.

(a) If at any time it is determined by the Commissioner that a release or, based on site specific circumstances, a threatened release of hazardous wastes, including hazardous constituents from a SWMU, a combination of SWMUs, or an AOC poses a threat to human health or the environment, or that such condition jeopardizes the Respondent's ability to comply with any governmental permit or order, a draft interim corrective measures study shall be submitted to the Commissioner for approval within thirty (30) calendar days of notice of such a determination. This study shall consider, among other relevant factors, the character, the extent, direction, the rate of release, the proximity to population, the exposure pathways, the effects of delayed action, and the evaluations of appropriate interim corrective measures. Upon approval of the study by the Commissioner, the Respondent shall implement the required interim corrective measures as specified by the Commissioner. Nothing herein shall preclude the Respondent from taking immediate action to address the conditions described herein and promptly notifying the Commissioner.

(b) In the event the Respondent discovers, a release or, based on site-specific circumstances, a threatened release of hazardous waste, including hazardous constituents, from a SWMU, or a combination of SWMUs, that poses a threat to human health or the environment, the Respondent shall identify interim corrective measures to mitigate this threat. The Respondent shall immediately summarize the nature and magnitude of the actual or potential threat and nature of the interim measures being considered and notify the Commissioner. Within thirty (30) calendar days of notifying the Commissioner, the Respondent shall submit to the Commissioner, for approval, an interim corrective measures work plan for the interim measures. The Respondent shall implement the measures specified by the Commissioner. Nothing herein shall preclude the Respondent from taking immediate action to address the conditions described herein and promptly notifying the Commissioner.

(c) The following factors may be considered by the Commissioner or the Respondent in determining the need for interim corrective measures:

(i) Time required to develop and implement a final corrective measure;

(ii) Actual and potential exposure of human and environmental receptors;

(iii) Actual and potential contamination of drinking water supplies and sensitive ecosystems;

(iv) The potential for further degradation of any impacted medium;

(v) Presence of hazardous waste, including hazardous constituents, in containers that may pose a threat of release;

(vi) Presence and concentration of hazardous waste, including hazardous constituents, in soils that have the potential to migrate to groundwater or surface water;

(vii) Weather conditions that may affect the current levels of contamination;

(viii) Risks of fire, explosion, or potential for exposure to hazardous wastes, including hazardous constituents, as a result of an accident or failure of container or handling system; and

(ix) Other situations that may pose threats to human health and the environment.

7. Determination of No Further Action.

(a) Based on the results of an RFI for a particular SWMU, or combination of SWMUs, and/or AOC, and other relevant information, the Respondent may submit an application to the Commissioner for a determination to terminate the subsequent corrective action requirements of this Exhibit. This application must contain information demonstrating no release(s) of hazardous wastes, including hazardous constituents, from the SWMU(s) and/or AOC(s) that pose a threat to human health or the environment. If, based upon review of the Respondent's request for a determination of no further action, the results of the RFI, and other information, , the Commissioner determines that the release(s) or the suspected release(s) investigated either are non-existent or do not pose a threat to human health or the environment, the Commissioner may grant the requested determination.

(b) A determination of no further action shall not preclude the Commissioner from implementing the following actions:

(i) Modifying this order at a later date to require the Respondent to perform such investigations as necessary to comply with the requirements of this Exhibit and its Appendices if new information or subsequent analysis indicates that there are, or are likely to be, releases from SWMUs/AOCs that may pose a threat to human health or the environment; and

(ii) Requiring continual or periodic monitoring of air, soil, groundwater, or surface water/sediment or subsurface gas, if necessary, to protect human health and the environment, when site-specific circumstances indicate the release(s) of hazardous waste, including hazardous constituents, are likely to occur from any SWMU(s) and/or AOC(s).

8. Compliance Schedule for Reporting.

(a) The Respondent shall submit, to the Commissioner, signed progress reports, as specified in approved work plans pursuant to this order, of all activities (i.e., SWMU Assessment, Interim Measures, RCRA Facility Investigation, Corrective Measures Study) conducted pursuant to the provisions of the Corrective Action Compliance Schedules of this Exhibit, beginning no later than thirty (30) calendar days after the Respondent is first required to begin implementation of any requirement herein. These reports shall contain:

(i) A description of the work completed during the reporting periods

(ii) Summaries of all findings made during the reporting period, including summaries of laboratory data;

(iii) Summaries of all changes made during the reporting period;

(iv) Summaries of all contacts made with representatives of the local community and public interest groups during the reporting period;

(v) Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

(vi) Changes in personnel conducting or managing the corrective action activities during the reporting period;

(vii) Projected work for the next reporting period; and

(viii) Copies of daily reports, inspection

reports, laboratory/monitoring data, etc., generated during the reporting period.

(b) Upon request, copies of other relevant reports and data not identified in Exhibit C Condition B.8.(a) shall be made available to the Commissioner.

(c) The Commissioner may require the Respondent to conduct new or more extensive assessments, investigations, or studies, based upon information provided in the progress reports referred to in Exhibit C Condition B.8(a) above, or upon other supporting information.

(d) All plans and schedules required by the conditions of this Exhibit and Appendix III-D are upon approval of the Commissioner, incorporated into this order by reference and become an enforceable part of this order. Any noncompliance with such approved plans and schedules shall constitute noncompliance with this order. Extensions of the due dates for submittals may be granted by the Commissioner in accordance with Exhibit C Condition E.14.

9. Compliance with Governmental Requirements. During investigative activities, interim corrective measures, and final corrective measures, (including, but not limited to, equipment decommissioning,

excavation and unit demolition) required under this Exhibit, the Respondent shall ensure that the transportation, treatment, storage, discharge, and disposal of all contaminated materials generated as a result of such activities (including, but not limited to, soils, sediments, liquids, tanks, pipes, pumps, rubble, debris, and structural materials) are performed in an environmentally sound manner pursuant to all applicable Federal, State and local requirements and that is protective of public health and the environment. Nothing in this Exhibit shall be construed to require the Respondent to proceed in a manner which is in violation of any such requirements.

10. Notifications.

(a) Notification of groundwater contamination. If at any time the Respondent discovers that hazardous constituents in groundwater that may have been released from a solid waste management unit or area of concern at the facility have migrated beyond the facility boundary in concentrations that exceed action levels, the Respondent shall, within fifteen (15) calendar days of discovery, provide written notice to the Commissioner and any person who owns or resides on the land which overlies the contaminated groundwater.

(b) Notification of air contamination. If at any time the Respondent discovers that hazardous constituents in air that may have been released from a solid waste management unit or area of concern at the facility have or are migrating to areas beyond the facility boundary in concentrations that exceed action levels, and that residences or other places at which continuous, long-term exposure to such constituents might occur are located within such areas, the Respondent shall, within fifteen (15) calendar days of such discovery;

(i) Provide written notification to the Commissioner, and

(ii) Initiate any actions that may be necessary to provide notice to all individuals who have or may have been subject to such exposure.

(c) Notification of residual contamination. If hazardous wastes or hazardous constituents in solid waste management units or areas of concern, or which have been released from solid waste management units or areas of concern, will remain in or on the land, including groundwater, the Commissioner may require the Respondent to record, in accordance with State law, a notation in the deed to the facility property or in some other instrument which is normally examined during title search that will, in perpetuity, notify any potential purchaser of the property of the types, concentrations, and locations of such hazardous wastes or hazardous constituents. The Commissioner may require such notice as part of the corrective measure's selection process.

C. **COMPLIANCE SCHEDULE FOR ASSESSMENT OF NEWLY IDENTIFIED SWMUS AND AOCS.**

1. Notification of Assessment. The Respondent shall notify the Commissioner, in writing, of any additional SWMU(s) and/or AOC(s) not listed in this Order, which are identified during the course of groundwater monitoring, field investigations, environmental audits, or other means within fifteen (15) calendar days after discovery.

2. SWMU/AOC Assessment Report. Within thirty (30) calendar days after notifying the Commissioner, the Respondent shall submit a SWMU/AOC Assessment Report. This Report must provide, at a minimum, the following information for each newly identified SWMU/AOC:

(a) Type of unit/area;

(b) Location of each unit/area on a topographic map of appropriate scale;

(c) Dimensions, capacities, and structural descriptions of the unit/area (supply available engineering drawings);

(d) Function of unit/area;

(e) Dates that the unit/area was operated;

(f) Description of the wastes that were placed or spilled at the unit/area;

(g) Description of any known releases from the unit/area (to include groundwater data, soil analyses, air monitoring data, and/or surface water/sediment data);

(h) The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes, including hazardous constituents, have occurred, are occurring, or are likely to occur from the unit/area; and

(i) Whether this unit/areas, individually or in combination with other units/areas described in Exhibit C Condition A.3. is a significant source of contaminant release.

3. SWMU/AOC Sampling and Analysis Plan. Within thirty (30) calendar days after submittal of the SWMU/AOC Assessment Report required in Exhibit C Condition C.2., the Respondent shall submit to the Commissioner for approval a Plan in accordance with the most recent version of the NYS RCRA Quality Assurance Project Plan Guidance, for any sampling and analysis of groundwater, land surface and subsurface strata, surface water/sediment or air, as necessary to determine whether a release of hazardous waste, including hazardous constituents, from such unit(s) and/or area(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU/AOC Sampling and Analysis Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste, including hazardous constituents, from the newly discovered SWMU(s) and/or AOC(s) to the environment.

4. Subsequent Assessment Actions. Following submission of the SWMU/AOC Assessment Sampling and Analysis Plan set forth in Exhibit C Condition C.3., subsequent activities for the Plan shall proceed in accordance with the following schedule:

(a) Meeting between the Respondent, the U.S. Environmental Protection Agency (Agency) and the New York State Department of Environmental Conservation (Department) to discuss Plan comments, as appropriate; and,

(b) Submission of a revised Plan to the Commissioner for approval within thirty (30) calendar days of the above-described meeting. (If the above referenced meeting is determined not to be necessary, the Respondent shall submit a revised Plan to the Commissioner, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days after Respondent's receipt of Plan comments from the Commissioner); and,

(c) Begin implementation of the SWMU/AOC Sampling and Analysis Plan within thirty (30) calendar days following written approval from the Commissioner for the Plan.

5. SWMU/AOC Sampling and Analysis Report. Within thirty (30) calendar days of receipt by the Respondent of validated analytical data generated under the approved SWMU/AOC Sampling and Analysis Plan, the Respondent shall follow reporting requirements in the approved Plan and submit a SWMU/AOC

Sampling and Analysis Report to the Commissioner. The Report shall describe all results obtained from the implementation of the approved Plan.

6. Assessment Conclusions. Based on the results of the SWMU/AOC Sampling and Analysis Report, the Commissioner shall determine the need for further investigations at the specific unit(s) covered in the SWMU/AOC Assessment Report. If the Commissioner determines that such investigations are needed, the Commissioner shall, by written notification, require the Respondent to prepare and submit for approval a RCRA Facility Investigation Work Plan in accordance with Exhibit C Condition E.5. et. seq..

D. COMPLIANCE SCHEDULE AND NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT SWMUS AND AOCS.

The Respondent shall notify the Commissioner, in writing, of any release(s) of hazardous wastes, including hazardous constituents, discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities no later than fifteen (15) calendar days after discovery. Such newly-discovered release(s) may be from the newly-identified unit(s)/area(s), from the unit(s)/area(s) for which, based on the findings of the RFA, the Commissioner had previously determined that no further investigation was necessary, or from the unit(s)/area(s) investigated as part of an RFI. Based on the information provided in the notification, the Commissioner shall determine the need for further investigation of the release(s). If the Commissioner determines that such investigations are needed, the Commissioner shall, by written notification, require the Respondent to prepare a RCRA Facility Investigation Work Plan in accordance with Exhibit C Condition E.5. et. seq..

E. CORRECTIVE ACTION REQUIREMENTS.

1. No Action Requirement.

(a) On the basis of the RCRA Facility Assessment Sampling Visit Report, dated June 3, 1997, as revised on September 24, 1998, the Commissioner has determined that there is no evidence at this time of the release(s) of hazardous waste(s) and/or constituent(s) that threaten human health or the environment from the following SWMU(s) and/or AOC(s) identified in Exhibit C Condition A.3:

SWMU/AOC	Description	RFA/RFI	Status
AOC 1	Former Transformer yard location	Part of the PR Report NYSDEC March 23, 1994.	NO FURTHER ACTION NYSDEC March 23, 1994
AOC 2	Engineering Physics Building and parking lot	Part of the PR Report NYSDEC March 23, 1994. The Engineering Physics Building parking lot is the location of a former electrical transformer which contained transformer fluid. Recommended a site-specific evaluation of the risk posed by contaminated soil. Required RFA Sampling Visit and based on the results an RFI. Final report submitted NYSDEC on June 16, 2017, and NYSDEC approval was received via email on September 26, 2017.	NO FURTHER ACTION PR Report identified RFI recommended site-specific evaluation NYSDEC March 23, 1994. RFA-Sampling Visit Report (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI. A Final Engineering Report – SWMU 8 and AOC 2 (CB&I 2017), documenting the remedial activities for SWMU 8 and AOC 2 was submitted to NYSDEC on June 16, 2017, and NYSDEC approval was received via email on September 26, 2017. No Further Action as the remedial alternative for AOC 2 was selected from the CMS report recommended
AOC 3	Transformer – Engineering Systems Building	Part of the PR Report NYSDEC March 23, 1994. Transformer surrounded by containment trench – leak detected 3/15/90. No RFA required.	NO FURTHER ACTION NYSDEC March 23, 1994

AOC 4	East Room – Applied Research Building	During a January 1998 excavation it was determined that a release of hazardous waste or constituents had occurred from SWMU-8, RFA sampling objective has been met. No further sampling occurred at this AOC during the site-wide RFA-SV. No RFI required based on excavation and removal.	NO FURTHER ACTION Residual Contamination was addressed through SWMU-8.
AOC 5	Hot Gas Cleanup Unit - Engineering Systems Building	RFA-Sampling Visit Report (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI. The findings of the RFI indicate that these areas do not exhibit contaminants in soil above industrial use SCOs, nor groundwater contamination above groundwater standards	NO FURTHER ACTION
SWMU 1a	Environmental Control Facility – Virgin Storage Area	Part of the PR Report NYSDEC March 23, 1994. Building housing typical storage quantity of forty 55-gallon drums on wooden pallets and overhead racks. No RFA required.	NO FURTHER ACTION
SWMU 1	Environmental Control Facility – Building 2	Part of the PR Report NYSDEC March 23, 1994. Identified as Waste Management Unit #5 in the CRD Part 373 Permit Application Active Waste Management Facility with no evidence of release. No RFA required.	NO FURTHER ACTION
SWMU 2	Environmental Control Facility – Reactives Room	Part of the PR Report NYSDEC March 23, 1994. Enclosed unit on concrete pad housing containers of total volume of 315 gallons. No RFA required.	NO FURTHER ACTION
SWMU 3	Environmental Control Facility – Loading Dock/Packaging Area	Part of the PR Report NYSDEC March 23, 1994. Roofed area on concrete pad – major area of waste handling activities. No RFA required.	NO FURTHER ACTION
SWMU 4	Environmental Control Facility – Building 3	Part of the PR Report NYSDEC March 23, 1994. Building on concrete pad with four bays which house different types of waste. Identified as Waste Management Units 5, 7 and 8 in CRD Part 373 Permit Application Active Waste Management Facility with no evidence of release. No RFA required.	NO FURTHER ACTION
SWMU 6	Former Waste Storage Area – Hydrogen Peroxide Storage Building	Part of the PR Report NYSDEC March 23, 1994. An 8 ft. by 12 ft. area where laboratory chemical wastes were stored. RFA Sampling Visit required. RFA Sampling Visit determined that no further investigation was required.	NO FURTHER ACTION
SWMU 6a	Former Propane Storage Tank Location – Hydrogen Peroxide Storage Building	Part of the PR Report NYSDEC March 23, 1994. Used to store propane only and its size and configuration was determined by close examination of existing features and interviews with current and former employees familiar with this SWMU. RFA Sampling Visit required. RFA Sampling Visit determined no	NO FURTHER ACTION

		further investigation was required.	
SWMU 7	Former Waste Packaging Area – Resin and Insulation Building	Part of the PR Report NYSDEC March 23, 1994 - Building used for packaging of laboratory chemicals prior to shipment for offsite disposal. No RFA required.	NO FURTHER ACTION
SWMU 8	Former Drum Storage Area – Applied Research Building (ARB)	PR Report identified submitted to NYSDEC March 23, 1994. RFA-Sampling Visit Report (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI RFI recommended site-specific evaluation. CMS report recommended Excavation and Off-site Disposal at a Chemical Waste Landfill as the remedial alternative for SWMU 8. A Final Engineering Report – SWMU 8 and AOC 2 (CB&I 2017), documenting the remedial activities for SWMU 8 and AOC 2 was submitted to NYSDEC on June 16, 2017, and NYSDEC approval was received via email on September 26, 2017.	NO FURTHER ACTION
SWMU 9	Former waste storage area – Applied Research Building (ARB)	Part of the PR Report NYSDEC March 23,1994. RFA-Sampling Visit Report (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI. The findings of the RFI indicate that these areas do not exhibit contaminants in soil above industrial use SCOs, nor groundwater contamination above groundwater standards.	NO FURTHER ACTION
SWMU 10	Former Waste Storage – KWB 501 and 518	Part of the PR Report NYSDEC March 23, 1994. Indoor storage area. No RFA required.	NO FURTHER ACTION
SWMU 11	Former Waste Storage Area – K-1 (Main Lab Building) 5B6/5B7	Part of the PR Report NYSDEC March 23, 1994. Two rooms used to store chemical wastes. No RFA required.	NO FURTHER ACTION
SWMU 12	Former Waste Storage Area – Chemistry and Engineering Building	Part of the PR Report NYSDEC March 23, 1994.Former waste pick-up area for wastes from pilot plant. No RFA required.	NO FURTHER ACTION
SWMU 13	Waste Storage Area – Room 328 – Chemistry and Engineering Building	Part of the PR Report NYSDEC March 23, 1994. Locked, heated, ventilated room inside building used for drum storage of wastes from pilot plant prior to transport to ECF. No RFA required.	NO FURTHER ACTION
SWMU 14	Former Waste Storage Area at Metallurgy and Ceramics Building	Part of the PR Report NYSDEC March 23, 1994. 6 ft. by 10 ft. three sided roofed building on concrete pad with curbing. Demolished in 1989 pad remains. Used for laboratory waste storage. Required RFA Sampling Visit. RFA Sampling Visit determined that no further investigation was required.	NO FURTHER ACTION
SWMU 15	Drum Storage Area – Engineering Systems Building	Part of the PR Report NYSDEC March 23, 1994. Concrete pad for drum storage. No RFA required.	NO FURTHER ACTION

SWMU 17	Environmental Control Facility – Neutralized Acid Tank	Part of the PR Report NYSDEC March 23, 1994. Below ground 4800 gallon lined fiberglass tank with original 5400 gallon concrete holding tank with 1 foot thick walls. No RFA required.	NO FURTHER ACTION
SWMU 18	Environmental Control Facility – Acid Neutralization Tank	Part of the PR Report NYSDEC March 23, 1994. Below ground 900 gallon fiberglass tank with an original 1100 gallon concrete tank with 1 foot thick walls. No RFA required.	NO FURTHER ACTION
SWMU 19	Waste Solvent Tank – Chemistry/Engineering Building	300-gallon covered below ground stainless steel tank within a steel tank; both tanks are contained within a concrete vault. No RFA required.	NO FURTHER ACTION
SWMU 20	Emergency Spill Tank - Chemistry/Engineering Building	A properly abandoned single-walled 1000 gallon emergency spill tank; located underground approximately 10 feet west of CEB. Accidental spilled material from the CEB laboratories was piped to and contained in the tank. No RFA required.	NO FURTHER ACTION
SWMU 21	Former Acid Pickling Tank – Metallurgy/Ceramics Building	14000 gallon covered below ground ceramic/brick tank used for neutralization of acids prior to discharge to sire sewer system. No RFA required.	NO FURTHER ACTION
SWMU 22	Former Waste Oil Tank Area: Metallurgy and Ceramics Building	PR Report submitted to NYSDEC March 23, 1994. RFA-Sampling Visit Report required (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI. The findings of the RFI indicate that these areas do not exhibit contaminants in soil above industrial use SCOs, nor groundwater contamination above groundwater standards.	NO FURTHER ACTION
SWMU 23	Storm water basin - Former Locations of Coal Wastewater Tanks: Engineering Systems Building	PR Report identified submitted to NYSDEC March 23, 1994. RFA-Sampling Visit Report (Nittany Geoscience, Inc. 1997a/b) and the October 16, 1998 letter from the NYSDEC as requiring an RFI. The findings of the RFI indicate that these areas do not exhibit contaminants in soil above industrial use SCOs, nor groundwater contamination above groundwater standards. As recommended in the RFI the catch basin in SWMU-23 was abandoned by diverting stormwater from the area and sealing the catch basin to prevent water from entering the basin.	NO FURTHER ACTION
SWMU 25	Wastewater Treatment Facility	Part of the PR Report NYSDEC March 23, 1994 – Employs primary/secondary treatment and treats an average of 350,000 gallons per day. No RFA required.	NO FURTHER ACTION
SWMU 26	Imhoff Tank	Part of the PR Report NYSDEC March 23, 1994 – The Imhoff Tank was used to store combined sanitary waste and lab sewer waste. RFA Sampling Visit	NO FURTHER ACTION

		determined no further investigation was required.	
SWMU 27	No.6 Fuel Oil Tank	Part of the PR Report NYSDEC March 23, 1994 – 150,000 aboveground tank with full concrete containment. No RFA required.	NO FURTHER ACTION
SWMU 28	Old No.6 Fuel Oil Tank	Part of the PR Report NYSDEC March 23, 1994 – 250,000 gallon concrete tank used to store Number 6 fuel oil. No RFA required.	NO FURTHER ACTION
SWMU 29	Four Wastewater Neutralization Tanks, Main Laboratory Building	Additional SWMUs/AOCs letter report dated March 20, 1996. Tank located in basement of Main Laboratory Building. No RFA required.	NO FURTHER ACTION
SWMU 30	Oil/Water Separator, Garage	Additional SWMUs/AOCs letter report dated March 20, 1996. Small oil/water separator on the floor of the garage. No RFA required.	NO FURTHER ACTION
SWMU 31	Construction and Demolition Landfill	Additional SWMUs/AOCs letter report dated March 20, 1996. Required RFA Sampling Visit. Approximately 130 ft. x 280 ft. and is located Northwest of the main building complex. Its usage began in the 1950s for the disposal of soil. concrete, blacktop and organic debris. RFA Sampling Visit determined no further investigation required.	NO FURTHER ACTION
SWMU 32	New Waste Oil Tank, Metallurgy and Ceramics Building	Additional SWMUs/AOCs letter report dated March 20, 1996. 2,000 gallon single walled steel tank with concrete vault in basement. No RFA required.	NO FURTHER ACTION
SWMU 33	Coal Pile Runoff Vault Engineering Systems Building	Additional SWMUs/AOCs letter report dated March 20, 1996 Coal pile sits on a concrete pad with 6-inch berm. No RFA required.	NO FURTHER ACTION
SWMU 34	Potassium Carbonate Tank – Braun Tower Pad	Additional SWMUs/AOCs letter report dated March 20, 1996. Process tank buried beneath concrete pad for Tower. No RFA required.	NO FURTHER ACTION
SWMU 35	Former Low Level Mixed Waste Storage Area, C-Wing, Main Laboratory Building	Additional SWMUs/AOCs letter report dated March 20, 1996. Cabinet storage of mixed wastes. No RFA required.	NO FURTHER ACTION
SWMU 36	GE Renewables Learning Center	SWMU questionnaire in accordance with the certification required in 6 NYCRR 373-1.4(a)(5)(iv) requested by DEC 8/2/21. GE response dated 8/14/21.	NO FURTHER ACTION

(b) The Respondent need not undertake corrective action at any SWMU(s) and/or AOC(s) identified in Exhibit C Condition E.1.(a) as long as there is no evidence of the release(s) of hazardous waste(s) or constituent(s) from the SWMU(s) and/or AOC(s) threatening human health or the environment. This condition does not apply to any other stipulation specified in other Exhibits or Conditions of this Order.

(c) A determination of no further action shall not preclude the Commissioner from requiring further investigations, studies, monitoring, or corrective measures, if new information or subsequent analysis indicates the release(s) or likelihood of release(s) from SWMU(s) and/or AOC(s) identified in Exhibit C Condition E.1.(a) that could pose a threat to human health or the environment.

2. Compliance Schedule for RCRA Facility Assessment ("RFA") Sampling Visit Work Plan.
Not applicable.

3. Compliance Schedule for RFA-SV Work Plan Implementation

Not applicable.

4. Compliance Schedule for RFA-Sampling Visit Report.

Not applicable.

5. Compliance Schedule for RCRA Facility Investigation ("RFI") Work Plan.

(a) On the basis of the RCRA Facility Assessment Sampling Visit Report, dated June 3, 1997, as revised on September 24, 1998 and subsequent investigations, the Commissioner has determined that there has been a release of hazardous waste and/or constituents from the following SWMU(s), or combination of SWMU(s), and/or AOC(s) identified in Exhibit Condition A.3. that require the completion of an RFI:

SWMU 5 (including SWMU 24)

(b) On the basis of the RCRA Facility Assessment Sampling Visit Report, dated June 3, 1997, as revised on September 24, 1998, the Commissioner has determined that there has been a release of hazardous waste and/or constituents from the following inaccessible SWMU(s) and/or AOC(s) identified in Exhibit C Condition A.3:

None identified.

(c) The Respondent shall submit to the Commissioner for approval a RCRA Facility Investigation Task I Report on Current Conditions, a Task II Report on Pre-Investigation Evaluation of Corrective Measures Technologies, and a Work Plan that meets the RFI Scope of Work included in Appendix III-B for the inaccessible SWMU(s) and/or AOC(s) identified in Exhibit C Condition E.5.(b)and/or identified pursuant to Exhibit C Condition C.6. no later than one-hundred and eighty (180) calendar days prior to the date when the SWMU(s) and/or AOC(s) become accessible for such an investigation. The RFI Work Plan shall be prepared in accordance with the provisions of Exhibit C Conditions E.5.(f)(i) through (iv). Accessibility to the SWMU(s) and/or AOC(s) shall be considered achievable when the impediment to the RFI (e.g. building, utilities) is demolished, abandoned, or to be altered in a manner that would allow access to the SWMU(s) and/or AOC(s).

(d) The Respondent shall submit to the Commissioner for approval a RCRA Facility Investigation Task I Report on Current Conditions required by the RFI Scope of Work included in Appendix III-B of this Exhibit. A Task I Report shall be submitted for approval within sixty (60) calendar days after the written notification by the Commissioner that an RFI is required pursuant to Exhibit C Conditions C.6., D. and/or E.4(b).

(e) The Respondent shall submit to the Commissioner for approval a RCRA Facility Investigation Task II Report on the Pre-Investigation Evaluation of Corrective Measures Technologies required by the RFI Scope of Work included in Appendix III-B of this Exhibit. A Task II Report shall be submitted for approval within ninety (90) calendar days after the written notification by the Commissioner that an RFI is required pursuant to Exhibit C Conditions C.6, D. and/or E.4.(b).

(f) The Respondent shall submit for approval a Work Plan to the Commissioner to address those units, releases of hazardous waste, including hazardous constituents, and media of concern which require the further investigations. A RFI Work Plan shall be submitted within ninety (90) calendar days after written notification by the Commissioner that an RFI is required pursuant to Exhibit C Conditions C.6., D., and/or E.4.(b).

(i) The Work Plan shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the nature, direction, rate, movement, and concentration of releases of hazardous waste, including hazardous constituents, from specific units or groups of units and areas, and their actual or potential receptors. The Work Plan shall detail all proposed activities and procedures to be conducted at the facility and/or off-site, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the RFI.

(ii) The Work Plan shall discuss sampling and data collection quality assurance and data management procedures, including formats for documenting and tracking data and other results of investigations, and health and safety procedures.

(iii) The Work Plan must, at a minimum, address all necessary activities or include descriptions to meet the requirements specified in Tasks III through V of the Scope of Work for a RCRA Facility Investigation included in Appendix III-B and its attachments to this Exhibit.

(iii) The Respondent may determine that any of the items required by Tasks III through V of the Scope of Work in Appendix III-B of this Exhibit have already been submitted or completed, and therefore, the resubmittal of those items are not necessary for completing the RFI. The Respondent shall request, within thirty (30) calendar days of the effective date of this order, and/or within thirty (30) calendar days of any notification by the Commissioner that an RFI is required that the Commissioner review for approval the Respondent's determination. At the time of the request, the Respondent must provide the following information:

(1) description of the items and/or summary of findings;
(2) description of investigations addressing the items, documents/reports of the investigations with dates, and summary of the findings; and
(3) copies of the documents/reports. Upon the Commissioner's approval of any previously performed items, the Respondent may delete these from the RFI Work Plan. However, upon disapproval of items, all activities necessary for the items must be included in the RFI Work Plan.

(g) Following submission of the RFI Work Plan set forth in Exhibit C Condition E.5.(f), subsequent activities for the Plan shall proceed in accordance with the following schedule:

(i) Meeting between the Respondent and the Department to discuss Plan comments, as appropriate; and

(ii) Submission of a revised Plan to the Commissioner for approval within thirty (30) calendar days of the above-described meeting. (If the above-referenced meeting is determined not to be necessary, the Permittee shall submit a revised Plan to the Commissioner, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days after Respondent's receipt of Plan comments from the Commissioner).

(h) The Commissioner shall review, for approval as part of the RFI Work Plan, any plans developed pursuant to Exhibit C Condition C.6, addressing further investigations of newly-identified SWMUs and/or AOCs, or Exhibit C Condition D, addressing newly discovered releases from units and/or areas. The Commissioner shall modify the Compliance Schedule of this Exhibit according to the modification procedures stipulated in Exhibit C Condition E.14. of this Exhibit to incorporate these units and areas and releases into the RFI Work Plan.

6. Compliance Schedule for RCRA Facility Investigation Work Plan Implementation

No later than thirty (30) calendar days after written notification by the Commissioner approving the RFI Work Plan, the Respondent shall begin implementation of the RFI according to the schedules specified in the RFI Work Plan. The RFI shall be conducted in accordance with the approved RFI Work Plan.

7. Compliance Schedule For RCRA Facility Investigation Final Report And Summary Report

(a) Within sixty (60) calendar days of receipt by the Respondent of validated analytical data generated under the approved RFI Work Plan, the Respondent shall submit to the Commissioner for approval the RFI Final and Summary Reports (Task VII of the Scope of Work for an RFI in Appendix III-B of this Exhibit). The RFI Final Report must contain adequate information to support further corrective action decisions at the facility and/or off-site, should such actions be necessary. The RFI Final Report shall describe the procedures, methods, and results of all facility investigations of SWMUs and AOCs and their releases, including information on the type and extent of contamination at the facility and/or off-site, sources and migration pathways, and actual or potential receptors. It shall present all information gathered under the approved RFI Work Plan. The RFI final report will include a comparison of media specific hazardous constituents with their corresponding action levels. The Summary Report shall describe more briefly the procedures, methods, and results of the RFI.

(b) Following submission of the Reports set forth in Exhibit C Condition E.7.(a), subsequent activities for the Report shall proceed in accordance with the following schedule:

(i) Meeting between the Respondent and the Department to discuss Report comments, as appropriate; and

(ii) Submission of a revised Report to the Commissioner for approval within forty-five (45) calendar days of the above-described meeting. (If the above-referenced meeting is determined not to be necessary, the Respondent shall submit a revised Report to the Commissioner, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days after Respondent's receipt of Report comments from the Commissioner).

(c) After the Commissioner approves the RFI Final Report and Summary Report, the Respondent shall mail the approved Summary Report to all individuals on the facility mailing list established by the Respondent, within thirty (30) calendar days of receipt of approval.

(d) A report summarizing the testing program required by Task VI of the Scope of Work for RFI in Appendix III-B of this Exhibit shall be submitted, as a separate document, at the same time as the RFI Final Report.

8. Compliance Schedule for Current Interim Corrective Measures

(a) Not Applicable

9. Compliance Schedule for Corrective Measures Study ("CMS") Scope of Work.

(a) Should a CMS be required, the Commissioner shall notify the Respondent in writing. This notice shall identify the hazardous constituent(s) which have exceeded the action level(s) as well as those which have been determined to threaten human health and the environment given site-specific exposure conditions or due to additive exposure risk. The notification shall specify target cleanup levels for hazardous constituents detected in each medium of concern, and may also specify corrective measure alternatives to be evaluated by the Respondent during the CMS.

(b) The Commissioner may require a Corrective Measures Study ("CMS") under the following conditions:

(i) If the concentrations of hazardous constituents in groundwater, surface water/sediment, soil, or air exceed their corresponding individual action levels; or

(ii) If the concentrations of hazardous constituents in groundwater, surface water/sediment, soil, or air do not exceed their corresponding individual action levels, but additive exposure risk due to the presence of multiple constituents is not protective of human health; or

(iii) If the concentrations of hazardous constituent in groundwater, surface water/sediment, soil, or air do not exceed corresponding individual action levels, but still pose a threat to human health or the environment, given site-specific exposure conditions.

(c) Not Applicable

(d) The CMS will be considered complete upon completion of Tasks I through IV required by the CMS Scope of Work included in Appendix III-C of this Exhibit. Within sixty (60) calendar days after a notification required by Exhibit C Condition E.9.(a) the Respondent shall complete Task I and submit to the Commissioner a Task I report and documents, if any, relevant to other Tasks.

(e) The Respondent shall submit for approval a CMS Plan to the Commissioner within sixty (60) calendar days after a notification required by Exhibit C Condition E.9.(a).

(i) The CMS Plan shall provide:

(1) A description of the general approach to investigating and evaluating potential corrective measure;

(2) A definition of the overall objectives of the study;

(3) The specific plans for evaluating corrective measure to ensure compliance with corrective measure standards;

(4) The schedules for conducting the study; and

(5) The proposed format for the presentation of information.

(ii) The CMS Plan must address, at a minimum, all necessary activities to complete Tasks II and III required by the CMS Scope of Work included in Appendix III-C of this Exhibit.

(f) Following submission of the CMS Plan set forth in Exhibit C Condition E.9.(e), subsequent activities for the Plan shall proceed in accordance with the following schedule:

(i) Meeting between the Respondent and the Department to discuss Plan comments, as appropriate; and

(ii) Submission of a revised Plan to the Commissioner for approval within thirty (30) calendar days of the above-described meeting. (If the above-referenced meeting is determined not to be necessary, the Respondent shall submit a revised Plan to the Commissioner, according to a schedule specified by the

Department, not to exceed forty-five (45) calendar days after Respondent's receipt of Plan comments from the Commissioner).

10. Compliance Schedule for Corrective Measures Study Implementation.

No later than thirty (30) calendar days after the Respondent has received written approval from the Commissioner for the CMS Plan, the Respondent shall begin to implement the CMS according to the schedules specified in the CMS Plan. The CMS shall be conducted in accordance with the approved Plan submitted pursuant to Exhibit C Condition E.9.

11. Compliance Schedule for Corrective Measures Study Final Report.

(a) Within forty-five (45) calendar days after the completion of the CMS, the Respondent shall submit for approval a CMS Final Report (Task IV) to the Commissioner. The CMS Final Report shall:

(i) Summarize the results of the investigations and, if applicable, of any bench-scale or pilot tests conducted;

(ii) Provide a detailed description of the corrective measures evaluated and include an evaluation of how each corrective measure alternative meets the standards set forth in Exhibit C Condition E.12(a).

(iii) Present all information gathered under the approved CMS Plan; and

(iv) Contain any additional information to support the Commissioner in the corrective measure selection decision-making process, described under Exhibit C Condition E.12.

(b) The CMS Final Report (Task IV) must address, at a minimum, all items necessary to demonstrate completion of Tasks II and III required by the CMS Scope of Work included in Appendix III-C of this Exhibit.

(c) Following submission of the CMS Report set forth in Exhibit C Condition E.11(a), subsequent activities for the Report shall proceed in accordance with the following schedule:

(i) Meeting between the Respondent and the Department to discuss the Report comments, as appropriate; and,

(ii) Submission of a revised Report to the Commissioner for approval within thirty (30) calendar days of the above-described meeting. (If the above referenced meeting is determined not to be necessary the Respondent shall submit a revised Report to the Commissioner, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days after Respondent's receipt of Report comments from the Commissioner.)

(d) As specified under Exhibit C Condition E.9.(a), based on preliminary results and the CMS Final Report, the Commissioner may require the Respondent to evaluate additional corrective measures or particular elements of one or more proposed corrective measures.

12. Corrective Measure(s) Selection.

(a) Based on the results of the documents submitted under Exhibit C Condition E.7. for the RFI, under Exhibit C Condition E.11. for the CMS, and any further evaluations of additional corrective measures under this study, the Commissioner shall select the corrective measure(s) that at a minimum will meet the following standards:

(i) Be protective of human health and the environment;

(ii) Attain media cleanup standards selected by the Commissioner during the corrective measures selection process;
(iii) Control the source(s) of release(s) so as to reduce or eliminate, to the maximum extent practicable, further releases of hazardous waste, including hazardous constituents, that might pose a threat to human health and the environment; and
(iv) Meet all applicable waste management requirements.

(b) In selecting the corrective measure(s) which meets the standards for corrective measures established under Exhibit C Condition E.12.(a), the Commissioner shall consider the following evaluation factors, as appropriate:

(i) Long-term reliability and effectiveness. Any potential corrective measure(s) may be assessed for the long-term reliability and effectiveness it affords, along with the degree of certainty that the corrective measure(s) will prove successful. Factors that shall be considered in this evaluation include:

(1) Magnitude of residual risks in terms of amounts and concentrations of hazardous waste, including hazardous constituents, remaining following implementation of the corrective measure(s), considering the persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous wastes, including hazardous constituents;

(2) The type and degree of long-term management required, including monitoring and operation and maintenance;

(3) Potential for exposure of humans and environmental receptors to remaining hazardous wastes, including hazardous constituents, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal or containment;

(4) Long-term reliability of the engineering and institutional controls, including uncertainties associated with land disposal of untreated hazardous wastes, including hazardous constituents, and their residuals; and,

(5) Potential need for replacement of the corrective measure(s).

(ii) Reduction of toxicity, mobility or volume. A potential corrective measure(s) may be assessed as to the degree to which it employs treatment that reduces toxicity, mobility or volume of hazardous wastes, including hazardous constituents. Factors that shall be considered in such assessments include:

(1) The treatment processes the corrective measure(s) employs and materials it would treat;

(2) The amount of hazardous wastes, including hazardous constituents, that would be destroyed or treated;

(3) The degree to which the treatment is irreversible;

(4) The residuals that will remain following treatment, considering the persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous wastes, including hazardous constituents; and

(5) All concentration levels of hazardous waste, including hazardous constituents, in each medium that the corrective measure(s) must achieve to be protective of human health and the environment.

(iii) The short-term effectiveness of a potential corrective measure(s) may be assessed considering the following:

(1) Magnitude of reduction of existing risks;

(2) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a corrective measure(s), including potential threats to human health and the environment associated with excavation, transportation, and redisposal or containment; and

(3) Time until full protection is achieved.

(iv) Implementability. The ease or difficulty of implementing a potential corrective measure(s) may be assessed by considering the following types of factors:

(1) Degree of difficulty associated with constructing the technology;

(2) Expected operational reliability of the technologies;

(3) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(4) Availability of necessary equipment and specialists;

(5) Available capacity and location of needed treatment, storage and disposal services; and

(6) Requirements for removal, decontamination, closure, or post closure of units, equipment, devices or structures that will be used to implement the corrective measure(s).

(v) Cost. The types of costs that may be assessed include the following:

(1) Capital costs;

(2) Operation and maintenance costs;

(3) Net present value of capital and operation and maintenance costs; and

(4) Potential future corrective measure costs.

13. Implementation of Corrective Measure(s).

(a) Based on information the Respondent submits in the RFI and Summary Reports, under Exhibit C Condition E.7, the CMS Final Report under Exhibit C Condition E.11., and other information, the Commissioner will select the corrective measure(s), pursuant to 6NYCRR 373-1.7(b) and 6NYCRR 621.14. A Statement of Basis will specify the selected corrective measure(s) and include, at a minimum the following:

(i) Description of all technical features of the corrective measure(s) that are necessary for achieving the standards for corrective measures established under Exhibit C Condition E.12.(a), including length of time for which compliance must be demonstrated at specified points of compliance;

(ii) All media cleanup standards for hazardous constituents, selected by the Commissioner, that the corrective measure(s) must achieve to be protective of human health and the environment;

(iii) All requirements for achieving compliance with these cleanup standards;

(iv) All requirements for complying with the standards for management of wastes;

(v) Requirements for removal, decontamination, closure or post-closure of units, equipment, devices or structures that will be used to implement the corrective measure(s);

(vi) A schedule for initiating and completing all major technical features and milestones of the corrective measure(s); and

(vii) Requirements for submission of reports and other information.

(b) Within thirty (30) calendar days after this order has been modified, the Respondent shall demonstrate in writing to the Commissioner financial assurance for completing the approved corrective measures.

14. Modification of the Compliance Schedules.

(a) If at any time the Respondent determines that modification of any Compliance Schedule of this Exhibit, including Appendix III-D, is necessary because such schedules cannot be met, the Respondent must:

(i) Notify the Commissioner in writing within fifteen (15) calendar days of such determination; and

(ii) Provide an explanation why the current schedule cannot be met.

(b) The Commissioner shall notify the Respondent in writing of the final decision regarding the Respondent's proposed modification to the Compliance Schedule.

(c) Compliance Schedule modifications finalized by the Commissioner according to this procedure shall not be subject to administrative appeal.

(d) Modifications to the Compliance Schedule pursuant to their procedure does not constitute a reissuance of this order.

Exhibit C Appendix -A
COMPONENTS REQUIRED FOR RCRA ANALYTICAL DATA SUBMITTED TO NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION*
General Electric Global Research Center (GE-GRC)
Order on Consent No:

A Report Narrative should accompany each submission, summarizing the contents, data and QA/QC results and all relevant circumstances of the work.
A. Parameter requested.
B. Sample Number or Numbers, Matrix, and:
1. Date and time collected;
2. Date extracted and/or digested;
3. Date and time analyzed; and
4. Chain of custody report and/or form, including confirmation of unbroken chain of custody, intact sample packaging and container seals and adequate temperature and/or other preservation.

C. Results b,e,f,
1. Sample Results;
2. Duplicate;
3. Blanksa;
4. Matrix Spike; matrix spike duplicate; blank spike; and
5. Surrogate recoveries, if applicable.

D. Supporting QA/QC
1. Methodology;
2. Method detection limits, instrument detection limits;
3. Linear curvesd;
4. Percent solids for soils, sludges, sediments, and where otherwise applicable;
5. Calculations;
6. Cleanup procedures;
7. Data validation procedures, results, and completed data validation checklists; and
8. Documentation which illustrates how blank water is determined to be analyte-free.
In addition to submitting the above, all sample data and its QA/QC data as specified in SW-846, 3rd edition, Chapter 1, must be maintained accessible to NYSDEC either in hard copy or on magnetic tape or disk (computer data files). The data, if requested by NYSDEC, should be formatted as described in SW-846, 3rd edition, Chapter 1. This requirement may be changed in the future to mandate computer data files, accessible to NYSDEC on request.

This does not obviate the requirement to do the QA/QC specified in each individual EPA-approved method.
* Components for RCRA submissions for non-contract Lab Protocols. If CLP, then CLP deliverables are required, unless otherwise stated in the approved plan.
a. The data should include all blanks (trip, equipment rinse, method and instrument blanks) as specified in the sampling and analysis plan, guidance and regulation.

b. Supporting QA/QC should be specific to the RCRA samples analyzed.

c. Every effort practicable must be made to achieve detection limits below regulatory limits and comparable to or better than the Practical Quantification Limits specified in the EPA-approved methods. In no case, will reporting limits above the specified PQL's be accepted without extensive and complete documentation to the Department.

d. These may not need to be submitted if adequate QA/QC summaries validating the data, including calibration control charts, correlation coefficients, etc., are submitted. The Report Narrative should describe the data validation and explain discrepancies. The supporting data should be provided to NYSDEC upon request, without restriction. Calibration data must include date and time of analysis.

e. Frequencies of blanks, duplicates, spikes, surrogates, calibrations, standard reference materials, etc., should be as stated in the approved sampling and analysis plan, the approved analytical methods and the SW-846 3rd edition, Chapter 1, requirements. If there are any perceived conflicts, these should be resolved with NYSDEC in advance of sampling.

f. Spiking for metals, organics or other parameters must be done before sample preparation (i.e. before digestions, extractions etc.) unless otherwise stated in the approved plan. Furnace analysis for metals will still require post-digestion spikes on all samples analyzed by this technique.

Exhibit C Appendix-B
Scope of Work For A
RCRA Facility Investigation
General Electric Global Research Center (GE-GRC)
Order on Consent No.

I. INTRODUCTION

The Respondent shall undertake a RCRA Facility Investigation ("RFI") that should include the development of several component plans and supporting reports relevant to the specific investigations to be undertaken pursuant to this order. Component plans and reports must be prepared and submitted in accordance with the Compliance Schedules in Exhibit C Condition III.E. and Appendix III-D of this Exhibit. The purpose of this RFI is to characterize the nature, extent, direction, rate, movement and concentration of releases of hazardous waste and/or constituents from Solid Waste Management Units and Areas of Concern at the facility including areas off-site impacted by the release(s) from the facility and to gather all necessary data to support the Corrective Measures Study. The Respondent shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RCRA Facility Investigation. The RFI Scope of Work includes several tasks:

Task I: A report on the Description of Current Conditions.

Task II: A report on the Pre-Investigation Evaluation of Corrective Measures.

Task III: RFI Management Plans including:

A. The Project Management Plan;
B. The Data Management Plan;
C. The Quality Assurance Project Plan;
D. The Health and Safety Plan; and
E. The Community Relations Plan.

Task IV: The Facility Investigation.

Task V: Investigative Analysis.

Task VI: Laboratory, Bench Scale, and Pilot Studies.

Task VII: Reports.

The report on Description of Current Conditions should comprise all available and relevant information and data on the facility's background, SWMU(s) and AOC(s) characterization, nature and extent of contamination, potential receptors, and prevailing corrective action implementation. Data and information gathered during any previous investigations, remediations, or inspections and other relevant data should be included in the submittal. That information and data may then be used to focus subsequent field investigations and development of the respective work plans for the SWMU(s) and AOC(s) to be investigated as part of this order. If the Respondent maintains that relevant information and data has been submitted, the Respondent should cite such submittal(s). The Respondent shall refer to Exhibit C Condition III.B.5. on addressing prior submittals.

The report on Pre-Investigation Evaluation of Corrective Measures will identify potential technologies that may be considered by the Respondent for subsequent implementation. These alternative technologies will focus the RFI to collect the necessary data for their proper evaluation.

The RFI Management Plans shall provide the necessary information that will assure that the following objectives are met:

- Proper management of all aspects of the RFI project including tracking of project milestones. Schedules and tracking methods shall be established for RFI tasks and report submittals (Project Management Plan); E Satisfactory presentation of data and results developed by the RFI. Data management procedures shall be established to effectively process data such that relevant data descriptions are readily accessible and accurately maintained (Data Management Plan); E Generation of valid data during the RFI investigation. QA/QC procedures shall be established to describe and document data quality (Quality Assurance Project Plan);

- Implementation of appropriate health and safety measures during the RFI. Health and safety procedures shall be established to ensure the health and safety of the investigative team(s) and the general public during the RFI (Health and Safety Plan); an

- Provision for informing the community of the results of the RFI (Community Relations Plan).

The Facility Investigation shall focus on procedures and techniques that will be utilized during field investigations to characterize the environmental setting and the contaminant release(s) from the SWMU(s) and AOC(s). Characterization of the environmental setting will be necessary to determine monitoring locations and to aid in defining the boundaries of the contaminated unit(s) and area(s). The Respondent shall characterize each environmental media, as deemed necessary by the Department, to provide information that can be used to determine the rate and extent of the contaminant release(s). Characterization of the contaminant release(s) from the SWMU(s) and AOC(s) will be necessary to determine the nature, extent, direction, rate, movement and concentration of the contaminant plume(s).

Since a potentially broad spectrum of situations involving information on a specific release(s) may exist at the beginning of the RFI, a flexible, phased approach for the release investigation may be necessary. The Respondent may begin with an evaluation of existing data and propose the collection of additional data as necessary to characterize the release. The Respondent may consider incorporating appropriate screening techniques, i.e., soil gas, geophysical methods, as the initial phase of field investigation for the RFI.

Based on existing data and/or data collected by appropriate screening techniques, the Respondent may develop a conceptual model of the release. This model may then be used to plan and develop subsequent investigations. The Respondent shall then develop work plans for the subsequent investigative program(s), as deemed necessary by the Department, utilizing conventional monitoring techniques capable of release(s) verification and/or characterization.

An Investigative Analysis shall be carried-out on the data generated by the Facility Investigation. The analysis shall focus on the quality of data generated and on establishing the nature, extent, direction, rate, movement and concentration of contamination.

Laboratory and/or Bench Scale Studies shall be performed to assess corrective measure technologies that may be applicable for remediating the SWMU(s), the AOC(s), and the environmental contamination

investigated by the Respondent. The information gathered from such studies will assist the Respondent in selecting the alternative technologies for evaluation during the Corrective Measures Study.

Progress reports on the Facility Investigation and Laboratory Bench Scale Studies shall be submitted quarterly in addition to a final RFI Report and Summary Report.

II. TASK I: DESCRIPTION OF CURRENT CONDITIONS

The Respondent shall submit a report for Task I containing available and relevant information and data on the facility's background, SWMU(s), AOC(s), contamination, receptors, and remediation undertaken pertinent to the specific SWMU(s) and AOC(s) to be investigated as part of this order.

A. Facility Background

The Respondent shall summarize the regional location, pertinent boundary features, general facility physiography, geology, hydrogeology, and historical use of the facility for the treatment, storage or disposal of solid and hazardous waste. The information shall include:

1. Map(s) depicting the following:

(a) General geographic location;

(b) Property lines, with the owners of all adjacent property clearly indicated;

(c) Topography and surface drainage depicting all waterways, wetlands, floodplains, water features, drainage patterns, and surface water containment areas;

(d) All above and underground tanks, buildings, utilities, paved areas, easements, rights-of-way, and other features;

(e) All known past and present solid or hazardous waste treatment, storage or disposal areas;

(f) All process sewers;

(g) Surrounding land uses (residential, commercial, agricultural, recreational); and

(h) The locations of all production, withdrawal, and groundwater monitoring wells at the facility and within the vicinity of the facility. These wells shall be clearly labeled and ground and top of casing elevations and construction details included (these elevations and details may be included as an attachment). All maps shall be consistent with the requirements set forth in 6NYCRR Subpart 373-1.5(a)(2)(xix) and be of sufficient detail and accuracy to locate and report all current and future work performed at the site.

2. A history and description of ownership and operation, solid and hazardous waste generation, treatment, storage and disposal activities at the facility.

3. Approximate dates or periods and description of past product, raw material, and waste spills; identification of the materials spilled; the amount spilled; the location where spilled; and a description of the response actions conducted (local, state, or federal response units or private parties), including any inspection reports or technical reports generated as a result of the response.

B. SWMU and AOC Characterization

The Respondent shall submit available and relevant information that will characterize the wastes, the SWMU(s) and the AOC(s) where wastes have been placed, collected or removed including: type; quantity; physical state; disposition (containment or nature of deposits); and facility characteristics affecting the release(s) (e.g., facility security, and engineered barriers). The information should include:

1. SWMU and AOC Characteristics:

(a) Location of unit/area (located on facility map);

(b) Type of unit/area;

(c) Design features;

(d) Operating practices (past and present);

(e) Period of operation;

(f) Age of unit/area; and

(g) General physical conditions.

2. Waste Characteristics:

(a) Type of waste placed in the unit/area:

(i) Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing or reducing agent);

(ii) Quantity; and

(iii) Chemical composition (e.g., Appendix VIII hazardous constituents).

(b) Physical and chemical characteristics of waste and its constituents:

(i) Physical state (solid, liquid, gas);

(ii) Physical description (e.g., powder, oily sludge);

(iii) Temperature;

(iv) pH;

(v) General chemical class (e.g., acid, base, solvent);

(vi) Molecular weight;

(vii) Density;

(viii) Boiling point;

(ix) Viscosity;

(x) Solubility in water;

(xi) Cohesiveness of the waste;

(xii) Vapor pressure;

(xiii) Flash point; and

(xiv) Other relevant properties.

(c) Migration and dispersal characteristics of the waste constituents and procedures used in making the determination:

(i) Sorption;

(ii) Biodegradability, bioconcentration, biotransformation;

(iii) Photodegradation rates;

(iv) Hydrolysis rates;

(v) Chemical transformations; and

(vi) Volatilization rates.

C. Nature, Extent, Direction, Rate, Movement and Concentration of Contamination
The Respondent shall submit available and relevant information on the nature, extent, direction, rate, movement and concentration of the release(s) from the SWMU(s) and the AOC(s). This information and data should include:

1. Summary of available monitoring data and qualitative information on locations and levels of contamination at the facility and within the vicinity of the facility if contamination has migrated off-site.

2. Summary of all potential contaminant migration pathways including available information on geology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality.

D. Potential Receptors

The Respondent shall submit available and relevant information describing the human populations and environmental systems that are susceptible to exposure by the contaminant release(s) from the SWMU(s) and the AOC(s). Data on observable effects or bioassays for ecosystems should accompany this submittal if available. The information shall include:

1. Local uses and possible future uses of groundwater:

(a) Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial);

(b) Location of groundwater users including wells and discharge areas (identify on a map); and

(c) The well(s) pump rate(s) and the well(s) depth(s).

2. Local uses and possible future uses of surface waters draining from the facility:

(a) Domestic and municipal (e.g. potable and lawn/gardening watering);

(b) Recreational (e.g. swimming, fishing);

(c) Agricultural;

(d) Industrial; and

(e) Environmental (e.g. fish and wildlife propagation).

3. Human use of or access to the facility and adjacent lands, including, but not limited to:

(a) Recreation;

(b) Hunting;

(c) Residential;

(d) Commercial;

(e) Zoning; and

(f) Relationship between population locations and prevailing wind direction.

4. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.

5. A description of the ecology overlying and adjacent to the facility.

6. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.

7. A description of any endangered or threatened species near the facility.

E. Corrective Action Implementation

The Respondent shall submit documentation on corrective measures (remedial measures) undertaken on-site or offsite at the facility. Remedial actions should include any interim corrective measures, RCRA closures, State or Federal Superfund activities. This documentation shall include:

1. Objectives of the remediation and how it is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;

2. Design, construction, operation, and maintenance requirements;

3. Schedules for design, construction and monitoring; and

4. Schedule for progress reports.

III. TASK II: PRE-INVESTIGATION EVALUATION OF CORRECTIVE MEASURES

The Respondent shall submit a report for Task II that identifies the potential corrective measure technologies that may be used on-site or off-site for the containment, treatment, remediation, and/or disposal of contamination. This report shall also identify any field data that needs to be collected in the facility investigation to facilitate the evaluation and selection of the final corrective measure or measures (e.g., compatibility of waste and construction materials, information to evaluate effectiveness, treatability of wastes, etc.).

IV. TASK III: RFI MANAGEMENT PLANS

The Respondent shall submit RFI Management Plans as part of the RFI Work Plan. The Plans shall address the methods and procedures necessary to manage the RFI, to describe data developed by the RFI, to gather and ensure valid RFI data, to protect the health and safety of investigators and the general public, and to keep the community informed about the RFI.

A. Project Management Plan

The Respondent shall prepare a Project Management Plan that shall include a discussion of the management approach, schedules, and personnel utilized during the RFI. That Plan shall include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This Plan shall also document the overall management approach to the RCRA Facility Investigation that will assure adherence to tasks and reporting schedules. The schedule for completing the RFI should reflect the schedules set forth in Exhibit C Condition III.E. and Appendix III-D. The schedule shall reflect dates for submittal of various RFI Work Plan components, dates for starting and accomplishing specific tasks associated with the RFI, and dates for reporting information from specific tasks to the Department.

B. Data Management Plan

The Respondent shall prepare a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

1. Data Record

The data record shall include, but not be limited to the following:

(a) Unique sample or field measurement code;

(b) Sampling or field measurement location and sample or measurement type;

(c) Sampling or field measurement raw data;

(d) Laboratory analysis ID number;

(e) Property or component measured; and

(f) Result of analysis (e.g., concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

(a) Unsorted (raw) data;

(b) Results for each medium, or for each constituent monitored;

(c) Data reduction for statistical analysis;

(d) Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and

(e) Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

(a) Display sampling location and sampling grid;

(b) Indicated boundaries of sampling area, and areas where more data are required;

(c) Display levels of contamination at each sampling location;

(d) Display geographical extent of contamination;

(e) Display contamination levels, averages, and maxima;

(f) Illustrate changes in concentration in relation to distance from the source, time, depth or other parameters; and

(g) Indicate features affecting intramedia transport and show potential receptors.

C. Quality Assurance Project Plan (QAPjP)

The Respondent shall prepare a QAPjP to document each phase of investigative work and all sampling and monitoring procedures to be implemented during the RFI. The following activities shall be covered in the QAPjP: sampling, field measurements and sample analysis performed during the investigations. This Plan shall ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. The QAPjP(s) shall be developed in accordance with the following guidance documents, "RCRA Quality Assurance Project Plan Guidance," "SW-846," and "Technical Enforcement Guidance Document." The Plan shall address all of the sixteen

(16) essential QA/QC elements stipulated in the "RCRA Quality Assurance Project Plan Guidance." A summary of the QA/QC elements that shall be in the Plan is found in the subsequent paragraphs.

1. Data Quality Objectives

The QAPjP shall include, but not be limited to the following:

(a) Description of the intended uses for the data, and the necessary level of precision and accuracy for these intended uses;

(b) Description of methods and procedures to be used to assess the precision, accuracy and completeness of the measurement data;

(c) Description of the rationale used to assure that the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition or an environmental condition; and

(d) Description of the measures to be taken to assure that data sets can be compared to each other.

2. Sampling and Field Measurements

The QAPjP shall include, but not be limited to the following:

(a) Sampling and field measurement locations, depths, etc.;

(b) Collecting all necessary ancillary data;

(c) Conditions under which sampling and field measurements should be conducted;

(d) Media to be sampled and addressed by field measurements (e.g., groundwater, air, soil, sediment, etc.);

(e) Parameters to be measured and where;

(f) The frequency of sampling and field measurements and length of sampling period;

(g) The types of sample (e.g., composites vs. grabs) and number of samples to be collected;

(h) Measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;

(i) Documenting field sampling and measurement operations and procedures, including;

(i) Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, and adsorbing reagents);

(ii) Procedures and forms for recording raw data and the exact location, time, and specific considerations associated with sample and data acquisition;

(iii) Documentation of specific sample preservation method;

(iv) Calibration of field devices;

(v) Collection of replicate samples and measurements;

(vi) Submission of field-biased blanks, where appropriate;

(vii) Potential interferences present at the facility;

(viii) Construction materials and techniques, associated with monitoring wells and piezometers;

(ix) Field equipment listing and sample containers;

(x) Sampling and field measurement order; and

(xi) Decontamination procedures.

(j) Selecting appropriate sample containers;

(k) Sample preservation; and

(l) Chain-of-Custody, including:

(i) Standardized field tracking reporting forms to establish sample custody in the field prior to and during shipment; and

(ii) Pre-prepared sample labels containing all information necessary for effective sample tracking.

3. Sample Analysis

The QAPjP shall include, but not be limited to the following:

(a) Chain-of-custody procedures, including:

(i) Identification of a responsible party to act as sample custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;

(ii) Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and

(iii) Specification of laboratory sample custody procedures for sample handling, storage, and disbursement for analysis.

(b) Sample storage procedures and storage times;

(c) Sample preparation methods;

(d) Analytical procedures, including:

(i) Scope and application of the procedure;

(ii) Sample matrix;

(iii) Potential interferences;

(iv) Precision and accuracy of the methodology; and

(v) Method detection limits.

(e) Calibration procedures and frequency;

(f) Data reduction, validation and reporting;

(g) Internal quality control checks, laboratory performance and systems audits and frequency, including:

(i) Method blank(s);

(ii) Laboratory control sample(s);

(iii) Calibration check sample(s);

(iv) Replicate sample(s);

(v) Matrix-spikes sample(s);

(vi) "Blind" quality control sample(s);

(vii) Control charts;

(viii) Surrogate samples;

(ix) Zero and span gases; and

(x) Reagent quality control checks.

(h) Preventive maintenance procedures and schedules;

(i) Corrective action (for laboratory problems); and

(j) Turnaround time.

D. Health and Safety Plan

The Respondent shall prepare a Health and Safety Plan for the protection of the investigative team(s), workers, and general public which may be exposed to hazards.

1. The Health and Safety Plan shall include, but not be limited to the following:

(a) Facility description including availability of resources such as roads, water supply, electricity and telephone service;

(b) Describe the known hazards and evaluate the risks associated with the incident and with each activity conducted;

(c) List key personnel and alternates responsible for site safety, response operations, and for protection of public health;

(d) Delineate work areas;

(e) Describe levels of protection to be worn by personnel in work areas;

(f) Establish procedures to control site access;

(g) Describe decontamination procedures for personnel and equipment;

(h) Establish site emergency procedures;

(i) Address emergency medical care for injuries and toxicological problems;

(j) Describe requirements for an environmental surveillance program;

(k) Specify any routine and special training required for responders; and

(l) Establish procedures for protecting workers from weather-related problems.

2. The Facility Health and Safety Plan shall be consistent with:

(a) NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985);

(b) EPA Order 1440.1 - Respiratory Protection;

(c) EPA Order 1440.3 - Health and Safety Requirements for Employees engaged in Field Activities;

(d) Facility Contingency Plan;

(e) EPA Standard Operating Safety Guide (1984);

(f) OSHA regulations particularly in 29 CFR " 1910 and 1926;

(g) State, local, and other federal agency (e.g., DOD, DOE) regulations; and

(h) Other EPA guidance as provided.

E. Community Relations Plan

The Respondent shall prepare a plan on disseminating information to the public regarding investigation activities and results. The plan should identify who will be notified and will receive summary RFI reports.

V. TASK IV: THE FACILITY INVESTIGATION

The Respondent shall submit a workplan that shall address the techniques and procedures necessary to characterize the environmental setting at and within the vicinity of the facility and the media-specific contamination resulting from the release(s) by the SWMU(s) and the AOC(s). The part of the workplan that addresses field sampling and measurement activities shall meet the sampling plan requirements stipulated in the "RCRA Quality Assurance Project Plan

Guidance."

A. Environmental Setting

The Respondent shall submit an appropriate plan on collecting information to supplement existing information on the environmental setting at the facility and in the vicinity of the facility. Sufficient information shall be collected by the Respondent to characterize only those environmental media impacted by the release(s) from the SWMU(s) and the AOC(s):

1. Hydrogeology

The Respondent shall conduct a program to characterize the hydrogeologic conditions at the facility and the off-site areas where contamination has migrated. The program shall provide relevant information on geology and hydrogeology that should include, but not be limited to the following facts:

(a) A description of the regional and facility specific geologic and hydrogeologic characteristics which affect groundwater flow both beneath and within the vicinity of the facility, including:

(i) Regional and facility specific geomorphology and stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;

(ii) Structural geology: description of local and regional structural features (e.g., folds, faults, joints, and fractures);

(iii) Identification and characterization of areas and amounts of recharge and discharge;

(iv) Regional and facility specific groundwater flow patterns; and

(v) Characterize seasonal variations in the groundwater flow regime.

(b) An analysis of any topographic features that might influence the groundwater flow system.

(c) Based on field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways (i.e., the aquifers and any intervening saturated and unsaturated units), including:

(i) Hydraulic conductivity and porosity (total and effective);

(ii) Lithology, grain size, sorting, degree of cementation;

(iii) An interpretation of hydraulic interconnections between saturated zones; and

(iv) The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content etc.).

(d) Based on field studies and cores, structural geology and hydrogeologic cross sections, a description of the extent (depth, thickness, lateral extent) of hydrogeologic units which may be part of the migration pathways, including:

(i) Sand and gravel deposits in unconsolidated deposits;

(ii) Zones of fracturing or channeling in consolidated or unconsolidated deposits;

(iii) Zones of higher permeability or low permeability that might direct and restrict the flow of contaminants;

(iv) The uppermost aquifer: geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs; and

(v) Water-bearing zones above the first confining layer that may serve as a pathway for contaminant migration including perched zones of saturation.

(e) Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, a representative description of water level or fluid pressure monitoring including:

(i) Water-level contour and/or potentiometric maps;

(ii) Hydrologic cross sections showing vertical gradients;

(iii) The flow system, including the vertical and horizontal components of flow; and

(iv) Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.

(f) A description of man-made influences that may affect the hydrogeology, identifying:

(i) Active and inactive local water-supply and production wells with an approximate schedule of pumping; and

(ii) Man-made hydraulic structures (sewers, pipelines, French drains, ditches, unlined ponds, septic tanks, outfalls, retention areas, etc.).

2. Soils

The Respondent shall conduct a program to characterize the soil and rock units above the water table in the vicinity of the contaminant release(s). The program shall provide relevant information on soil characterization that should include, but not be limited to the following facts:

(a) SCS soil classification;

(b) Surface soil distribution;

(c) Soil profile, including ASTM classification of soils;

(d) Transects of soil stratigraphy;

(e) Hydraulic conductivity (saturated and unsaturated);

(f) Relative permeability;

(g) Bulk density;

(h) Porosity;

(i) Soil sorptive capacity;

(j) Cation exchange capacity (CEC);

(k) Soil organic content;

(l) Soil pH;

(m) Particle size distribution;

(n) Depth of water table;

(o) Moisture content;

(p) Effect of stratification on unsaturated flow;

(q) Infiltration;

(r) Evapotranspiration;

(s) Storage capacity; and

(t) Mineral content.

3. Surface Water and Sediment

The Respondent shall conduct a program to characterize the surface-water bodies in the vicinity of the contaminant release(s). The program shall provide relevant information on surface water and sediment characterization that should include, but not be limited to the following facts:

(a) Description of the temporal and permanent surface-water bodies including:

(i) For lakes and estuaries: location, elevation, surface area, inflowoutflow characteristics, depth, temperature stratification, and volume;

(ii) For impoundments: location, elevation, surface area, depth, volume, inflowoutflow characteristics, freeboard, and purpose of impoundment;

(iii) For rivers, streams, ditches, drains, swamps and channels: location, elevation, flow, velocity, depth, width, inflow-outflow characteristics, seasonal fluctuations, and flooding tendencies (i.e., 100 year event);

(iv) Drainage patterns; and

(v) Evapotranspiration.

(b) Description of the chemistry of the surface water. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients (NH3, NO3 -/NO2, PO4 -3), chemical oxygen demand, total organic carbon, and specific contaminant concentrations.

(c) Description of sediment characteristics including:

(i) Deposition area;

(ii) Thickness profile; and

(iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, and pH).

4. Air

The Respondent shall conduct a program to characterize the climate at the facility and in the vicinity of the facility when contamination migrates off-site. The program shall provide relevant information on climatic conditions that should include, but not be limited to the following facts:

(a) A description of the following parameters:

(i) Annual and monthly rainfall averages;

(ii) Monthly temperature averages and extremes;

(iii) Wind speed and direction;

(iv) Relative humidity/dew point;

(v) Atmospheric pressure;

(vi) Evaporation data;

(vii) Development of inversions; and

(viii) Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence.

(b) A description of topographic and man-made features which affect air flow and emission patterns, including:

(i) Ridges, hills or mountain areas;

(ii) Canyons or valleys;

(iii) Surface-water bodies (e.g., rivers, lakes, bays, etc.);

(iv) Wind breaks and forests;

(v) Buildings; and

(vi) Existing man-made air emission sources

(e.g., industrial processes, residences, etc.).

B. Contamination Characterization Plan

The Respondent shall submit a workplan on collecting analytical data to supplement existing data on groundwater, soils, surface water, sediment, air and subsurface gas contamination. This data shall be sufficient to define the nature, extent, origin, direction, and rate of movement of contaminant plume(s) in the environmental medium impacted by the release(s) from the SWMU(s) and AOC(s).

1. Groundwater Contamination

The Respondent shall conduct a program to characterize any plume(s) of contamination at the facility and any plume(s) that have migrated offsite. The program shall provide relevant information on groundwater contamination that should include, but not be limited to the following facts:

(a) A description of the horizontal and vertical extent of any immiscible or dissolved plume(s);

(b) The horizontal and vertical direction of contamination movement;

(c) The velocity of contaminant movement;

(d) The horizontal and vertical concentration profiles of contaminant constituents in the plume(s);

(e) An evaluation of factors influencing the plume movement, specific contaminant movement, and specific contaminant transformation (e.g., physical, chemical, biological, etc.); and

(f) An extrapolation of future contaminant movement.

2. Soil Contamination

The Respondent shall conduct a program to characterize the contamination of the soil and rock units above the water table in the vicinity of the contaminant release(s). The program shall provide relevant information on soil contamination that should include, but not be limited to the following facts:

(a) A description of the vertical and horizontal extent of contamination.

(b) A description of relevant contaminant chemical properties within the contaminant source area and plume. This includes contaminant solubility, speciation, adsorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation.

(c) Specific contaminant concentrations.

(d) The velocity and direction of contaminant movement.

(e) An extrapolation of future contaminant movement.

3. Surface-Water and Sediment Contamination

The Respondent shall conduct a program to characterize the contamination in surface-water bodies resulting from the contaminant release(s) at the facility. The program shall provide relevant information on surface water and sediment contamination that shall include, but not be limited to the following facts:

(a) A description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the facility, and the extent of contamination in underlying sediments;

(b) The horizontal and vertical direction of contaminant movement;

(c) The contaminant velocity;

(d) An evaluation of the physical, biological and chemical factors influencing contaminant movement;

(e) An extrapolation of future contaminant movement; and

(f) The toxicity of the sediment and adjacent water column to aquatic life.

4. Air Contamination

The Respondent shall conduct a program to characterize the particulate and gaseous contaminants released into the atmosphere. The program shall provide relevant information on air emissions that should include, but not be limited to the following facts:

(a) A description of the horizontal and vertical direction and velocity of contaminant movement;

(b) The rate and amount of the release; and

(c) The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

5. Subsurface Gas Contamination

The Respondent shall conduct a program to characterize subsurface gas contamination in the soil. The program shall provide relevant information on subsurface gas contamination that should include, but not be limited to the following facts:

(a) A description of the horizontal and vertical extent of subsurface gas migration;

(b) The chemical composition of the gases being emitted;

(c) The rate, amount, and density of the gases being emitted; and

(d) Horizontal and vertical concentration profiles of the subsurface gases emitted.

VI. TASK V: INVESTIGATION ANALYSIS

The Respondent shall prepare an analysis and summary of all facility investigations and their results. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature, rate, and extent of contamination, potential threat to human health and/or the environment, and to support the Corrective Measures Study.

A. Data Analysis

The Respondent shall analyze all facility investigation data outlined in Task IV and prepare a report on the nature, rate, and extent of contamination at the facility including sources and migration pathways. The report shall describe the nature and extent of contamination (qualitative/ quantitative) in relation to background levels indicative for the area.

B. Protection Standards

The Respondent shall identify all relevant and applicable standards and action levels (e.g., health based guidance values) for the protection of human health and the environment.

VII. TASK VI: LABORATORY AND BENCH SCALE STUDIES

The Respondent shall conduct laboratory and/or bench scale studies to determine the applicability of a corrective measure technology or technologies to facility conditions. The Respondent shall analyze the technologies, based on literature review, vendor contracts, and past experience to determine the testing requirements. The Respondent shall develop a testing plan identifying the type(s) and goal(s) of the study(s), the level of effort needed, and the procedures to be used for data management and interpretation. Upon completion of the testing, the Respondent shall evaluate the testing results to assess the technology

or technologies with respect to the site-specific questions identified in the test plan. The Respondent shall prepare a report summarizing the testing program and its results, both positive and negative.

VIII. TASK VII: REPORTS

A. Progress Reports

The Respondent shall provide signed progress reports as required by Condition B.8.(a) of Exhibit C of this order.

B. Draft and Final Reports

The Respondent shall prepare a RCRA Facility Investigation ("RFI") Report as required by Condition E.7 of Exhibit C of this order. The RFI Report shall present all information gathered under the approved RFI Workplan.

Exhibit C - Appendix C

SCOPE OF WORK FOR A CORRECTIVE MEASURE STUDY

General Electric Global Research Center

Order on Consent No.;

I. PURPOSE

The purpose of this Corrective Measure Study (CMS) is to develop and evaluate the corrective action alternative or alternatives and to recommend the corrective measure or measures to be taken. The Respondent will furnish the personnel, materials, and services necessary to prepare the corrective measure study, except as otherwise specified.

II. SCOPE

The Corrective Measure Study consists of four tasks:

Task I: Identification and Development of the Corrective Measure Alternative or Alternatives

A. Description of Current Situation

B. Establishment of Corrective Action Objectives

C. Screening of Corrective Measures Technologies

D. Identification of the Corrective Measure Alternative or Alternatives Task II: Evaluation of the Corrective Measure Alternative or Alternatives

A. Technical/Environmental/Human Health/Institutional

B. Cost Estimate

Task III: Justification and Recommendation of the Corrective Measure or Measures

A. Technical

B. Human Health

C. Environmental Task IV: Reports

A. Progress

B. Final

III. TASK I: IDENTIFICATION AND DEVELOPMENT OF THE CORRECTIVE ACTION ALTERNATIVE OR ALTERNATIVES

Based on the results of the RCRA Facility Investigation and consideration of the identified Preliminary Corrective Measure Technologies (Task II of Appendix III-B), the Respondent shall identify, screen, and develop the alternative or alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action.

A. Description of Current Situation

The Respondent shall submit an update to the information describing the current situation at the facility and the known nature and extent of the contamination as documented by the RCRA Facility Investigation Report. The Respondent shall provide an update to information presented in Task I of the RFI to the Commissioner regarding previous response activities and any interim measures which have or are being implemented at the facility. The Respondent shall also make a facility specific statement of the purpose for the response, based on the results of the RCRA Facility Investigation ("RFI"). The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

B. Establishment of Corrective Action Objectives

The Respondent, in conjunction with the Department, shall establish site specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA and New York State guidance, and the requirements of any applicable federal and state statutes. At a minimum, all corrective actions concerning groundwater releases from regulated units must be consistent with, and as stringent as, those required under 6NYCRR 373-2.6.

C. Screening of Corrective Measure Technologies

The Respondent shall review the results of the RFI and reassess the technologies specified in Task II and identify additional technologies which are applicable at the facility. The Respondent shall screen the preliminary corrective measure technologies identified in Task II of the RFI and any supplemental technologies to eliminate those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations. Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

1. Site Characteristics

Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration;

2. Waste Characteristics

Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site); and

3. Technology Limitations

During the screening process, the level of technology development, performance record, and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.

D. Identification of the Corrective Measure Alternative or Alternatives

The Respondent shall develop the corrective measure alternative or alternatives based on the corrective action objectives and analysis of the Preliminary Corrective Measure Technologies, as presented in Task II of the RFI and as supplemented following the preparation of the RFI Final Report. The Respondent shall rely on engineering practice to determine which of the previously identified technologies appear most suitable. Technologies can be combined to form the overall corrective action alternative or alternatives. The alternative or alternatives developed should represent a workable number of option(s) that each appear to adequately address all problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. The Respondent shall document the reasons for excluding technologies, identified in Task II, as supplemented in the development of the alternative or alternatives.

IV. TASK II: EVALUATION OF THE CORRECTIVE MEASURE ALTERNATIVE OR

ALTERNATIVES

The Respondent shall describe each corrective measure alternative that passes through the Initial Screening in Task I of Appendix III-C and evaluate each corrective measure alternative and it's components. The evaluation shall be based on technical, environmental, human health and institutional concerns. The Respondent shall also develop cost estimates of each corrective measure.

A. Technical/Environmental/Human Health/Institutional

The Respondent shall provide a description of each corrective measure alternative which includes, but is not limited to the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. The Respondent shall evaluate each alternative in the four following areas:

1. Technical

The Respondent shall evaluate each corrective measure alternative based on performance, reliability, implement ability and safety.

(a) The Respondent shall evaluate performance based on the effectiveness and useful life of the corrective measure:

(i) Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure

shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies; and

(ii) Useful life is defined as the length of

time the level of effectiveness can be maintained. Most corrective measure technologies, with the exception of destruction, deteriorate with time. Often, deterioration can be slowed through proper system operation and maintenance, but the technology eventually may require replacement. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

(b) The Respondent shall provide information on the reliability of each corrective measure including their operation and maintenance requirements and their demonstrated reliability:

(i) Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straight forward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered; and

(ii) Demonstrated and expected reliability is a way of measuring the risk and effect of failure. The Respondent should evaluate whether the technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes.

(c) The Respondent shall describe the implement ability of each corrective measure including the relative ease of installation (constructability) and the time required to achieve a given level of response:

(i) Constructability is determined by conditions both internal and external to the facility conditions and include such items as location of underground utilities, depth of water table, heterogeneity of subsurface materials, and location of the facility (i.e., remote location vs. a congested urban area). The Respondent shall evaluate what measures can be taken to facilitate construction under these conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities; and

(ii) Time has two components that shall be addressed:

(1) the time it takes to implement a corrective measure; and

(2) the time it takes to actually see beneficial results. Beneficial results are defined as the reduction of contaminants to some acceptable, preestablished level.

(d) The Respondent shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Among the factors to consider are fire, explosion, and exposure to hazardous substances.

2. Environmental

The Respondent shall perform an Environmental Assessment for each alternative. The Environmental Assessment shall focus on the facility conditions and pathways of contamination actually addressed by each alternative. The Environmental Assessment for each alternative will include, at a minimum, an evaluation of: the short and long term beneficial and adverse effects of the response alternative; any adverse effects on environmentally sensitive areas; and an analysis of measures to mitigate adverse effects.

3. Human Health

The Respondent shall assess each alternative in terms of the extent to which it mitigates short and long term potential exposure to any residual contamination and protects human health both during and after implementation of the corrective measure. The assessment will describe the levels and characterizations of contaminants on-site, potential exposure routes, and potentially affected populations. Each alternative will be evaluated to determine the level of exposure to contaminants and the reduction over time. For management of mitigation measures, the relative reduction of impact will be determined by comparing residual levels of each alternative with existing criteria, standards, or guidelines.

4. Institutional

The Respondent shall assess relevant institutional needs for each alternative. Specifically, the effects of Federal, State, and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative.

B. Cost Estimate

The Respondent shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of the alternative). The cost estimate shall include both capital, operation and maintenance costs.

1. Capital costs consist of direct (construction) and indirect (nonconstruction and overhead) costs.

(a) Direct capital costs include:

(i) Construction costs: Costs of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measure;

(ii) Equipment costs: Costs of treatment, containment, disposal and/or service equipment necessary to implement the action; these materials remain until the corrective action is complete;

(iii) Land and site-development costs: Expenses associated with purchase of land and development of existing property; and

(iv) Buildings and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

(b) Indirect capital costs include:

(i) Engineering expenses: Costs of administration, design, construction supervision, drafting, and testing of corrective measure alternatives;

(ii) Legal fees and license or permit costs: Administrative and technical costs necessary to obtain licenses and permits for installation and operation;

(iii) Startup and shakedown costs: Costs incurred during corrective measure startup; and

(iv) Contingency allowances: Funds to cover costs resulting from unforeseen circumstances, such as adverse weather conditions, strikes, and inadequate facility characterization.

2. Operation and maintenance costs are postconstruction costs necessary to ensure continued effectiveness of a corrective measure. The Respondent shall consider the following operation and maintenance cost components;

(a) Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for postconstruction operations;

(b) Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;

(c) Auxiliary materials and energy: Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;

(d) Purchased services: Sampling costs, laboratory fees, and professional fees for which the need can be predicted;

(e) Disposal and treatment costs: Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues generated during operations;

(f) Administrative costs: Costs associated with administration of corrective measure operation and maintenance not included under other categories;

(g) Insurance, taxes, and licensing costs: Costs of such items as liability and sudden accidental insurance; real estate taxes on purchased land or rights-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;

(h) Maintenance reserve and contingency funds: Annual payments into escrow funds to cover (1) costs of anticipated replacement or rebuilding of equipment and (2) any large unanticipated operation and maintenance costs; and

(i) Other costs: Items that do not fit any of the above categories.

V. TASK III: JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURE OR MEASURES

The Respondent shall justify and recommend a corrective measure alternative using technical, human health, and environmental criteria. This recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Tradeoffs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Commissioner will select the corrective measure alternative or alternatives to be implemented based on the results of Tasks II and III of Appendix III-C. At a minimum, the following criteria will be used to justify the final corrective measure or measures.

A. Technical

1. Performance - corrective measure or measures which are most effective at performing their intended functions and maintaining the performance over extended periods of time will be given preference;

2. Reliability - corrective measure or measures which do not require frequent or complex operation and maintenance activities and that have proven effective under waste and facility conditions similar to those anticipated will be given preference;

3. Implementability - corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

4. Safety - corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

B. Human Health

The corrective measure or measures must comply with existing EPA and/or State criteria, standards, or guidelines for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.

C. Environmental

The corrective measure or measures posing the least adverse impact (or greatest improvement) over the shortest period of time on the environment will be favored.

VI. TASK IV: REPORTS

A. Progress Reports

The Respondent shall provide the Commissioner with signed progress reports as required by Condition B.8.(a) of this Exhibit.

B. Corrective Measures Study ("CMS") Final Report

The Respondent shall prepare a CMS Final Report as required by Condition E.11. of this Exhibit. The CMS Final Report shall include all information gathered under the approved CMS Workplan.

The CMS Final Report shall at a minimum include:

1. A description of the facility;

(a) Site topographic map and preliminary layouts.

2. A summary of the corrective measure or measures;

(a) Description of the corrective measure or measures and rationale for selection;

(b) Performance expectations;

(c) Preliminary design criteria and rationale;

(d) General operation and maintenance requirements; and

(e) Long-term monitoring requirements.

3. A summary of the RCRA Facility Investigation and impact on the selected corrective measure or measures;

(a) Field studies (groundwater, surface-water, soil, air); and

(b) Laboratory studies (bench scale, pilot scale).

4. Design and Implementation Precautions;

(a) Special technical problems;

(b) Additional engineering data required;

(c) Permits and regulatory requirements;

(d) Access, easements, right-of-way;

(e) Health and safety requirements; and

(f) Community relations activities.

5. Cost Estimates and Schedules;

(a) Capital cost estimate;

(b) Operation and maintenance cost estimate; and

(c) Project schedule (design, construction, operation).

Exhibit C - Appendix D Compliance Schedule
General Electric Global Research Center (GE-GRC)
Compliance Schedule for Interim Corrective Measures.
Order on Consent No.:

A. Pursuant to Module Condition B.6.(a), Respondent shall submit for approval an interim corrective measures study within thirty (30) calendar days following the date of the notification by the Commissioner requiring implementation of interim corrective measures.

B. Pursuant to Module Condition B.6.(b), Respondent shall submit for approval an interim corrective measures work plan within thirty (30) calendar days after notifying the Commissioner of the actual or potential threat to human health or the environment.

II. Compliance Schedule for Reporting.

A. Pursuant to Exhibit C Condition B.8.(a), Respondent shall submit signed progress reports as specified in approved work plans of all activities conducted in accordance with the provisions of this Exhibit, beginning no later than thirty (30) calendar days after the Respondent is first required to begin implementation of any such requirement.

III. Compliance Schedule for Notification

A. Pursuant to Exhibit C Condition B.10.(a), Respondent within fifteen (15) calendar days; after discovering facility releases of hazardous constituents in groundwater have migrated off-site, shall notify the Commissioner and off-site owners or residents on land overlying such contamination.

B. Pursuant to Exhibit C Condition B.10.(b), Respondent within fifteen (15) calendar days; after discovering facility releases of hazardous constituents in air have or are migrated

off-site, exceeding action levels, shall notify the Commissioner and off-site individuals subject to such long-term exposure.

IV. Compliance Schedule for Assessment of Newly Identified and AOCs.

A. Pursuant to Exhibit C Condition C.1., Respondent shall notify the Commissioner, in writing, of any additional SWMU(s) and/or AOC(s) within fifteen (15) calendar days after discovery.

B. Pursuant to Exhibit C Condition C.2., Respondent shall submit a SWMU/AOC Assessment Report within thirty (30) calendar days after notifying the Commissioner of any additional SWMU(s) and/or AOC(s).

C. Pursuant to Exhibit C Condition C.3., Respondent shall submit for approval a SWMU/AOC Sampling and Analysis Plan within thirty (30) calendar days after submittal of the SWMU/AOC Assessment Report.

D. Pursuant to Exhibit C Condition C.4.(b), Respondent shall submit for approval revisions of the SWMU/AOC Sampling and Analysis Plan within thirty (30) calendar days after meeting with the Department to discuss Plan comments or within forty-five (45) calendar days after Respondent's receipt of Plan comments when no meeting is scheduled.

E. Pursuant to Exhibit C Condition C.4.(c), Respondent shall begin to implement the SWMU/AOC Sampling and Analysis Plan within thirty (30) calendar days following written approval of the Plan.

F. Pursuant to Exhibit C Condition C.5., Respondent shall submit a SWMU/AOC Sampling and Analysis Report within thirty (30) calendar days of receipt by the Respondent of validated analytical data generated under in the approved SWMU/AOC Sampling and Analysis Plan.

V. Compliance Schedule and Notification Requirements For Newly Discovered Releases At SWMUs and AOCs.

A. Pursuant to Exhibit C Condition D., Respondent shall notify the Commissioner, in writing, of any newly-discovered releases at SWMUs and/or AOCs, no later than fifteen (15) calendar days after such discovery.

VI. Compliance Schedule For RFA-Sampling Visit (SV) Work Plan.

NOT APPLICABLE

VII. Compliance Schedule For RFA-SV Work Plan Implementation.

NOT APPLICABLE

VIII. Compliance Schedule For RFA-SV Report.

NOT APPLICABLE

IX. Compliance Schedule For RCRA Facility Investigation ("RFI") Work Plan.

A. Pursuant to Exhibit C Condition E.5.(c)., Respondent shall submit for approval a RFI Task I and II reports and a Work Plan for the inaccessible SWMU(s) identified in Exhibit C Condition E.5.(b) and/or Exhibit C Condition C.6. no later than one-hundred and eighty (180) calendar days prior to the date when the SWMU(s) become accessible for such an investigation.

B. Pursuant to Exhibit C Condition E.5.(d)., Respondent shall submit for approval a RFI Task I Report for the SWMU(s) identified in Exhibit C Condition E.5.(a) within sixty (60) calendar days after the effective date of this order, if applicable, and within sixty (60) calendar days after written notification by the Commissioner than an RFI is required pursuant to Exhibit Condition C.6, D., and/or E.4(b).

C. Pursuant to Exhibit C Condition E.5.(e)., Respondent shall submit for approval a RFI Task II Report for the SWMU(s) identified in Exhibit C Condition E.5.(a) within ninety (90) calendar days after the effective date of this order, if applicable, and within ninety (90) days after written notification by the Commissioner than an RFI is required pursuant to Exhibit C Condition C.6., D., and/or E.4(b).

D. Pursuant to Exhibit C Condition E.5.(f)., Respondent shall submit for approval a RFI Work Plan for the SWMU(s) identified in Exhibit C Condition E.5.(a) within one-hundred and twenty (120) calendar days after the effective date of this order, if applicable, and within ninety (90) days after written notification by the Commissioner than an RFI is required pursuant to Exhibit C Condition C.6., D., and/or E.4(b).

E. Pursuant to Exhibit C Condition E.5(f)(iv), if the Respondent determines any items of Tasks III through V of the RFI Scope of Work have been submitted, the Respondent shall request within thirty (30) calendar days of the effective date of the order, and/or within thirty (30) calendar days of notification by the Commissioner, that the Commissioner review for approval the Respondent's determination.

F. Pursuant to Exhibit C Condition E.5.(g)(ii)., Respondent shall submit for approval revisions to the RFI Work Plan within thirty (30) calendar days after meeting with the Department to discuss Plan comments, or within forty-five (45) calendar days after Respondent's receipt of Plan comments when no meeting is scheduled.

X. Compliance Schedule for RFI Work Plan Implementation.

A. Pursuant to Exhibit C Condition E.6., Respondent shall begin to implement the RFI Work Plan within thirty (30) calendar days following written approval of the Plan.

XI. Compliance Schedule for RFI Final Report And Summary Report.

A. Pursuant to Exhibit C Condition E.7.(a)., Respondent shall submit for approval the RFI Final and Summary Reports within sixty (60) calendar days after receipt by the Respondent of validated analytical data generated under the approved work plan.

B. Pursuant to Exhibit C Condition E.7.(b)(ii), Respondent shall submit for approval revisions to the RFI Final and Summary Reports within forty-five (45) calendar days after meeting with the Department to discuss Report comments, or within forty-five (45) calendar days when no meeting is scheduled.

C. Pursuant to Exhibit C Condition E.7.(c), Respondent shall mail the approved Summary Report to all individuals on the facility mailing list within thirty (30) calendar days of receipt of Report approval.

XII. Compliance Schedule for Current Interim Corrective Measures.

NOT APPLICABLE.

XIII. Compliance Schedule for Corrective Measures Study ("CMS") Scope of Work.

A. Pursuant to Exhibit C Condition E.9.(d), Respondent shall submit a Task I Report and documents within sixty (60) calendar days after the written notification by the Commissioner for a CMS.

B. Pursuant to Exhibit C Condition E.9.(e), Respondent shall submit for approval a CMS Plan within sixty (60) calendar days after the written notification by the Commissioner for a CMS.

C. Pursuant to Exhibit C Condition E.9.(f)(ii), Respondent shall submit for approval revisions to the CMS Plan within thirty (30) calendar days after meeting with the Department to discuss Plan comments, or within forty- five (45) calendar days when no meeting is scheduled.

XIV. Compliance Schedule for CMS Implementation.

A. Pursuant to Exhibit C Condition E.10., Respondent shall begin to implement the CMS Plan within thirty (30) calendar days following written approval of the Plan.

XV. Compliance Schedule for CMS Final Report.

A. Pursuant to Exhibit C Condition E.11.(a), Respondent shall submit for approval a CMS Final Report within forty- five (45) calendar days after completion of the CMS.

B. Pursuant to Exhibit C Condition E.11.(c)(ii), Respondent shall submit for approval revisions to the CMS Final Report within thirty (30) calendar days after meeting with the Department to discuss Report comments or within forty-five (45) calendar days when no meeting is scheduled.

XVI. Compliance Schedule for Financial Assurance for Corrective Measure(s)

A. Pursuant to Exhibit C Condition E.13.(b), Respondent shall demonstrate financial assurance for completing the approved corrective measure(s) within thirty (30) calendar days after this order has been modified.

XVII. Modification of the Compliance Schedules

A. Pursuant to Exhibit C Condition E.14.(a)(i), Respondent shall submit proposed modification of any Compliance Schedule within fifteen (15) calendar days of determining that a schedule cannot be met.

Exhibit C – Appendix E
RCRA Facility Investigation Workplan outline/Maintenance Plan
for SWMUs Requiring Further Action
General Electric Global Research Center (GE-GRC)
Order on Consent No.:

SWMU-5

Unit Description: Environmental Control Facility - Old Farm Area

SWMU 5, the Environmental Control Facility (ECF) area, was originally identified as a SWMU in the RCRA Facility Assessment Preliminary Review Report (NYSDEC 1994). The ECF area, also known as the Old Farm Area, is a 0.5-acre fenced-in area which includes SWMUs 1, 1a, 2, 3, 4, 17, 18, and 24. The area was used to store laboratory chemicals prior to disposal in the on-site incinerator (SWMU-24), the former on-site landfill (SWMU-16), or prior to off-site disposal. This order requires GE to continue to monitor groundwater conditions Approximate capacity of 100 55-gallon drums.

Status:

GE intends to continue using the ECF area for the packaging and storage of hazardous wastes for less than 90 days.

Approximate Period of permitted
Operation: 1949-1987

Types of Waste:
Laboratory chemicals:
D001-D043
F001-F005
B001-B007
Various P & U wastes

Constituents:
Various

Method of Containment:
None

Media of Concern:

Soil, groundwater

Site Investigation Plan with Sampling and Next Step(s) Toward Corrective Action:

A RCRA Facility Investigation Report – SWMU 5 Environmental Control Facility (CB&I 2016c) summarizing the results of the investigation for SWMU 5 was prepared and submitted to NYSDEC on November 18, 2016. The RFI Report indicated that soils contained semi-volatile organic compounds (SVOCs) in the polyaromatic hydrocarbon (PAH) range and arsenic at concentrations that are slightly above the New York State Industrial SCOs in soil borings SB-5 and SB-3, respectively (CB&I 2016c). Additionally, both soil sampling locations are covered by asphalt which limits infiltration of surface water and limits the potential for exposure to the underlying soils. The RFI Report further indicated that GE intends to continue using the ECF area for the storage and packaging of hazardous wastes for less than 90 days. As the identified constituents of concern (COCs) within the ECF are isolated in nature, are generally characterized as having low mobility in soil and groundwater, and direct contact between soil and on-site personnel is limited by the asphalt cover, GE proposed to postpone any remedial action for SWMU 5 until such time that the ECF is closed or no longer actively utilized for less than 90-day storage of hazardous wastes. GE is still awaiting comments from NYSDEC on the RFI Report for SWMU 5. This order requires GE to continue to monitor groundwater conditions and perform an RFI upon closure of this unit. On monitoring activities for SWMU 5, SWMU 16 and SWMU 24. the NYSDEC's goals for the monitoring program are to collect appropriate groundwater quality data upgradient and downgradient of SWMUs 5, 16, and 24 to confirm that potential constituents of concern are not migrating from these regulatory units, and to ensure the integrity of the SWMU 16 cap as discussed in the Statement of Basis and the former Permit. The OMM activities for these three SWMUs are performed in accordance with the June 2016 Work Plan (CB&I 2016a) and consist of semi-annual groundwater monitoring, annual landfill cap inspection, and annual reporting.

The remaining work associated with the closure of SWMU 5 includes:

- Finalization of the RFI Report based on comments received from the Department, if any;
- Performance of a Corrective Measures Study or Feasibility Study to identify the appropriate remedy for SWMU 5;
- Implementation of the remedy selected via the CMS/FS process, and development and submittal of a Remedial Action Completion Report.

SWMU-16

Unit Description: Inactive Landfill

Area is 0.31 acres in size. Wastes deposited in this landfill consisted of materials that could not be burned in the chemical incinerator (including shock-sensitive materials and metals), as well as ash. Buried items include bottles and other small containers. In 1978, 280 test holes were drilled to establish the limits of the chemical burial area. A stormwater diversion trench and bentonite clay cap were installed in 1981. Groundwater monitoring wells have been installed around the fill area since 1979. Groundwater sampling conducted in May 1979 indicated the presence of high levels of several organic compounds in groundwater directly beneath the fill area. The contaminants included toluene, benzene, carbon tetrachloride, chlorobenzene, chloroform, ethylbenzene, methylene chloride, tetrachloroethylene, and trichloroethylene. Between 1978 and 1981, some of the on-site wells, including those installed within the fill area, were decommissioned, relocated or reinstalled for various reasons. New downgradient wells were installed in 1989 and Appendix IX analysis performed. As a result of this sampling round, low levels of chloroform, trichloroethene, 1,2-dichloroethene, and bromodichloromethane were detected in one of the downgradient wells. Contraventions of NYS groundwater standards for barium and manganese occurred in all three downgradient wells. Subsequent semi-annual sampling have revealed periodic contraventions of standards for arsenic, phenol, manganese, and barium.

Status:

Inactive

Approximate Period of Operation:

1957-1972

Types of Waste:

Laboratory wastes:
D001, D004-
D043 F001-F005
P & U wastes in small quantities

Constituents:

Various

Method of Containment:

None

Media of Concern:

Soil, groundwater

Sampling and Maintenance Plan:

Conduct annual inspections of the landfill=s cap, to commence within 60 days of the effective date of this Order. The inspection should assess the overall condition of the cap, and include checks for desiccation, cracking, erosion, and any other problems with integrity. A professional engineer=s report must be submitted to DEC within 45 days of the date of the inspection, which

summarize the findings and reports repair needs, if any. GE-GRC will implement any required repairs within 60 days of approval of the report by NYSDEC.

Continue semi-annual groundwater monitoring. Ongoing monitoring activities for SWMU 5, SWMU 16 and SWMU 24.

The OMM activities for these three SWMUs are performed in accordance with the June 2016 Revised Site Maintenance and Monitoring Work Plan (CB&I 2016a), which is attached as an Exhibit to the Order and consist of semi-annual groundwater monitoring, annual landfill cap inspection, and annual reporting. The semi-annual groundwater monitoring consists of gauging groundwater elevations and measuring groundwater field parameters (i.e., specific conductivity, pH, temperature, oxidation reduction potential, and dissolved oxygen) at monitoring wells THM-12, MW-1, MW-2, MW-3, MW-4, MW-5, and MW-7 twice per year (spring and fall). Additionally, during the fall monitoring event, the wells are sampled for the following analytes:

- VOCs by EPA SW-846 Method 8260C
- Total recoverable phenolics by EPA SW-846 Method 9066
- Dissolved barium by EPA Method 6010C
- Chloride by EPA Method 9056A
- Total dissolved solids by EPA Method SM 2540 C-1997(2011)
- Total organic carbon by EPA Method SM 5310 C-2000(2011)

The integrity and protectiveness of the SWMU 16 landfill cap is assessed via annual inspection. During the inspection the presence and integrity of access restrictions (fence with locking access gate) are confirmed. Additionally, the overall condition of the landfill cap is assessed by checking for adequate vegetative cover (grass cover), desiccation, cracking, erosion, and any other integrity issues. Visual observations are noted on landfill inspection forms and photographs of the landfill and access restrictions are taken.

The results of the semi-annual groundwater monitoring and annual SWMU 16 cap inspection are summarized in an annual Site Maintenance and Monitoring Report, which is submitted to the NYSDEC by January 31 of each year (i.e., for the prior calendar year).
A Notice in Deed will be posted to restrict groundwater usage and ensure maintenance of the cap and wells.

SWMU-24

Unit Description: Former Chemical Waste Incinerator

Incinerator formerly situated on 0.1 acre. Open pit burning of laboratory chemical wastes. Burning fed by acetone. Located in 90-day storage area hazardous waste transfer/storage area.

Status:

Inactive

Approximate Period of Operation:

1957-1980. Demolished in 1984. Debris and 750 tons of contaminated soil were disposed of as hazardous waste.

Types of Waste:
Laboratory chemicals: D001-D043, F001-F005
Shock-sensitive and highly reactive materials
Various P and U wastes in small quantities

Constituents:
PCB's, various VOCs

Method of Containment:
None

Media of Concern:
Soil, groundwater

Site Investigation Plan with Sampling and Next Step(s) Toward Corrective Action:
Based on results of the RCRA Facility Assessment Sampling Visit Report, dated June 3, 1997, and as revised on September 24, 1998, the Respondent will perform a RCRA Facility Investigation, as per Exhibit E -Appendix B of this Order, upon closure of this area.

Ongoing monitoring activities for SWMU 5, SWMU 16 and SWMU 24. The NYSDEC's goals for the monitoring program are to collect appropriate groundwater quality data upgradient and downgradient of SWMUs 5, 16, and 24 to confirm that potential constituents of concern are not migrating from these regulatory units, and to ensure the integrity of the SWMU 16 cap as discussed in the Statement of Basis and the former Permit. The OMM activities for these three SWMUs are performed in accordance with the June 2016 Work Plan (CB&I 2016a) and consist of semi-annual groundwater monitoring, annual landfill cap inspection, and annual reporting.

AOC-6

Unit Description: Former Resins and Insulation Building

Impacted soils observed during excavation activities being performed near the demolished Resins and Insulation Building.

Status:
Inactive

Approximate Period of
Operation:

Types of Waste:

Constituents:
Various

Method of Containment:

None

Media of Concern:
Soil, groundwater

Site Investigation Plan with Sampling and Next Step(s) Toward Corrective Action:
AOC-6 was identified in October 2004 during excavation activities being performed near the demolished Resin and Insulation Building. NYSDEC was notified of AOC-6 on November 4, 2004. Interim remedial measures were implemented that included: excavation and off-site disposal of approximately 290 yards of contaminated soils; post-excavation sampling; and site restoration. All impacted soils were removed from this area as documented by the results of confirmatory sampling (AOC-6 Sampling and Analysis Report, NA Water Systems 2005).

No Further Action remedy (NYSDEC granted 2015) includes the implementation of Institutional Controls/Environmental Covenants as the selected remedy.

Old Farmhouse Stone Foundation

On October 14, 2021 Respondent submitted to NYSDEC a document entitled "Field Sampling Plan — Old Stone Foundation Soil Investigation (Arcadis 2021) which detailed the scope of an investigation of soils in the vicinity of the old farmhouse stone foundation to delineate the extent of soils containing metals above applicable 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs). The Field Sampling Plan also included, at the Department's request, procedures for re-development and re-sampling of downgradient monitoring well MW-06 to re-confirm that contaminant migration is not occurring from soils into shallow groundwater. The Field Sampling Plan was approved by NYSDEC on November 2, 2021. The groundwater sampling, including monitoring well re-development was completed in November 2021. GE implemented the soil sampling program beginning on January 24, 2022. A Data Summary Report detailing the sampling activities and results of the soil and groundwater investigations, including the results of delineation of soils with metals concentrations exceeding Residential SCOs, will be submitted to the Department in March 2022.

GE intends to conduct soil excavation at the site of the old farmhouse stone foundation to remove soils with metals concentrations exceeding the Residential SCOs. Soils will be transported off-site and disposed at a landfill licensed and permitted to receive the wastes. The remaining work associated with the old farmhouse stone foundation includes:

- Development of a Soil Excavation Work Plan detailing: the scope of excavation work (areas and depths); project permitting requirements; procedures for mobilization, site preparation, soil excavation and handling, post-excavation confirmation sampling, waste transportation and disposal, excavation backfill, and site restoration; project reporting requirements, and an implementation schedule.
- Securing the required permit for the work and completing the required regulatory notifications;
- Excavation and off-site transportation and disposal of soils to achieve Residential SCOs;
- Site restoration;

- Preparation and submittal of a Construction Completion Report detailing and documenting the results of site remediation activities and the achievement of the Residential SCOs.

EXHIBIT D

Order on Consent

Index No. CO 4-20220212-109

Exhibit D
INDUSTRIAL SEWER ASSESSMENT WORKPLAN OUTLINE
General Electric Global Research Center (GE-GRC)
Niskayuna, New York
Schenectady County

I. INITIAL EVALUATION

It is the intent of this Order to require an evaluation of the potential for, or actual releases from those below and above ground sections of an industrial sewer that previously or currently handled hazardous waste or liquids containing hazardous constituents. The term "industrial sewer" shall be used to designate these sections of a facility's industrial sewer system.

This first step in the evaluation is to determine the status of the industrial sewer system at the facility. To provide this information, the Permittee shall provide within sixty (60) calendar days from Permit issuance, the following information in a document titled, "Current Industrial Sewer Condition Report."

1. Physical characterizations of the industrial sewer:
   a. Age;
   b. Diameter and construction materials of pipe and manholes;
   c. Previous repairs: date of repair, method of repair, cause of integrity breach, cleanup of contaminated environmental media;
   d. Location of industrial sewer including laterals indicated on a site plan of the facility; and
   e. Elevation of industrial sewer relative to the groundwater table.

2. Wastewater conveyed by the industrial sewer:
   a. Hazardous constituents or hazardous waste transported by the system;
   b. Concentration of constituents in wastewater; and
   c. Current volume handled by the system.

3. Results of previous integrity evaluations of the industrial sewer (if any):
   a. Reason for evaluation;
   b. Date of evaluation; and
   c. Results for evaluation.

4. Plans to upgrade the industrial sewer system (if any):
   a. Proposed type of upgrading and relocating industrial sewers above ground, slip lining, installation of double walled pipe with leakdetection, segregating waste streams, etc; and

b. Time frame for proposed work.

Based upon the available information, the Department will evaluate the industrial sewer system in terms of its potential to release waste, and if so, the potential impact on human health and the environment. Based on this initial evaluation, if the threat to human health and the environment exists, it is likely that integrity testing of the industrial sewer will be required.

The Department will take into account the facility's plans to upgrade the industrial sewer system when making the decision to require an integrity test. If the proposed upgrade is acceptable, and completed within an acceptable time frame, integrity testing may not be necessary. However, when the industrial sewers are decommissioned, testing may be necessary to evaluate environmental media contaminated by past releases.

II. INDUSTRIAL SEWER ASSESSMENT

If the Department makes a determination that integrity testing of the industrial sewer is necessary, a Sampling Visit (SV) Workplan shall be submitted by the facility which addresses the methods, procedures, and schedules for assessing industrial sewer leaks would include in line TV survey and a method of integrity testing.

The remaining portions of the industrial sewer system, excluding the manholes, must undergo the integrity testing described below. If a industrial sewer pipe is above ground and can be visually inspected for leaks then that industrial sewer pipe is exempt from this integrity testing requirement.

If the Permittee can demonstrate that a industrial sewer pipe is continuously below the groundwater table throughout the year, then that industrial sewer pipe may be exempt from this integrity testing if infiltrating contaminated groundwater does not violate effluent limits at the point of discharge. However, this does not preclude the Permittee from testing or repairing industrial sewer pipes that are below the groundwater table. To demonstrate that a industrial sewer pipe is continuously below the groundwater table, the Permittee must submit a plot plan drawing of the facility with contour lines of the lowest seasonal overburden groundwater elevations and invert elevations and diameters of the industrial sewer pipes. A perched zone of groundwater may be included only if it occurs all year. If it cannot be shown that existing wells are adequate to determine groundwater elevations along a industrial sewer pipe, the Department may require piezometers to be installed to verify groundwater elevations.

In the event of a drought or other unusual conditions that may change groundwater levels, or upon notification by the Department, the Permittee shall monitor the groundwater elevations on a monthly basis along the untested industrial sewer pipes. The Permittee shall submit these monitoring results, including the measured piezometer or well groundwater elevations and the adjacent industrial sewer invert elevations, within fourteen (14) calendar days after the monitoring event. If the groundwater elevations remain below an industrial sewer pipe for two sampling events, then the Permittee shall perform a industrial sewer system integrity test in a time frame acceptable to the Department.

The industrial sewer assessment would address the following procedures:

1. Cleaning the industrial sewer system component (i.e., pipe, sump, etc.);
2. Conducting a TV survey of the industrial sewer pipe to confirm the location of all laterals, to observe the pipe's condition, and to locate cracks in the pipe;
3. Proposed integrity testing method to be performed on the industrial sewer system;
4. Repairing or removing from use any part of the industrial sewer system that fails a integrity test; and
5. Integrity testing of all repaired components.

The integrity test method must be approved by the Department. Upon receipt of the test results, the Department will determine those components of the industrial sewer system requiring repairs for continued use.

The Permittee shall show the locations of all repairs made prior to testing, and after testing, the locations of all leaks on a map in the RFA Sampling Visit Report. The Department may require an RFI investigation of the extent of any releases from portions of the industrial sewer system that have been repaired or that have leaked, as per Module III, Condition E.4.(b). This would most likely include soil sampling.

III. INACTIVE OR ABANDONED INDUSTRIAL SEWER

The inactive or previously abandoned portions of the industrial sewer system shall be investigated by soil sampling.

1. Sampling Locations and Depths Soil boring shall be taken along the abandoned industrial sewer, or if the industrial sewer has been removed, its former location. Locations may be modified based on field conditions with the Department's approval. A grab sample shall be collected below the invert elevation of the industrial sewer pipe from each boring.
2. Sampling and Analytical Methods The sample will be analyzed for hazardous constituents specific to the industrial sewer lines under assessment.

IV. MANHOLES

Prior to integrity testing, a visual inspection of the manhole shall be conducted to determine the general condition of the manhole. Necessary repairs shall be completed prior to integrity testing.

The manhole integrity testing would normally consist of the following procedures:

1. Plug all pipe outlets discharging into the manhole. Also plug the manhole outlet;
2. Fill the manhole with water to a height two feet above the crown of the highest inlet pipe;
3. Measure the water lost over a one hour period; and
4. Report the leak rate in gallons per day (gpd .

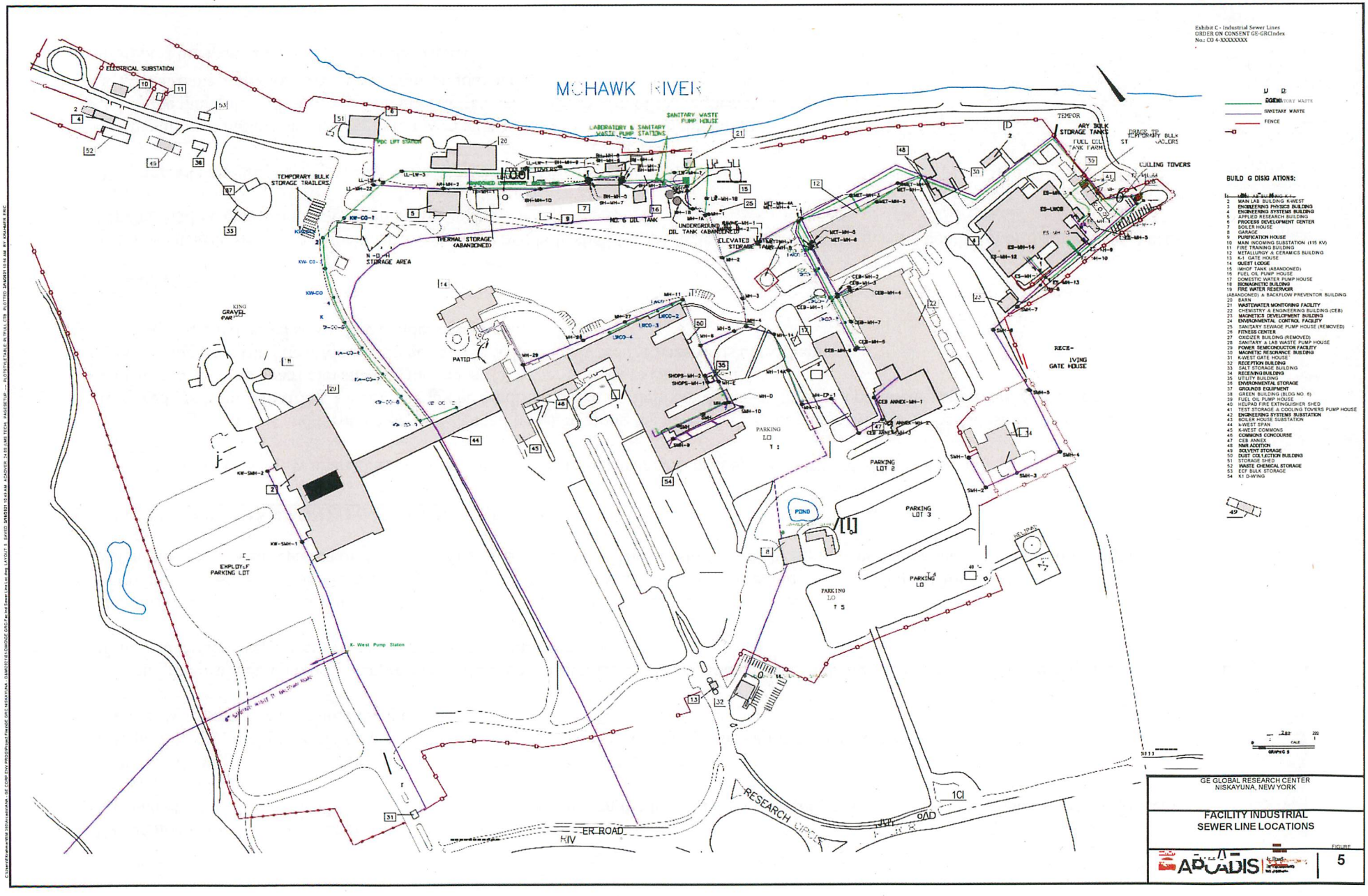
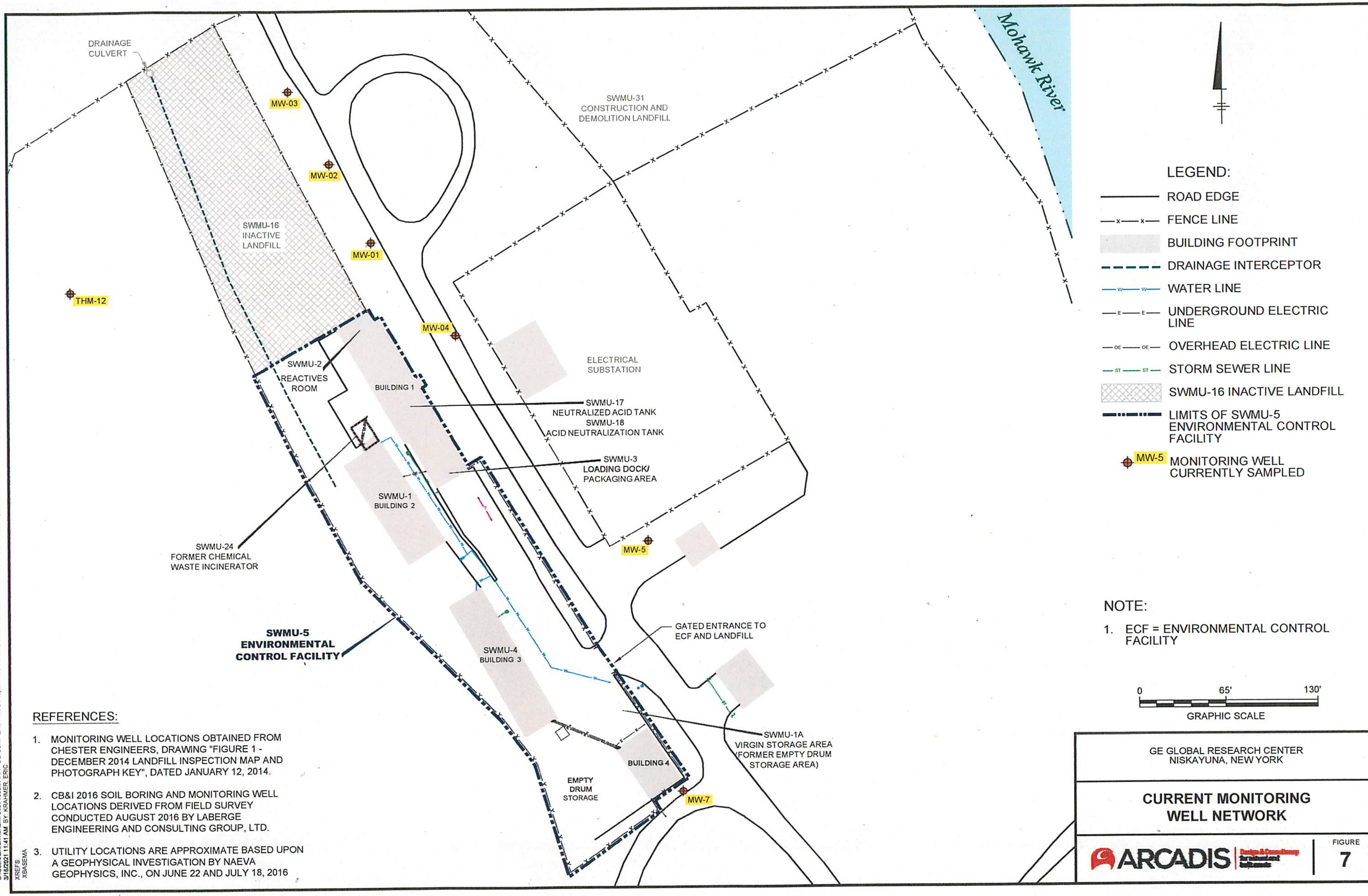


Exhibit C - Industrial Sewer Lines
ORDER ON CONSENT GE-GRCIndex
No.: CO 4-XXXXXXXX
MOHAWK RIVER
ELECTRICAL SUBSTATION
SANITARY WASTE PUMP HOUSE
LABORATORY & SANITARY WASTE PUMP STATIONS
PDC LIFT STATION
TEMPORARY BULK STORAGE TRAILERS
THERMAL STORAGE (ABANDONED)
N-O-41 STORAGE AREA
NO. 6 OIL TANK
UNDERGROUND WASTE OIL TANK (ABANDONED)
ELEVATED WATER STORAGE TANK
TEMPOR ARY BULK STORAGE TANKS
FUEL OIL TANK FARM
TEMPORARY BULK SILOS
COOLING TOWERS
KING GRAVEL PAR
PATIO
EMPLOYEE PARKING LOT
PARKING LOT 1
PARKING LOT 2
PARKING LOT 3
PARKING LOT 5
POND
HELIPAD
K- West Pump Station
RESEARCH CIRCLE
ER ROAD
RECEIVING GATE HOUSE
BUILDING DESIGNATIONS:
1 MAIN LAB BUILDING K-WEST
2 ENGINEERING PHYSICS BUILDING
3 ENGINEERING SYSTEMS BUILDING
4 APPLIED RESEARCH BUILDING
5 PROCESS DEVELOPMENT CENTER
6 BOILER HOUSE
7 GARAGE
8 PURIFICATION HOUSE
9 MAIN INCOMING SUBSTATION (115 KV)
10 FIRE TRAINING BUILDING
11 METALLURGY & CERAMICS BUILDING
12 K-1 GATE HOUSE
13 GUEST LODGE
14 (WHOF TANK (ABANDONED)
15 FUEL OIL PUMP HOUSE
16 DOMESTIC WATER PUMP HOUSE
17 BIOMAGNETIC BUILDING
18 FIRE WATER RESERVOIR
19 (ABANDONED) a BACKFLOW PREVENTOR BUILDING
20 BARN
21 WASTEWATER MONITORING FACILITY
22 CHEMISTRY & ENGINEERING BUILDING (CEB)
23 MAGNETICS DEVELOPMENT BUILDING
24 ENVIRONMENTAL CONTROL FACILITY
25 SANITARY SEWAGE PUMP HOUSE (REMOVED)
26 FITNESS CENTER
27 OXIDIZER BUILDING (REMOVED)
28 SANITARY & LAB WASTE PUMP HOUSE
29 POWER SEMICONDUCTOR FACILITY
30 MAGNETIC RESONANCE BUILDING
31 K-WEST GATE HOUSE
32 RECEPTION BUILDING
33 SALT STORAGE BUILDING
34 RECEIVING BUILDING
35 UTILITY BUILDING
36 ENVIRONMENTAL STORAGE
37 GROUNDS EQUIPMENT
38 GREEN BUILDING (BLDG NO. 6)
39 FUEL OIL PUMP HOUSE
40 HELIPAD FIRE EXTINGUISHER SHED
41 TEST STORAGE & COOLING TOWERS PUMP HOUSE
42 ENGINEERING SYSTEMS SUBSTATION
43 BOILER HOUSE SUBSTATION
44 K-WEST SPAN
45 K-WEST COMMONS
46 COMMONS CONCOURSE
47 CEB ANNEX
48 NMR ADDITION
49 SOLVENT STORAGE
50 DUST COLLECTION BUILDING
51 STORAGE SHED
52 WASTE CHEMICAL STORAGE
53 ECP BULK STORAGE
54 K1 D-WING
GE GLOBAL RESEARCH CENTER
NISKAYUNA, NEW YORK
FACILITY INDUSTRIAL
SEWER LINE LOCATIONS
FIGURE
5


DRAINAGE CULVERT
MW-03
MW-02
MW-01
THM-12
SWMU-16 INACTIVE LANDFILL
SWMU-31 CONSTRUCTION AND DEMOLITION LANDFILL
Mohawk River
MW-04
ELECTRICAL SUBSTATION
SWMU-2 REACTIVES ROOM
BUILDING 1
SWMU-17 NEUTRALIZED ACID TANK
SWMU-18 ACID NEUTRALIZATION TANK
SWMU-3 LOADING DOCK/ PACKAGING AREA
SWMU-1 BUILDING 2
SWMU-24 FORMER CHEMICAL WASTE INCINERATOR
MW-5
SWMU-5 ENVIRONMENTAL CONTROL FACILITY
GATED ENTRANCE TO ECF AND LANDFILL
SWMU-4 BUILDING 3
SWMU-1A VIRGIN STORAGE AREA (FORMER EMPTY DRUM STORAGE AREA)
BUILDING 4
EMPTY DRUM STORAGE
MW-7
LEGEND:
ROAD EDGE
FENCE LINE
BUILDING FOOTPRINT
DRAINAGE INTERCEPTOR
WATER LINE
UNDERGROUND ELECTRIC LINE
OVERHEAD ELECTRIC LINE
STORM SEWER LINE
SWMU-16 INACTIVE LANDFILL
LIMITS OF SWMU-5 ENVIRONMENTAL CONTROL FACILITY
MW-5 MONITORING WELL CURRENTLY SAMPLED
NOTE:
1. ECF = ENVIRONMENTAL CONTROL FACILITY
0 65' 130'
GRAPHIC SCALE
REFERENCES:
1. MONITORING WELL LOCATIONS OBTAINED FROM CHESTER ENGINEERS, DRAWING "FIGURE 1 - DECEMBER 2014 LANDFILL INSPECTION MAP AND PHOTOGRAPH KEY", DATED JANUARY 12, 2014.
2. CB&I 2016 SOIL BORING AND MONITORING WELL LOCATIONS DERIVED FROM FIELD SURVEY CONDUCTED AUGUST 2016 BY LABERGE ENGINEERING AND CONSULTING GROUP, LTD.
3. UTILITY LOCATIONS ARE APPROXIMATE BASED UPON A GEOPHYSICAL INVESTIGATION BY NAEVA GEOPHYSICS, INC., ON JUNE 22 AND JULY 18, 2016
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CURRENT MONITORING WELL NETWORK
ARCADIS
FIGURE
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