PHASE 2 DREDGING CONSTRUCTION QUALITY CONTROL/QUALITY ASSURANCE PLAN FOR 2013

Appendix A

to

Remedial Action Work Plan for Phase 2 Dredging and Facility Operations in 2013

HUDSON RIVER PCBs SUPERFUND SITE

Prepared for:

GENERAL ELECTRIC

319 Great Oaks Boulevard
Albany, New York 12203

Prepared by:

PARSONS

GE Company – Parsons Project Office
381 Broadway, Bldg 40-2
Fort Edward, NY 12828

Revised June 2013

TABLE OF CONTENTS

LIST OF ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

ASTM	American Society for Testing and Materials
CD	Consent Decree
CM	Construction Manager
CQAO	Construction Quality Assurance Officer
CU	Certification Unit
cy	Cubic yard
DQAP	Dredging Construction Quality Control/Quality Assurance Plan
DGPS	differential global positioning system
EPA	United States Environmental Protection Agency
FDR	Phase 2 Final Design Report
FI	Field Inspector
FRA	Federal Railroad Administration
GE	General Electric Company
GPS	Global Positioning System
HPPSC	Habitat Planting and Plant Supply Contractor
NYCRR	New York Codes and Regulations
NYSDOT	New York State Department of Transportation
PCB	Polychlorinated biphenyl
PFOC	Processing Facility Operations Contractor
PSCP	Performance Standards Compliance Plan
QA	Quality assurance
QC	Quality control
QC/QA	Quality control and quality assurance
RA	Remedial Action
RAM QAPP	Remedial Action Monitoring Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
ROD	Record of Decision
RTK DGPS	Real Time Kinematic Differential Global Positioning System
RYOC	Rail Yard Operations Contractor
SOW	Statement of Work

ACRONYMS AND ABBREVIATIONS (CONTINUED)

SVOC	Semi-volatile organic compounds
TAL	Target Analyte List
TCL	Target Compound List
TOC	Total organic carbon
VOC	Volatile organic compound

SECTION 1

INTRODUCTION

In 2005, the General Electric Company (GE) and the United States Environmental Protection Agency (EPA) executed a Consent Decree (CD) relating to the performance of the Remedial Action (RA) selected by EPA to address polychlorinated biphenyls (PCBs) in sediments of the Upper Hudson River, located in New York State, through dredging, as described in EPA's February 2002 Record of Decision (ROD) for the Hudson River PCBs Superfund Site. The CD was filed in federal district court on October 6, 2005 and was approved and entered by the court as a final judgment on November 2, 2006, when it went into effect.

In accordance with the ROD and the CD, the RA was to be conducted in two phases. Phase 1 was defined as the first year of dredging and was conducted by GE in 2009 (with habitat replacement/reconstruction in Phase 1 dredge areas completed in 2011). Phase 2 consists of the remainder of the dredging project. The CD provided that, following the completion of Phase 1 dredging and a peer review process, EPA would issue a decision regarding the performance standards and scope for Phase 2, and GE would notify EPA as to whether it would perform Phase 2 under the CD. EPA issued its decision regarding the performance standards and scope for Phase 2 in December 2010; and GE notified EPA (also in December 2010) that it elected to perform Phase 2 under the CD.

The CD includes, as Appendix B, a Statement of Work (SOW) for Remedial Action and Operations, Maintenance and Monitoring, which sets forth a number of general requirements for the RA and includes several attachments specifying requirements for various aspects of the RA. EPA issued revised versions of the SOW and its attachments for Phase 2 in December 2010. For the work to be performed in each construction year of Phase 2, Section 3.1 of the revised SOW requires GE to submit a Remedial Action Work Plan (RAWP) for Phase 2 Dredging and Facility Operations (D&FO) for such year, along with any remaining design documents (or revisions or addenda to previously approved design documents) for the dredging and related operations to be performed in that year. The revised SOW also specifies a number of specific plans to be included in the Phase 2 RAWP, including a Phase 2 Dredging Construction Quality Control/ Quality Assurance Plan (DQAP), which is to describe the quality control and quality assurance (QC/QA) systems that will be established and followed to verify compliance with the technical specifications included in the Phase 2 design for the year in question.

In the spring of 2011, GE submitted the required design documents and work plans for the first year of Phase 2 dredging, known as Phase 2 Year 1. These included a *Phase 2 Dredging Construction Quality Control/Quality Assurance Plan for 2011* (2011 DQAP), which was Appendix A to the RAWP for 2011 and was approved by EPA as part of that RAWP on April 26, 2011. GE conducted Phase 2 Year 1 dredging and associated activities in 2011 (excluding habitat construction in areas dredged in 2011, which was initiated in 2012). During the course of

that season, GE submitted two addenda to the RAWP, which included modifications to the 2011 DQAP. Addendum #1, submitted on June 21, 2011, included an updated table for the 2011 DQAP and was approved by EPA on July 1, 2011. Addendum #2, submitted on September 2, 2011, included another revised table for the 2011 DQAP and an additional attachment (presenting a standard operating procedure for sampling and analysis of cap isolation material) and was approved by EPA on November 2, 2011.

The revised SOW provides (in Section 3.1) that, for any Phase 2 year after the first year of Phase 2, GE need only submit "any necessary revisions and/or addenda" to a previously approved work plan. In the case of the DQAP, very few changes to the 2011 DQAP were necessary for the dredging to be conducted in 2012 (known as Phase 2 Year 2). As a result, the Phase 2 DQAP submitted for 2012 (2012 DQAP) incorporated by reference the majority of the 2011 DQAP (including the modifications and additions in the above-referenced addenda) and described only the revisions to that plan that apply to 2013.

During the course of the 2012 season, GE submitted eight addenda to the 2012 RAWP, two of which included modifications to the 2012 DQAP. Addendum #2, submitted on May 25, 2012, included a revised Table A2-1 of the DQAP to reflect GE's submittal of the *Phase 2 Transportation and Disposal Plan for 2012*. Addendum #8, submitted on October 26, 2012, included a revised Table A2-2 of the DQAP and a new form to be included in Attachment 3 (i.e, a Backfill and Cap Material Source Inspection Checklist). These addenda were approved by EPA.

Again, for the dredging to be conducted in 2013 (Phase 2 Year 3), very few additional changes to the DQAP will be necessary. In this situation, in accordance with the revised SOW, this *Phase 2 Dredging Construction Quality Control/Quality Assurance Plan for 2013* (2013 DQAP) again incorporates by reference the majority of the 2011 DQAP (including the modifications and additions in the 2011 addenda) and describes only the revisions to that plan that apply to 2013. To avoid confusion, revisions to that plan that were presented in the 2012 DQAP (or its addenda) are also included again in this 2013 DQAP (even if there have been no further substantive changes). This 2013 DQAP is an appendix to and part of the *Remedial Action Work Plan for Phase 2 Dredging and Facility Operations in 2013* (2013 RAWP).

Each subsequent section of this 2013 DQAP incorporates by reference the comparable section of the 2011 DQAP and identifies any substantive changes from that document. In addition, as a general matter, for purposes of this 2013 DQAP, all references in the 2011 DQAP to the *Phase 2 Final Design Report for 2011* (2011 FDR) should be understood to refer to the *Phase 2 Final Design Report for 2013* (2013 FDR); all references in the 2011 DQAP to the 2011 RAWP and its attached plans should be understood to refer to the 2013 RAWP and its comparable attached plans; all references in the 2011 DQAP to the *2011 Remedial Action Monitoring Quality Assurance Project Plan* (2011 RAM QAPP) should be understood to refer to the *Phase 2 Remedial Action Monitoring Quality Assurance Project Plan* (Phase 2 RAM QAPP)

submitted in 2012; and all references in the 2011 DQAP to the relevant contracts should be understood to refer to the following contracts for 2013:

- Contract 30 for the operation of the sediment processing facility by the Processing Facility Operations Contractor (PFOC);
- Contract 42A for dredging, transport of dredged material to the processing facility, backfilling/capping, and related in-river operations, to be performed by the Dredging Contractor;
- Contract 53A for the habitat construction activities to be performed in 2013 by the Habitat Planting and Plant Supply Contractor (HPPSC) in certain areas dredged in 2011 or 2012; and
- Contract 60 for the operation of the rail yard by the Rail Yard Operations Contractor (RYOC).

In addition, this 2013 DQAP contains two revised attachments – Attachment 1 (DQAP Staffing List and Résumés) and Attachment 2 (Dredging and Facility Operations Test and Inspection Tables) – and one additional form to be included in Attachment 3 (Typical Construction Forms). The remaining attachments are the same as those in the 2011 DQAP, as supplemented by Addendum #2 to the 2011 RAWP (which added Attachment 6 to the DQAP), except that in Attachments 5 (Standard Operating Procedure for Dredging Operations Bathymetric Surveys) and 6 (Standard Operating Procedure for Cap Isolation Material Sampling and Analysis for Total Organic Carbon), all references to 2011 and 2011 plans should be considered to refer to 2013 and the comparable 2013 plans.

As in prior years of this project, GE's approach to management of the quality of the RA implementation in 2013 will include an integrated system of quality control (QC) by its contractors and quality assurance (QA) by its Construction Manager (CM), which will be responsible for the day-to-day coordination of QA and QC measures in the field.

SECTION 2

PROJECT QC/QA ORGANIZATION

This section incorporates by reference Section 2 of the 2011 DQAP, except that: (a) the references to the 2011 D&FO should refer to the 2013 D&FO; and (b) the references to contract numbers should refer to the contract numbers given in Section 1 above.; and (c) Section 2.1.3 is revised as follows:

2.1.3 Engineers of Record

The Engineers of Record are independent, duly qualified, licensed design professionals, retained directly by GE to provide design and engineering services in connection with the project. This definition includes all subcontractors to the Engineers of Record.

The Engineers of Record to be used for the dredging and facility operations in 2013 are listed below, together with their roles:

Organization	Engineer's Certifying Role
ARCADIS	2013 Dredging and Facility Operations (including 2013 FDR)
Anchor QEA	2013 Habitat Construction
Urban Engineers, Inc.	Processing Facility Improvements
Shaw Group, Inc.	Processing Facility Improvements

SECTION 3

SUBMITTALS

This section incorporates by reference Section 3 of the 2011 DQAP.

SECTION 4

PERFORMANCE MONITORING REQUIREMENTS

This section incorporates by reference Section 4 of the 2011 DQAP except that the references to the 2011 RAM QAPP and the 2011 Performance Standards Compliance Plan (PSCP) should refer to the Phase 2 RAM QAPP and the 2013 PSCP.

SECTION 5

INSPECTION AND VERIFICATION ACTIVITIES

This section incorporates by reference Section 5 of the 2011 DQAP, except for changes to the FDR and contract numbers as described in Section 1 above.

SECTION 6

CONSTRUCTION DEFICIENCIES

This section incorporates by reference Section 6 of the 2011 DQAP.

SECTION 7

DOCUMENTATION

This section incorporates by reference Section 7 of the 2011 DQAP.

SECTION 8

EPA APPROVALS FOR CERTIFICATION UNITS

This section incorporates by reference Section 8 of the 2011 DQAP except for the changes to the cross-references as described in Section 1 above and except for the following revision of Section 8.1:

8.1 CU DREDGING COMPLETION APPROVAL

After the design dredging pass is reported by the Dredging Contractor to be complete within an individual Certification Unit (CU) or portion thereof, GE will provide notification to EPA of the start of the dredging approval process for that CU or portion thereof. The dredging approval process will be initiated by the CM with the collection of bathymetric survey data and sediment cores for laboratory analysis. A multi-beam survey will be performed in accordance with the Standard Operating Procedure for Dredging Operations Bathymetric Surveys (Attachment 5) by the third-party hydrographic survey contractor to document the bathymetric elevations after the design dredging pass. Single-beam or land surveys may be performed in shallow dredge areas. Concurrent with the bathymetric survey, the third-party sediment coring contractor will collect sediment cores in accordance with Section 4 of the Phase 2 RAM QAPP. (It should be noted that, if the CM is able to demonstrate that the Dredging Contractor's bathymetric surveys aligns with the third-party surveyor's bathymetric surveys, the CM may use the Dredging Contractor's confirmatory bathymetric survey and move directly to core collection after the design dredging pass is reported to be complete.) GE will review the results of the bathymetric survey and the sediment sample results with EPA in accordance with Section 4 of the 2013 PSCP to determine the need for and extent of an additional dredge pass. Bathymetric data and sediment sample data will be targeted to be available to allow EPA approval within five (5) days following the Dredging Contractor's notification of completion of the design dredging pass. In order to meet the target of obtaining EPA approval of all bathymetric surveys and sediment sampling within five (5) days following notification of completion of the design dredging pass, EPA is expected to be an integral part of that daily process.

Should the bathymetric survey and the results of the residual sediment sampling indicate the need for an additional dredging pass in accordance with the criteria in the 2013 PSCP (Appendix D to the 2013 RAWP), the process for confirmation of the additional dredging pass will be similar to that for the initial dredging pass. Review and confirmation of removal in an additional dredging pass is expected to take approximately five (5) days, including the review and determination by the EPA representative.

The CM will review the vertical and horizontal limits of removal and the results of the post-dredging sediment sampling within the CU in accordance with the applicable requirements of the 2013 FDR and the 2013 PSCP.

The CM will complete the CU Dredging Completion Approval Form (included in Attachment 4). This form will also identify the extent of backfilling and/or capping for the CU in accordance with the applicable requirements of the 2013 FDR, the 2013 PSCP, and agreements made with EPA during the course of the daily CU acceptance progress meetings.

A completed CU Dredging Completion Approval Form, Form 1, all laboratory data, and supporting drawings will be presented to the EPA field representative for review and concurrence. If the EPA field representative agrees that dredging has been completed and that the specified plan for backfilling and/or capping conforms to the requirements of the above-mentioned documents, then the EPA field representative will promptly indicate concurrence by initialing and signing the CU Dredging Completion Approval Form, Form 1. To keep pace with the dredging schedule, CU acceptance decision-making products will be generated seven (7) days per week, and EPA's availability to review and discuss those products on a seven (7) days per week basis may be necessary.

SECTION 9

FIELD CHANGES

This section incorporates by reference Section 9 of the 2011 DQAP.

SECTION 10

FINAL QC/QA REPORTING

This section incorporates by reference Section 10 of the 2011 DQAP, except that: (a) the annual report on 2013 work activities will be submitted within 30 days after completion of dredging, backfilling, capping, shoreline reconstruction/stabilization, sediment processing, and off-site transport of processed sediments for that season; and (b) that annual report will include the documentation specified in Section 5.5 of the 2013 PSCP.

ATTACHMENT 1

DQAP STAFFING LIST AND RESUMÉS

DQAP STAFFING LIST

DQAP

2013 Dredging and Facility Operations
Hudson River PCB's Superfund Site

April 1, 2013

The following personnel are assigned DQAP functions effective as indicated below. Periodic updates to this list are to be issued by the CM.

FUNCTION	NAME	ORGANIZATION
Construction Quality Assurance Officer (CQAO)	Thomas Binsfeld	Construction Management
CQA Field Inspector (FI)	Richard Robinson	Construction Management
CQA FI	Zachary Evans	Construction Management
CQA FI	Michael Vaillant	Construction Management
CQA FI	Douglas Dumont	Construction Management
CQA FI	Susan Green	Construction Management
CQA FI	Stephan Lemieux	Construction Management

/s/ Larry Hartman
CM Approval

1 April 2013
Date

Years of Experience
12

Education / Training

- MS, Environmental Engineering, Madison University, Gulfport, MS, 2004
- BS, Biology, Minnesota State University, Mankato, MN, 2001

License / Registration

- CPEA – Certified Professional Environmental Auditor

Special Training

- RABQSA Certified Lead Auditor for both ISO 9001 (QMS), and 14001 (EMS) Management Systems
- OSHA HAZWOPER Refresher 40-hour
- Hazardous Materials Specialist
- Tank and Specialty Car Specialist, Railway Education Bureau

Thomas Binsfeld

CQA Officer

Summary of Relevant Qualifications

Mr. Binfeld has 12 years of combined consulting and regulatory experience directly related to the development and execution of technical and Quality Assurance programs of remediation of PCB and MGP impacted sediment and soils under New York State and Federal Superfund Programs. Primary responsibilities have involved;

- Construction Management/ Quality Assurance – Construction Quality Assurance inspection, engineering and management roles integral to the development and execution of multi-year remedial programs. Managing and mentoring teams of junior technical and quality inspection staff.
- Environmental Engineering– Managed environmental site compliance systems for large industrial and transportation facilities in multiple states. Monitored and maintained remediation systems for multiple sites. Conclusive, concrete, & confident leadership Prepared deliverable project reports associated with discharges, UST/AST upgrades, and remedial activities; Assisted in the implementation of multi-media compliance programs and environmental management systems. Positive team leader that is motivational, flexible and takes initiative.

Work Experience

Quality Assurance Manager - Parsons Corporation, Hudson River Remediation - General Electric, Fort, Edward, New York. QA Manager Manages the Quality Assurance program through the tracking, evaluation and quality conformance evaluation of project operations such as: shoreline tree trimming, debris removal, dredging, backfilling and capping, bank stabilization, habitat restoration, lock passages, transport, unloading, processing and disposal of over 500,000 cy of dredged sediment. Mentoring and training junior inspection staff relative to quality assurance and control procedures, documentation non-conformance issues and corrective actions. Extensive coordination with contractor's quality control staff and regulatory agency representatives to achieve overall performance and conformance with the contract documents.

Environmental Engineer - *AECOM, Latham, NY.* Environmental compliance consultant, QC/QA Management, Waste Management, Chemical Disposal, Quality Management and Permitting, Environmental Health and Safety Compliance auditing, and Environmental Management System development and auditing. Clients and projects including but not limited to:

- Beverages Company, Environmental Health and Safety Compliance Audit, United States.
  Served as lead environmental health and safety auditor for more than twenty (20) locations including production plants, warehouse and production operations in facilities in the US. Responsible for examining compliance with state, local, federal, and corporate requirements [2011].
- Transportation Audits, Alabama, & Mississippi. Served as audit Team Member or team leader for Transportation Compliance Audits at Georgia Pacific's Alabama River Cellulose, and Leaf River MS Cellulose facilities in Monroeville Alabama & Old Augusta MS. Activities included Rail inspection, Hazardous Materials Verification of compliance with General Applicability of Hazardous Materials Transportation Laws including:, DOT HAZ-MAT Employee Identification and Training, Shipping methods for Hazardous Materials, Shipping Papers, Labeling, Marking, and Placarding. Placarding Applicability, Certificate of Registration & Security Plan applicability, Alabama state requirements and other pertinent legal requirements. We also verified corrections actions made based upon previous audit findings [2011]

- DOT Transportation Audit. Served as audit Team Leader for a Transportation Compliance Audit at KOCH Nitrogen Company's Sterlington Louisiana Anhydrous Ammonia Distribution facility. Activities included Hazardous Materials Verification of compliance with General Applicability of Hazardous Materials Transportation Laws including:, DOT HAZ-MAT Employee Identification and Training, Shipping methods for Hazardous Materials, Shipping Papers, Labeling, Marking, and Placarding. Placarding Applicability, Certificate of Registration & Security Plan applicability, Louisiana state requirements and other pertinent legal requirements. We also verified corrections actions made based upon previous audit findings [2011]
- New York State, New York State Hospitals. Provided assistance and consultation with all environmental, health, and safety programs at various facilities throughout New York State. The priority of the contract with DASNY is to prepare the facilities for voluntary EPA multimedia compliance audits. The project involved consulting with facility managers on environmental regulatory compliance. Monthly coaching visits to the facilities were conducted to assist with federal, state, and local environmental regulations. Specific areas covered are hazardous waste management, hazardous waste disposal, oil spill prevention, stormwater pollution prevention, wastewater management, and assist with regulatory reporting and record keeping requirements. Employee training includes the topics of universal waste management, spill prevention, control and countermeasures, and stormwater pollution prevention. Conducted periodic multi-media process audits of NY facilities to determine compliance..[01/2009 – 08/2012]
- ISO 14001 Registration Assistance, Oriskany, New York. Evaluation of facility preparedness for ISO Registrations (QC and EMS). Evaluated organizational readiness for ISO registration including aspects and impacts for facility's ISO 14001 EMS implementation process. Evaluation of all areas of the facility for environmental aspects and subsequent Impacts. Procedural control, management system development and implementation, Gap analysis prior to registration process. Conducted gap analysis audit and pre-registration conformance audit of facility operations.[2010]
- Hospital Center, Compliance Review and Waste Characterization and Identification, New York. Reviewed facility wastes, discharges, and operating procedures to identify waste streams requiring management. Characterized waste streams previously identified into waste stream categories. Outlined facility waste management program (policy) including components of waste as Identified. Sections of the policy's management would follow the waste classifications listed. Program included regulatory requirements for generation, storage, labeling, recordkeeping, and disposal of regulated waste streams. Program discussed how to identify what generator status facility is based on specific waste streams the facility is generating and what implications each generator status has on the facility. Program included recordkeeping and reporting requirements for waste management at the facility. Addressed management requirements for each specific waste stream identified and would detail approved methods for management of each waste. A subset of the program would include a sanitary sewer no dumping policy including alternate management methods for materials traditionally managed via sink or toilet at the facility. Program also included ancillary plan development that was required as deemed by generator status. Conducted facility-wide process audit to determine compliance with regulatory requirements. [10/2009 – 08/2012]
- Manufacturing Facility, Voorheesville, New York.
  This project was for a heavy manufacturing facility that has various production processes that are regulated by multiple regulatory agencies. Provided assistance and consultation with regulatory compliance review for the facility's ISO 14001 EMS. Conducted third-party ISO 14001 conformance audit of facility operations. [2010]
- Manufacturing Facility, Horseheads, New York. Provided assistance and consultation with hazardous waste reduction planning and programming. This project was for a

biomedical components manufacturing facility that has various production processes that are regulated by multiple regulatory agencies. [2009]

- TRI Assistance, Oriskany, New York. Providing assistance and consultation with Toxic Release Inventory (TRI) EPCRA section 313 TRI reporting and submissions. Facility had discovered that they had failed to properly report for multiple previous years. Upon this discovery assistance was provided with the reporting requirements and also the various requirements for self disclosure of the compliance issue. [2009- 2011]

Facilities Manager - OP-TECH Environmental Services, Inc, Waverly, New York

- NY State Part 360 waste facility manager;
- Solids Management, Dewatering Treatment/solidification system
- RCRA, DOT and EPA compliance manager;
- Process control and implementation and management;
- Human resource management and supervision;
- Technical personnel management.
- Process control documentation management;
- Lab-pack chemicals for disposal;
- Conduct facility training and auditing;
- Manage/direct all continuous improvement projects an initiatives;
- DOT and environmental training for the entire corporation. [07/2007 - 12/2008]

Environmental Manager - NUCOR Steel/Vulcraft of New York, Chemung, New York.
Responsible for all environmental needs of a large structural steel fabricator, including SPCC, SWPPP, NPDES, SDPES, RCRA waste management, permitting and planning.

- Provided maintenance, testing and inspection of all wastewater treatment systems, drinking water systems, oil-water separator systems, facility air quality systems, and waste management.
- Served as emergency manager for hazardous materials incidents.
- Manager of Wastewater treatment operators.
- Wastewater treatment sludge management.
- Provided environmental and safety training and served as safety back-up whenever necessary.
- Served as the ISO quality management lead auditor and assistant management representative.
- Led the Development and implementation of both QMS and EMS systems
  - EMS programs included Title V,
  - IWTP for hazardous wastewater,
  - SQG of hazardous waste,
  - and storm water (SWPPP).

Cedar American Rail Holdings, Inc., Bettendorf, Iowa. Manager of Environmental, Hazardous Materials, Training & Safety

- Responsible for all environmental needs of a large railroad corporation including: Incident Management, Regulatory Compliance and Remediation activities.
- Managed construction of facility upgrades.
- Conducted multi-media compliance audits of numerous rail yards and facility maintenance shops in various mid-western states including MN, WI, IL, MO, SD, WY, IA, and KS.
- Conducted environmental compliance audits of rail facilities.
  - [06/2002-08/2005]

Years of Experience

28

Education / Training

- A.A.S. – Construction Technology
- A.A.S, Human Resource Management, Community College of the Air Force
- 147 Semester Hours toward B.S.O.E, Wayland Baptist University, Texas

Special Training

- American Heart Association CPR/First Aid
- OSHA 40-Hour Hazardous Waste Safety Training
- OSHA 30-Hour Construction Safety Course
- OSHA 8-Hour Supervisor Training
- Quality Teams and Tools
- ISO 9000 Audit Course

Richard Robinson

Chief River Operations Inspector

Summary of Relevant Qualifications

Mr. Robinson has 28 years of experience in environmental restoration, military and highway construction projects. As a result of his diverse experience in various sectors, he provides management, coordination, oversight, and synergy to a diverse team dedicated to personal, professional, and organization goals. Mr. Robinson project experience includes construction management, quality assurance, multi-site operations, facility maintenance, project and, crisis management, asset management, contingency engineering, motivational team building skills, staffing, planning, organizing and budgeting.

Work Experience

Chief River Operations Inspector, GE Hudson River Dredging Project - Ft. Edward, New York. Mr. Robinson is responsible for inspecting and providing quality assurance to the various facets of this multi-year river operations project. Mr. Robinson manages quality assurance staff for all on river operations. This includes scheduling and management of the FIs on a 24 hour, 6 day /week basis. He provides overall review of QA efforts related to river operations including tracking production and quantities, and verifying work completed by Contractors. He also coordinates the operational activities with the contractors and performs complex inspection tasks of assigned construction activities to ensure compliance with all applicable codes and standards. Other responsibilities include documenting, tracking and working to correct all conformance, compliance, and construction deficiencies as described by contract documents.

Construction Quality Control Manager, GE Hudson River Dredging Project - Ft. Edward, New York. Mr. Robinson served as the Contractor's Quality Control Manager for the GE Hudson River Processing Facility Site Work Construction (civil works). He was responsible for implementing the overall Contractor Quality Control Plan. This plan included 35 Definable Features of Work, US Army Corp of Engineer's inspection process documenting preparatory, initial, follow-up, and final inspection. He documented, tracked and corrected all conformance, compliance, and construction deficiencies' as described by contract documents. Scheduled all applicable material testing requirements, in field soil density test, ACI concrete test and managed the CQC staff. In addition, he managed the overall Safety Program with a staff of 1 Site Safety Officer and 4 Site Safety Representatives. Responsible for conducting daily safety briefings, accident investigation, near miss incident reporting, behavioral based safety observation program, administering the drug and alcohol testing program, air and noise monitoring.

United States Air Force Military Leader with 22 years of experience in government construction projects, facility maintenance, civil engineer operations, contract management, project management, and construction management. He has worldwide experience in the US, Pacific, Europe, Central America, and Southwest Asia. Acknowledged as an expert in civil engineering contingency operations, construction, operations and maintenance, security and sustainment in austere environments.

Luzerne Road Remedial Construction - Glen Falls Municipal Landfill – Field Engineer, Construction Quality Control Manager and Environmental Health and Safety Officer for this 16 acre $4.7 million landfill closure and cap construction project. Responsible for implementing the overall Contractor Quality Control Plan and Site Safety Plan. The CQC plan included Definable Features of Work, US Army Corp of Engineers inspection process documenting Preparatory, Initial, Follow-up, and Final inspection. Tracked and corrected all conformance, compliance, and construction deficiencies as described by contract documents. Scheduled all applicable material testing requirements, conducted waste characterization sampling, pre and post excavation soil sampling, and puff matrix sampling.

Richard Robinson (Continued)

Safety Officer responsibilities included HASP implementation, Personal Air Monitoring Program, Community Air Monitoring Program, VOC Monitoring, and Particulate Monitoring. In addition, responsible for processing submittals, change orders, field orders and overall administration of project documentation

COLONIE LANDFILL AREA 6, PHASE II LANDFILL CELL LINER CONSTRUCTION, COLONIE, NEW YORK. - Field Engineer for this 13 acre $4.5 million landfill cell construction project. Mr. Robinson was responsible for processing submittals, change orders, field orders, and overall administration of project documentation. His duties included monitoring quality, production, and safety. Produced and maintained job schedules and coordinated with subcontractors and suppliers. He worked directly with the owner, engineer, inspectors, and NYS Department of Conservation representative to resolve construction issues. In addition, he coordinated and conducted all material source sampling for imported materials, and assists the Construction Manager in testing and sampling in place materials throughout construction.

NYS THRUWAY AUTHORITY, LOCK 6E REHABILITATION PROJECT, WATERFORD, NEW YORK. Mr. Robinson was the Night Shift Superintendent for this $15 million project to resurface the lock chamber, intake, outlet, bypass tunnels, and install new miter gates. He directly supervised Carpenters, Laborers, and Crane Operators in the demolition and reconstruction of the Lock 6E concrete surfaces. Responsible for the quality, production, and safety of personnel and equipment.

RECONSTRUCT SEVEN INTERSECTIONS ALONG U.S. ROUTE 9 AND NYS ROUTE 254. Project Manager for the $2.3 million reconstruction of seven intersections along U.S. Route 9 and NYS Route 254 in Queensbury NY. The scope of work included repairing existing culverts, installing new drainage structures, extending existing utilities, adding additional lanes and milling and resurfacing of existing pavement. In addition, new traffic signal and inductance loop systems were installed at the intersections.

U.S. CENTRAL COMMAND HEADQUARTERS FORCE PROTECTION PROJECTS Project Manager for the Congressional Funded force protection initiatives at the Command Headquarters Building at MacDill Air Force Base, Tampa Florida. The Scope of work included reconstruction of the building entrance, security systems, 3M Mylar film blast protection, vehicle entry security gate systems, hydraulic barrier and bollard systems, and the perimeter security wall.

Years of Experience
5

Education / Training

- B.S. Civil Engineering, Syracuse University, Syracuse, NY 2009
- Minor Engineering Management, Syracuse University, Syracuse, NY 2009

License / Registration

- E.I.T.: Fundamentals of Engineering, New York – April 2009

Special Training

- 40-Hour HAZWOPER: Hazardous Waste Operations and Emergency Response
- OSHA 10-Hour: Construction Training
- Boaters Certificate: New York State
- First Aid, CPR, AED
- Microsoft: Office Programs
- Primavera:
  - Project Management v621
  - Project Management v13 Oracle
  - SharePoint
- CAD:
  - MathCAD
  - MicroStation
  - AutoCAD
- dbo2 - Design Build Own Operate:
  - Health & Safety Inspections
- Surveying:
  - Proficient in surveying techniques – Traditional, Theodolite, and GPS

Zachary T. Evans

CQA Field Inspector

Summary of Relevant Qualifications

Mr. Evans has experience as a construction and field inspector, and engineering experience in the Structural and Transportation fields.

Work Experience

Field Inspector - Parsons – Fort Edward, NY - General Electric Co. Hudson River Dredging Project. Provided quality assurance oversight to eight of seventeen dredge and backfill plants in the targeted dredging of 265,000 cy of Tri+ PCB laden sediments from the Hudson River. Tracked quantities and percent of work complete. Addressed concerns relating to historical artifacts and quality of life issues (Light, Noise, Air, Odor, and Navigation). Oversaw activities associated with environmental and navigational dredging with dredge platforms using hydraulic level cut buckets controlled by Hypack Dredgepack software. Provided quality assurance oversight of resuspension controls including installation, operation and removal of a rock dike with control structures, sheet piling, and silt curtains. Provided quality assurance oversight of shoreline stabilization activities, backfill and capping activities, and habitat construction. Also responsible for monitoring onshore activities including mobilization/demobilization of work sites and dredge equipment, manpower and equipment tracking, loading and shipping of railcars. Completed a post-dredging data analysis of all tracked quantities. Also conducted on-river structure surveys for future dredge areas.

Transportation Engineer Intern - Herbert, Roland & Grubic, Inc – Dunmore, PA – Performed a detailed roadway cross-sectional design using MicroSation and performed inspections of concrete and reinforcing bars for installation of interstate logo signboards. Performed trip generation calculations, and completed drawings using AutoCAD drawings for Highway Occupancy Permits. Updated property deeds in accordance with CAD drawing details to ensure accuracy of work.

Structural Engineer Intern - Dubai Contracting Company, L.L.C., – Dubai, U.A.E. - Performed inspection work on high-rise construction sites including the Rolex, Sama, Code, and 014 Towers. Oversaw operations associated with construction of the reinforced concrete sheer walls, foundations, foundation water tanks and repairs, block walls, building utilities (HVAC, plumbing and electrical), curtain walls, parking garages. Conducted weekly site progress meetings.

ESTI Construction Inspector - Pennsylvania Department of Transportation, District 4-0 – Construction Unit – Dunmore, PA. Performed inspections and maintained accurate legal documentation of daily roadway construction processes including manpower, equipment, safety, and quality control. Assured compliance with codes, standards, and project contract. Oversaw work crew of 15 personnel. Documented and issued pay for daily work performed by subcontractors. Inspected procedures including paving milling of roadways, pipe and drainage installation, and line painting and testing.

Michael T. Vaillant

CQA Field Inspector

Years of Experience
9

Education / Training

- B.S. – Civil Engineering, Columbia University, New York, NY, 2004
- B.S – Physics & Environmental Studies, Hobart College, Geneva, NY, 1996

License / Registration

- Engineering in Training , New York

Special Training

- 40-Hr O.S.H.A – 29 CFR 1910.120 HAZWOPER w/ Eight Hour Refresher

Summary of Relevant Qualifications

Mr. Vaillant has 9 years experience in various structural building design, civil & site engineering, waterfront development, and bridge analysis and inspection projects. Mr. Vaillant has relevant experience on complex projects including design work, construction and bridge inspections, and construction management. He has proven abilities in utilizing his engineering judgment and knowledge, providing unique and cost-effective solutions and working within time and budget constraints.

Work Experience

River Inspector – Parsons, Hudson Falls, NY - Responsible for daily oversight and documentation of construction activities related to river operations, including dredging, backfill, and land-based operations in support of river work at the GE Hudson River Dredging Project. Acted as the project owner's representative to ensure work was performed in compliance with project plans and specifications. Provided oversight for construction of the new unloading wharf at project processing facility along the Champlain Canal. Performed survey and evaluation of existing structures in the Hudson River to evaluate condition of the structure and potential impacts the structure may have on future dredging operations.

Assistant Team Leader/Design Engineer II – MJ Engineering & Land Survey, Clifton Park, NY - Responsible for assisting with NYSDOT Region 1 & Region 8 Biennial and Interim Bridge Inspections by documenting erosion, scour, and undermining at abutments and piers, measuring section loss of steel primary members, and preparing reports and sketches detailing findings. Operated special access equipment on a variety of inspections including Under Bridge Inspection Units (UBIU), bucket trucks, and motorized lifts. Oversaw setup of lane closures to ensure safety of inspection team and the public. Scheduled all inspections, including lane closures and special access equipment needs. Coordinated with other consultants and NYSDOT to schedule inspections and meet deadlines.

Staff Engineer – Green International Affiliates, Westford, MA - Reviewed original construction plans and inspection reports for steel, precast concrete, and block arch railroad bridges. Prepared detailed analysis calculations and models for technical rating reports. Performed field inspections of structures and documented conditions in detailed inspection reports.

Site Engineer, Lincoln, RI –T-Pier Rehabilitation & Mooring Field - Assisted with above and below water level inspections of existing timber pier. Inspection included removal of select timber piles for visual analysis of pile condition. Proposed multiple options for pier rehabilitation and cost estimates based inspection. Designed various mooring field layouts in adjacent harbor, allowing for a variety of boat sizes and mooring options.

Middle School Construction - Assisted with preparation of site engineering documents for permitting and construction, including site layout, grading, utility, and drainage plans, including tiered detention ponds and athletic fields. Construction oversight and administration tasks for site and structural work. Tasks included site inspections and field reports, responses to RFI's, and review of shop drawings.

Youth Assessment & Development Facilities – Completed a site layout, grading, drainage, and utility design for two separate youth correctional facility sites from conceptual design to construction phase.

Years of Experience
19

Education / Training

- A.S. - Civil Engineering Technology, State University of New York, 1993

Special Training

- State of California Department of Public Health Water Treatment Plant Operator-T1
- OSHA 40-Hour Hazardous Waste Safety Training
- OSHA 10-Hour Construction Safety Course
- OSHA 8-Hour Supervisor Training
- LPS-Loss Prevention System Training Certification
- Confined Space Entry
- Advanced PLC Programming
- TWIC Card
- Troxler Certified
- ACI Concrete Field Technician – Grade I Certification
- DBO2 Safety Software
- Primavera P6

Douglas D. Dumont

Chief Processing Facility Inspector

Summary of Relevant Qualifications

Mr. Dumont has 19 years of experience in civil and environmental remediation projects with roles that include: resident project representative, facility operations specialist, construction quality assurance inspector, construction oversight and inspection. Mr. Dumont is currently working on the General Electric Hudson River Dredging Project. Environmental remediation. His experience includes the following:

- Hazardous Waste Excavation, Treatment, Stabilization, Dewatering, and Transportation.
- Clean up of PCB's, Cyanides, Chromium 6 TCE, and other hazardous waste sites.
- Environmental Mechanical Dredging
- Slurry Walls
- Landfill Caps.
- Liner Construction
- Waste Water Treatment
- LNAPL Recovery Systems
- Bio-Venting
- Soil and Water Sampling
- Site Characterization Investigations

ACI certified as a concrete field technician- Grade I. He has served as a field and soils laboratory technician, procurement officer, and data manager on both private and public sector projects. His additional experience includes the operation of Geoprobes for collection of subsurface soil samples, well development, groundwater sampling, and sample preparation and shipment. He has been responsible for plant startups, developing facility operations and maintenance (O&M) manuals and lesson plans, plant evaluations, and implementation of computerized operational monitoring, control, and maintenance systems. Mr. Dumont has had oversight of concrete pours including inspection of formwork; re-bar installation, and concrete pours consisting of slump tests, entrained air tests, and compression cylinders.

Work Experience

Parsons-Chief Processing Inspector, Ft. Edward, New York. Mr. Dumont is currently the Chief Processing Inspector overseeing operations that are conducted 24 hours a day seven days a week and include unloading and processing six to eight sediment hopper barges (35' x 195' long) a day at a peak capacity of approximately 22,000 CY per week. At peak capacity a loaded unit train of 93 cars leaves the facility three times a week. Water from the process including stormwater is treated on-site through a 2 million gallon per day treatment plant that consists of clarifiers, multi-media filters, granular activated carbon vessels, and final polishing filtration. Mr. Dumont manages quality assurance staff for all Processing Facility operations including tracking production and quantities, and verifying work completed by Contractors and reviewing and approving inspectors Daily Field Reports.

Senior Construction Engineer/Specialist, Bayonne, New Jersey. Mr. Dumont served as the onsite representative at the Bayonne Crossing Development, overseeing and reporting on remedial activities onsite while development of the site is happening simultaneously. Which includes the installation of steel sheet piling for a NAPL Barrier Wall a construction of a Bio-Sparge Containment Trench which has vinyl sheet piling installed as a component of the Containment Trench.

Construction Inspection, Fernley, Nevada. Mr. Dumont was the onsite inspector for CDM during construction of a $40 million Drinking Water Micro Filtration Plant. Duties include

inspection of structural, mechanical and electrical construction activities and writing of daily reports.

Resident Project Representative, St. Petersburg, Florida. Mr. Dumont was the night shift resident project representative to observe capital project work being performed at the Pinellas County Waste to Energy Facility. His duties were to observe construction and implementation of the projects contained within 7 Exhibits to Veolia Environmental Services Inc., contract with Pinellas County, and to assure that Veolia Environmental Services Inc. complied with the contracts and all applicable codes. The work overseen by Mr. Dumont was on the following: Exhibit #1 Construction of Residue Storage Processing Building (RSPB), including rebar and concrete for building pad and erection of steel framing; Exhibit #2 Retrofitting of Boiler #3, removal and replacement of furnace water wall tube panels, including the final walk down of the hydrostatic test, feed chute assembly, grate drive traverse assembly, Martin stoker controls and feeders. Mr. Dumont also provided oversight on an overhaul and start up of a 25 MW Steam Turbine generator.

Construction Oversight and Inspection, Livingston, Montana. Mr. Dumont was the construction oversight and inspector under contract for Montana DEQ for the construction of the BNSF Livinston Shop Complex LNAPL recovery, soil bioventing and water treatment system. Mr. Dumont's duties included oversight of consturction and inspection of 1000 ft utilidor installed in an active railyard that connects the multi-use groundwater extraction/LNAPL recovery/bioventing well piping to a water treatment facility that houses granular activated carbon treatment of air and water streams, air blowers for the bioventing wells, and the system controls. Construction of a treatment building included numerous concrete pours, installation of piping, equipment and electrical work. Mr. Dumont's duties also included oversight of start-up and shake down of the treatment system once constructed.

Construction Quality Assurance Inspector, Massena, New York. Mr. Dumont was a construction quality assurance inspector (CQAI) at the Alcoa Inc., Massena Operations, West Plant Secure Landfill Cell 3 construction and operation.

Operations Specialist, Glendale, California. Mr. Dumont directed the startup of a $25 million, 7.2-million-gallon-per-day (mgd) water treatment plant, which uses air stripping and granular activated carbon to treat groundwater. His responsibilities included assisting with the startup, permit compliance, operation, maintenance, and monitoring for the plant.

Quality Assurance Inspector, Construction Remediation. Mr. Dumont was a member of CDM's construction quality assurance team associated with the $150 million Alcoa remediation project in Massena, New York. His responsibilities included construction inspection for a 40-acre Toxic Substances Control Act (TSCA) landfill with a composite liner, cap, and leachate collection/pumping systems; management of the field test database; well development; and groundwater sampling.

Susan Ann Green, P.G.

CQA Field Inspector

Years of Experience
26

Education / Training

- B.S., Iowa State University
- Graduate Coursework, Physical Geography and Geology, University of Utah

License / Registration

- Licensed Professional Geologist in Arkansas and Pennsylvania

Special Training

- OSHA 40-hour HAZWOPER
  - Level B-trained
  - Level C Site Safety Coordinator
- OSHA 10-hour Site Construction Outreach Safety Training
- BERS Proprietary Marine Vessel Tracking System
- Primavera P6 and Construction Manager Reporting Systems
- DBO2 Safety Software
- NYS-accredited Defensive Driving Certification

Publications and Presentations

- Completed twelve professional publications, technical papers, or presentations

Professional Affiliations

- Association of Environmental and Engineering Geologists
- National and Pennsylvania Ground Water Associations

Summary of Relevant Qualifications

Ms. Green has over 26 years as an accomplished groundwater geologist whose experience includes but is not limited to designing, implementing, inspecting, and managing multi-disciplinary environmental construction and remediation investigation oversight, geologic, and potable water supply projects. She excels in completing emergency construction oversight tasks. She has proven abilities in managing projects to schedule and budget; complex problem solving; and nurturing cohesive teams. Her projects have spanned 21 states supporting a wide range of Federal, state, municipal agencies as well as leading industries in the private sector.

Work Experience

Senior Construction Inspector/Processing Office Engineer, Fort Edward, NY. Ms. Green is currently a Senior Construction Inspector having covered both 2009 and 2011 field seasons at the Processing Facility. She completed diverse duties including inspection of sediment barge unloading, size separation of river dredge spoils, filter press sediment dewatering operations, and associated data management. Key progress metrics for this 24/7 facility were managed contemporaneously to support daily Client progress meetings, Quality of Life environmental response reports, and weekly production reports to the EPA and to the Client. Other data management tasks included but not limited to Quality Assurance review of Barge Travel Logs, management of the Processing Facility Contractor QC sample database, as well as the logging, shipment, and tracking of rail car processing waste characterization samples. Monitored the contractor's bulk material handling and management of all on site processed material stockpiles throughout the site for compliance with contract.

Auxiliary projects in support of Processing Facility Operations and Facilities included but were not limited to:

- Monitoring the Processing Facility under drain well network to prevent failure of the site protective liner.
- Designed and implemented a soil boring and sampling program to facilitate the expansion of the Coarse Material Storage Area and verify that the area was not contaminated with PCBs from adjacent work areas.
- Provided inspection of Processing Facility geotechnical drilling in support of the construction of the new Gravity Thickener as well as expansion of the Wharf and other potential structures. Inspection duties included logging boreholes and collection of geotechnical samples.
- Designed and inspected the asphalt sampling of the footprint for the new Gravity Thickener. The porous media-based sampling plan was designed to facilitate characterization of TSCA or non-TSCA disposal classification.
- Designed and inspected the asphalt sampling of the footprint for the new Wharf expansion bulkhead. The porous media-based sampling plan was designed t facilitate characterization of TSCA or non-TSCA disposal classification.
- Tracked and evaluated processing downtime for the Construction Manager.
- Reviewed contractor work and quality plan submittals.
- Inspected the final decontamination of heavy equipment, laboratory trailer, and associated peripheral equipment prior to leaving the Exclusion Zone and the Processing Facility at the completion of the primary field season. Inspection included splitting of wipe test samples for laboratory quality assurance.

Construction Inspector/Senior Geologist, Municipal Brownfield Development Site, Philadelphia, PA. Confidential Client. Ms. Green was the oversight inspector for the jet grouting operation to augment the thickness of the natural basal clay strata underlying the former Superfund Site beneath the future Runway 8-26 at the Philadelphia International Airport. The task included drilling of pilot holes on 5-foot centers concurrent with jet grouting over a 5 acre area.

Construction Inspector, Municipal Brownfield Development Site, Philadelphia, PA. Confidential Client. Inspected inspection of demolition and environmental remediation of soil surrounding the footprint of the future Runway 8-26 at the Philadelphia, International Airport. Operations included salvaging of concrete and other inert materials for beneficial reuse at the job site, reclaiming contaminated soils following thermal treatment for reuse as construction backfill material, and PA Act 2 waste characterization for determination of disposal options. Minimized contractor removal of reusable concrete to reduce offsite disposal and onsite backfill costs incurred by the Division of Aviation. Reviewed for the Airport's Lead Construction Manager, labor and equipment expenditure records, contractor soil remediation confirmation sampling results, transportation manifests, disposal confirmations, and beneficial use of remediated site soil and construction demolition debris. Co-designed an innovative PA DEP Act 2-compliant sampling scheme for beneficial reuse or disposal of target materials, LUSTs, contaminated soil and water. Provided oversight of on-site orphan USTs and third party UST removals.

Construction Inspector/Senior Geologist, Municipal Brownfield Development Site, Philadelphia, PA. Confidential Client. Ms. Green provided inspection of the installation of nested sentinel wells into the Sole Source Potomac Aquifer to monitor potential migration of contamination into the aquifer from the nearby delisted Superfund site. She also assisted in the extension of the landfill dewatering wells through cap materials; installation and data acquisition from meters installed in the landfill dewatering wells; and inspection of the installation, extension, and rehabilitation of monitoring and recovery wells.

Site Manager/Construction Inspector/Senior Geologist, Phase II Real Estate Due Diligence Investigation with Demolition and Pa Act 2 Remediation, Former Transformer Testing Facility, Philadelphia, PA, Confidential client. Ms. Green designed and implemented a second investigational phase with limited inspection of the remediation and demolition at a former TSCA SQG facility. She participated in field operations that included but were not limited to extensive on-site file reviews, surface geophysical surveys, LUST/ multi-media, rapid turn sampling, monitoring well installation, hydrologic testing and groundwater modeling to secure a PA DEP Non-use Aquifer Determination. Coordinated multiple personnel for all project phases. Inspected voluntary facility demolition by the property owner. Procured laboratory and drilling services subcontractors. Interfaced with the property owner to complete an extensive supplemental file review and to dispose of investigation-derived TSCA waste.

Years of Experience
16

Education / Training

- B.S. - Geology, Plattsburgh State University, Plattsburgh, NY, 1999
- AOS – Science, Adirondack Community College, Queensbury, NY, 1996

Special Training

- 40-Hr O.S.H.A – 29 CFR 1910.120 HAZWOPER w/ Eight Hour Refresher
- Asbestos Supervisor – NYS DOL CERT # 05-04823
- 10-Hr O.S.H.A Construction & Safety Course
- Forklift O.S.H.A Certification – 29 CFR 1910.178
- PADI Open Water, Advanced Open Water, Ice Diver
- NYS Boaters Safety Course

Stephen J. Lemieux

CQA Field Inspector

Summary of Relevant Qualifications

Mr. Lemieux has 16 years experience supporting environmental projects as an environmental technician, supervisor and field geologist.

Work Experience

Processing Facility Inspector – Parsons, Hudson Falls, NY - Project contractor oversight for the entire sediment processing facility to include; size separation, dewatering, water treatment, wharf and rail yard operations for the General Electric Hudson River PCB superfund dredging project. Duties include documentation of all contractor and/or subcontractor activities on site day or night to include oversight of union and non-union employees and equipment, safety and health observations, construction activities and report and photograph preparation.

Environmental Technician, Glenmont, NY - Standby spill response for the gulf oil spill crisis in the Gulfport/Biloxi Mississippi area.

Asbestos Supervisor and Equipment Operator, Albany, NY - Supervised ten or more employees during the removal, cleaning, and disposal of asbestos containing materials from various schools, plants, and commercial buildings in New York State. Operated skid steers, loaders, scissor lifts, and forklifts to expedite disposal efforts on job sites. Interacted with contractors, sub-contractors, project monitors, and state agencies on regular basis in regards to project progress/completion, state/federal adherence asbestos regulations, and health and safety concerns.

Asbestos Worker and Equipment Operator, Albany, NY - Participated in the removal, cleaning, and disposal of asbestos containing materials from various schools. Operated skid steers, loaders, scissor lifts, and forklifts to expedite disposal efforts on job sites.

Engineering Geologist, Albany, NY - Prepared quarterly groundwater monitoring and subsurface investigation reporting for NYSDOT station sites throughout New York State. Gauged and sampled contaminated monitoring wells at various NYSDOT sites. Participated in global positioning satellite field training for establishing monitoring well networks on state geographic information system software.

Environmental Technician, Equipment Operator, Asbestos Supervisor, Rotterdam, NY – Performed on-call, twenty-four (24) hour spill response for NYSDEC spill response contract, rail road companies, and private sector clients. Performed system operation and maintenance checks for pump and treat and soil vapor remedial systems. Gauged and sampled contaminated monitoring & drinking water wells for NYS DEC and DOH agencies. Conducted lead, mold, and pigeon fecal abatements for commercial and industrial companies. Non-Hazardous waste transport of drums, contaminated soil, and asbestos waste to disposal facilities. Underground storage tank cleaning, dismantling, and removal for state and private clients.

Operated heavy/light equipment for various state and private sector project remedial excavation projects such as skid-steers, excavators, loaders, and backhoes.

Supervised ten or more employees during asbestos abatements of various schools, colleges, plants, and commercial buildings in New York and Massachusetts. Interacted with contractors, sub-contractors, project monitors, and state agencies on regular basis in regards to project progress/completion, state/federal adherence asbestos regulations, and health and safety concerns.

Field Geologist, Saratoga Springs, NY - Gauged and sampled on-site monitoring wells at various commercial, industrial & municipal landfill sites. Prepared quarterly groundwater monitoring reporting and mapping for private sector clients. Operated heavy equipment when needed to expedite soil sampling of excavations at contaminated sites. Participated in the sediment core sample processing at the Fort Edward General Electric Facility for the PCB dredging of the Hudson River. Duties entailed breaking down sediment cores into sections for description cataloging, decontamination of tools used during the description process, and hazardous waste disposal into drums.

Environmental Geologist, Ballston Spa, NY. Report preparation using Microsoft word and excel software for subsurface investigations, quarterly groundwater monitoring, remedial system operation and maintenance and installation, contaminated soil excavations, underground storage tank decommissioning and removal, residential drinking water well installation and testing, test pit investigations, and aquifer yield pump tests. Project management of approximately twenty to twenty-five sites to included client interactions, technician/sub contractor scheduling, budgeting, billing/payments, quality/quantity control for the NYS DEC standby remediation contract and for private sector clients.

Conducted oversight of subsurface/bedrock investigations, monitoring and residential/ municipal drinking water well installations by sub-contractor drilling companies throughout New York State. Gauged and sampled three to thirty on-site monitoring wells at a time for various state and private sector clients during all seasons. Performed oversight and inspection for decommissioning of various commercial & residential underground storage tanks. Participated in the installation and operation of various remedial technologies such as air sparging, pump and treat, and soil vapor extraction.

MILITARY

Specialist (E-4) - Field Artillery of the Vermont Army National Guard in Vergennes, VT

- Attended a two week 13B Military Occupation School (MOS) for field artillery operations in Phoenix, AZ.
- Military police operations involving security in and out of military installations and convoy escorts in and around Baghdad, Iraq during activation in for Operation Iraqi Freedom II.

Specialist (E-4) - Infantry of the New York Army National Guard in Ticonderoga, NY

- Attended active duty for basic training and 11B MOS advanced infantry training (3 months) in Fort Benning, GA.
- Served in the infantry for training one weekend a month and two weeks a year at a New York State armory in Ticonderoga, NY.

ATTACHMENT 2

DREDGING AND FACILITY OPERATIONS TEST AND INSPECTION TABLES

Table A2-1 Processing Facility Operations Inspections and Tests

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Sediment dewatering – filter cake and coarse material	Not applicable	Visual observation for appearance of free liquid or conditions that may result in the release of free liquid	Every batch	No apparent free liquid or sufficiently saturated condition of the material that could result in the release of free liquid
Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Sediment dewatering – filter cake	Contract 30, Section 13750 3.11	Visual + Paint Filter Liquids Test	Periodically confirm visual observation	Pass: Paint Filter Liquids Test
Sediment dewatering - coarse material	Contract 30, Section 13750 3.11	Visual + Paint Filter Liquids Test	Periodically to confirm visual observation	Pass: Paint Filter Liquids Test
Non-TSCA coarse material	Not applicable	Total PCBs Method GEHR8082	A five-point composite sample every 500 cy placed in Non-TSCA Coarse Material Staging Area. (Once test data have proven that process controls are effective and with the concurrence of the non-TSCA disposal facility, the frequency of confirmation testing may be reduced.	Pass: less than 50 parts per million (ppm) Total PCBs. (Note: Materials with Total PCBs ≥ 40 ppm will be re-tested or disposed of as TSCA material.)

Table A2-1 Processing Facility Operations Inspections and Tests

Test Schedule con't				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Non-TSCA fine material (filter cake)	Not applicable	Total PCBs Method GEHR8082	A five-point composite sample every 300 cy placed in Non-TSCA Filter Cake Staging Enclosure. (Once test data have proven that process controls are effective and with the concurrence of the non-TSCA disposal facility, the frequency of confirmation testing may be reduced.)	Pass: less than 50 ppm Total PCBs. (Note: Materials with Total PCBs ≥ 40 ppm will be re-tested or disposed of as TSCA material.)

Note: Technical Specification, Contract 30, Section 13750 (Processing Facility Operations)

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

DREDGING

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Water quality	Contract 42A Section 13805	Visual observations for turbidity plume, floatables or sheen	Daily during each shift by visual observations	Per contract specifications
(Note: The above is contractor operational monitoring, not compliance monitoring under Resuspension Performance Standard.)				
Bucket closure	Contract 42A Section 13803	Operator observation and limit switch monitor	Ongoing throughout dredging via operator and inspector observations	To the extent possible, complete closing of the dredge bucket before it is lifted from the river bottom, unless prohibited by debris.
Dredge positioning	Contract 42A Section 13803	Operator observation of in-cab monitor	Ongoing throughout dredging via real time kinematic differential global positioning system (RTK DGPS)	No dredging outside project limits
Heavy equipment inspection	01350 1.03 I 1.14 C	Visual	Daily	No leakage of liquids observed
Crane inspection	Section 01350 1.03 D.4 N 1.14 C	Visual	Annual by qualified third party and daily (each shift) for QC	Annual Certificate of Compliance Per manufacturer requirements for safety and per specifications for quality (deficiencies)

DREDGING

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Marine vessel inspection	Section 13897 1.03 A.2	Visual	Prior to Mobilization	Pre-mob: Certificate of Compliance Per Coast Guard and project specifications
RTK & GPS: Field Verification Calibration Check	Section 13803 2.01 B.5	Visual	Verify:30 days before equipment usage Calibrate: Daily	Per contract specifications and manufacturer's procedures
Night Work Lights	Section 13803 2.01 F	Visual	Each shift	Per manufacturer and project specifications
Anchor Systems Check	Section 13820 3.02 A	Visual	Daily: Prior to deployment	Per manufacturer requirements
Noise Management Reports	Section 02931 3.01 C	Decibel meter	Daily or per approved Noise Control Plan	Per contract specifications
(Note: The above is contractor operational monitoring, not compliance monitoring under Noise Performance Standard.)				
Light Management Reports	Section 02936 3.01 C	Light meter	Nightly or per approved Light Control Plan	Per contract specifications
(Note: The above is contractor operational monitoring, not compliance monitoring under Lighting Performance Standard.)				

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

DREDGING

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Dredging depths (elevations)	Contract 42A Section 13803 Drawings D-2021 thru D-2114	Post-dredge survey by third-party survey contractor	At completion of each CU	Required dredge depths (plus allowable over dredge depth)
Dredging extents (northings and eastings)	Contract 42A Section 13803 Drawings D-2021 thru D-2114	Post-dredge survey by third-party survey contractor	At completion of each CU	Required dredging extents

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

[Note: This table provides samples of required tests and inspections - confirmatory sampling is detailed in Phase 2 RAM QAPP]

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Water quality	Contract 42A Section 13805	Visual observations for turbidity plume, floatables or sheen	Daily during each shift by visual observations	Per contract specifications
(Note: The above is contractor operational monitoring, not compliance monitoring under Resuspension Performance Standard. Remedial action monitoring crews will note in field records any significant visual contrast due to increased turbidity and cause if known.)				
Bucket positioning	Contract 42A Section 13720 & Section 13803	Operator observation of in cab monitor and limit records from Third-party survey contractor	Ongoing throughout via differential global positioning system (DGPS) system	No material placement outside project limits

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

[Note: This table provides samples of required tests and inspections - confirmatory sampling is detailed in Phase 2 RAM QAPP]

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Backfill and cap layer depths	Contract 42A Section 02206 & Section 13720	Multi-beam bathymetric surveys	Post-backfill/cap surveys completed after placement in each CU	Meet layer and thickness requirements (plus allowable over placement)
Topsoil and Granular Material Types “1”, “2”, “N”, “O”, “P” & “Q”	Section 02206 2.02	Site Visual Inspection	Every Two Days (during time of delivery)	Prior to delivery and placement, the material will not exhibit any physical or other characteristics that indicate that the material has been modified by the addition of man-produced chemicals or contains other materials that do not meet requirements of the contract specifications.

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Tests for backfill/cap materials gradation by weight (per Contract 42A Specification 02205 Part 2.02)				
Granular Materials Type "1" & "2"	Section 02206 2.02	ASTM C136	Once every 5,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 A, B
Granular Materials Type "1" & "2"	Section 02206 2.02	DRO/TPH Analysis DRO 8015	Once every 5,000 tons initial (more or less frequent at direction of CM based on visual inspection of material)	Acceptance criteria is non-detect
Granular Materials Type "2" with TOC"	Section 02206 2.02	ASTM D2974	Once every 5,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 C

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Granular Materials Type "1" & "2"	Section 02206 2.02	DRO/TPH Analysis DRO 8015	One test pit with 5 point composite at a depth of 5 feet or greater per 10,000 sq feet of area to be mined.	Acceptance criteria is non-detect
Topsoil (Physical test only)	Section 02206 2.02	ASTM D422	Once per 1,000 cy initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 I
Granular Materials Type "3" (Blend of Type 1 and topsoil)	Section 02206 2.02 B	ASTM D2974	Once per 1,000 cy initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Minimum pre-placement TOC of 2.0 percent, with a maximum of 5.0 percent TOC

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Granular Materials Type "N"	Section 02206 2.02 B	ASTM C136	Once every 5,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 E 703 NYSDOT, 2008
Granular Materials Type "O", "P"	Section 02206 2.02 B	ASTM C136	Once every 5,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 F, G 620 NYSDOT, 2008
Granular Materials Type "Q"	Section 02206 2.02 B	ASTM D2974 620 NYSDOT, 2008	Once every 5,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Gradation criteria from Specification 02206 2.01 H

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Backfill/cap materials tests for chemical constituents (per Contract 42A Specification 02206), including laboratory analysis for PCBs, pesticides, VOC, SVOC, herbicides, TAL metals, cyanide, TOC				
Granular Materials Type "1" & "2"	Section 02206 2.02 C & D	EPA SW-846 Region 2 Methods: 8260B for TCL VOCs; 8270C for TCL SVOCs; 8082 for Pesticides / PCBs; 8150 for Herbicides; 6000 / 7000 for TAL Metals; and 9012 for Cyanide. Lloyd Kahn Method for TOC.	Once every 20,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Acceptance criteria are that no organic compounds shall be detected and inorganics shall be within background range for Eastern United States as identified in Table 375-6.8(a) of the 6 New York Codes and Regulations (NYCRR), Part 375 (2006) with the exception of magnesium and calcium.
Granular Materials Type "2 with TOC" (In-Situ Sampling for TOC)	02206 2.02 D & 13720 3.03.F.	Lloyd Kahn Method, following the sampling and analysis procedure detailed in Attachment 6 of this document.	Three homogenized cores at every eighth residual node (1 sample / acre)	Minimum in-situ post-placement TOC content is 2%.

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Topsoil (Multiple chemical analyses)	Section 02206 2.02.F.1	ASTM D4972	Once per 1,000 cy initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Acidity Range (pH): 5.5 to 7.5
Topsoil (cont'd)	02206 2.02.F.2	EPA SW-846 Region 2 Methods: 8260B for TCL VOCs; 8270C for TCL SVOCs; 8082 for Pesticides / PCBs; 8150 for Herbicides; 6000 / 7000 for TAL Metals; and 9012 for Cyanide. ASTM Method D2974 for TOC	Once per 1,000 cy initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Acceptance criteria as identified in Table 375-6.8(a) of the 6 NYCRR, Part 375 (2006) with the exception of magnesium and calcium.

Table A2-2 Contract 42A Dredging Operations Inspections and Tests

BACKFILLING, CAPPING, AND PLACING ARMORING MATERIALS

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Granular Materials Type "N", "O", "P"	Section 02206 2.02 C & D	EPA SW-846 Region 2 Methods: 8260B for TCL VOCs; 8270C for TCL SVOCs; 8082 for Pesticides / PCBs; 8150 for Herbicides; 6000 / 7000 for TAL Metals; and 9012 for Cyanide. Lloyd Kahn Method for TOC.	Once every 20,000 tons initial (more or less frequent at direction of CM based on visible variations in material characteristics)	Acceptance criteria are that no organic compounds shall be detected and inorganics shall be within background range for Eastern United States as identified in Table 375-6.8(a) of the 6 NYCRR, Part 375 (2006) with the exception of magnesium and calcium. [Part 375]

Notes:

1. Technical Specification: Contract 42A, Section 13803 (Dredging); Contract 42A, Section 13720 (Backfilling/Capping) and 13898 (Shoreline Stabilization).
2. QC Testing will be performed by Contractors. Quality analytical source QA Testing by CM via CM's third party testing contractor.
3. Borrow soil must be from approved on-site borrow source with test results provided in Specification 02206. Any change in material must be consistent with approved material characteristics as determined by CM. New moisture content curves will need to be plotted for change in material.

Table A2-3 Habitat Construction Inspections

Inspection Parameter	Specification Reference	Inspection Method	Minimum Inspection Frequency	Acceptance Criteria
Wild Celery Planting Unit (Vallisneria Americana)	Technical Specification: Contract 53A, Section 13705	Visual Inspection	5 planting units from each delivery	Acceptance criteria is that plants shall be free of insects and diseases, appear healthy and exhibit visible signs of viability such as green leaves and stems; plants do not appear chlorotic or exhibit signs of desiccation. Plants do not exhibit visible signs of herbivory. Roots and rhizomes/runners are present. Tubers are firm, healthy and brownish-white in color Planting unit consists of peat pot, plug tray or similar containing growing medium. No more than 20% of the planting units within a 50-plant unit tray are flowering.
American Pondweed (Potamogeton Sp.)	Technical Specification: Contract 53A, Section 13705	Visual Inspection	5 planting units from each delivery	Acceptance criteria is that plants shall be free of insects and diseases, appear healthy and exhibit visible signs of viability such as green leaves and stems; plants do not appear chlorotic or exhibit signs of desiccation. Plants do not exhibit visible signs of herbivory. Roots and rhizomes/runners are present. Planting unit consists of peat pot, plug tray or similar containing growing medium.
Water Lily (Nymphaea Odorata)	Technical Specification: Contract 53A, Section 13705	Visual Inspection	5 planting units from each delivery	Acceptance criteria is that plants shall be free of insects and diseases, appear healthy and exhibit visible signs of viability such as green leaves and stems; plants do not appear chlorotic or exhibit signs of desiccation. Plants do not exhibit visible signs of herbivory. Roots and

Table A2-3 Habitat Construction Inspections

Inspection Parameter	Specification Reference	Inspection Method	Minimum Inspection Frequency	Acceptance Criteria
				rhizomes/runners are present. Tubers are firm, healthy and brownish-white in color Planting unit consists of peat pot, plug tray or similar containing growing medium.
Supplemental SAV Planting Units	Technical Specification: Contract 53A, Section 13707	Visual Inspection	2 planting units from each delivery	Acceptance criteria is that plants shall be free of insects and diseases, appear healthy and exhibit visible signs of viability such as green leaves and stems; plants do not appear chlorotic or exhibit signs of desiccation. Plants do not exhibit visible signs of herbivory. Roots and rhizomes/runners are present. Tubers are firm, healthy and brownish-white in color Planting unit consists of peat pot, plug tray or similar containing growing medium.
SAV Plantings	Technical Specification: Contract 42A, Section 13704	Visual Observation	Daily of area planted that day	Planting units are present at a minimum spacing of 2’ with planting units a maximum of 0.5’ from each target location. Roots and Rhizomes to be installed below the backfill surface and shoots, leaves and stems protrude above backfill surface
Supplemental SAV Plantings	Technical Specification: Contract 53A, Section 13707	Visual Observation	Daily of area planted during the previous day	Planting units are present at a minimum spacing of 2’ with planting units a maximum of 0.5’ from each target location. Roots and Rhizomes to be installed below the backfill surface and shoots, leaves and stems protrude above backfill surface

Table A2-3 Habitat Construction Inspections

Inspection Parameter	Specification Reference	Inspection Method	Minimum Inspection Frequency	Acceptance Criteria
Marine Navigational Equipment	Manufacturer Operation Manuals	Per manufacturer equipment manual(s)	Daily	Calibrate and/or operate marine equipment in accordance with manufacturer's specifications and guidelines Inspect in accordance with Health and Safety Plan Complete vessel and equipment checklists

Table A2-4 Contract 60 Rail Yard Operations Inspections and Tests

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Inspect Locomotives	Contract 60, Section 13900 1.01	Physical inspection per Federal Railroad Administration (FRA) regulations	Daily	Per FRA regulation
Inspect rail cars	Contract 60, Section 13900, 1.01 D2	Physical inspection	100% of cars on inbound trains and on outbound trains	No defects as defined by Associate of American Railroads rule for interchange No Safety Appliance Act defects
Inspect, test and arm End of Train devices for each outbound train.	Contract 60, Section 13900, 1.01 A	Physical inspection and test with telemetry receiver	For every outbound train	Successful illumination of marker light and successful broadcast of telemetric information
Inspect track structure and switches	Contract 60, Section 13900, 1.01	Physical inspection and repairs as required	Weekly	Track and switches maintained to FRA Class 1
Inspect tools	Contract 60, Section 13900, 1.01 D and 2.02 A	Physical and per applicable manufacturer specifications	Before each use	Repair or remove from service

Table A2-4 Contract 60 Rail Yard Operations Inspections and Tests

Inspection Schedule				
Inspection Parameter	**Specification Reference**	**Inspection Method**	**Minimum Inspection Frequency**	**Acceptance Criteria**
Inspect off track mechanical equipment	Contract 60, Section 13900, 1.01	Physical and per applicable manufacturer specifications	Daily, before use	Repair or remove from service
Inspect Air Compressor	Contract 60, Section 13900, 1.01 D 13	Per manufacturer equipment manual	Weekly	Compressor generates 70 pounds per square inch air, properly dried to prevent condensation in train line
Rail yard site safety inspection	Contract 60 Section 13900 1.01 C4	Physical inspection of rail yard area for safety defects	Daily	Correct defects and deficiencies as identified
Inspect & maintain weigh-in-motion scale	Contract 60 Section 13900 1.01, 1.02, 3.01 A 10	Per manufacturer equipment manual(s)	Daily as required	Per manufacturer specified requirements
Weigh empty rail cars placed into service	Contract 60 Section 13900 3.01 A. 13.	Weigh-in-motion scale	Weigh approx. 10% of the inbound empty cars	Per manufacturer specified requirements
Rail car loaded quantity	Contract 60 Section 13900 1.01 I. 5.	Weigh-in-motion scale	Each car	≥103 tons, ≤108 tons (net weight)

Table A2-4 Contract 60 Rail Yard Operations Inspections and Tests

Test Schedule				
Test Parameter	**Specification Reference**	**Test Method**	**Minimum Testing Frequency**	**Acceptance Criteria**
Calibrate & certify weigh-in-motion scale	Contract 60 Section 13900 1.01, 1.02, 3.01 A	Per manufacturer equipment manual(s)	Calibrated by the first day of operations, approx. every 90 days, and after any scale outage or event that provides incorrect weights	Per manufacturer specified requirements
Perform Initial Terminal Brake Test	Contract 60, Section 13900 1.01 D	Perform initial terminal brake test according to applicable federal regulations	For every outbound train	100% effective brakes on each outbound train
Test rails and turnouts for defects	Contract 60, Section 13900 1.01 D	Ultrasonic rail testing device	Annually at end of shipping season	All rails and turnouts free of defects

ATTACHMENT 3

TYPICAL CONSTRUCTION FORMS

This Attachment incorporates by reference Attachment 3 of the 2011 DQAP, and also includes the additional inspection checklist attached hereto.

Backfill and Cap Material Source Inspection Checklist

PARSONS	Procedure No.	Revision No.	Date: 10/18/2012
Department:	QUALITY ASSURANCE/QUALITY CONTROL		
Title:	Backfill and Cap Material Source Inspection Checklist		

Question	Yes	No	N/A	Comments
Pre Qualification Data for Backfill and Cap Material				
Received prequalification analytical results for the material being inspected per Specification 02206?				
Are the prequalification analytical results satisfactory?				
General Environmental conditions.				
Are there any liquid storage containers at the site? Where?				
Are all areas clean and orderly?				
Are there any indications of previous spills? Where?				
Are there any fueling operations at the site? Where?				
Is combustible scrap, debris, and / or waste stored at the site? Where?				
Is there any unused equipment or vehicles stored at the site? What? Where?				
Are there any ponds or material washing operations at the site?				
Physical indicators				
Material has unusual smell? Describe any unusual smell that is present:				
Material has unusual feel? Consistency of the material:				
Material has unusual visual characteristics? (is the material visually consistent with the other previously accepted material?)				
Unusual sounds? Describe any unusual noise at the site:				
Any other physical properties of concern?				
Material Stockpiles				
Are stockpiles being properly segregated prior to delivery to the project site?				
Are stockpiles well drained and free of foreign materials? (snow, ice, wood, metal, trash, etc.)				
Sketch Site on Back of this Form (indicate location of any items indicated above as well as material source area)				

Inspected By:_____ Date/Time of Inspection:_____

ATTACHMENT 4

CU ACCEPTANCE FORMS

This Attachment incorporates by reference Attachment 4 of the 2011 DQAP.

ATTACHMENT 5

STANDARD OPERATING PROCEDURE FOR 2013 DREDGING OPERATIONS BATHYMETRIC SURVEYS

This Attachment incorporates by reference Attachment 5 of the 2011 DQAP except that all references to 2011 and 2011 plans should be considered to refer to 2013 and the comparable 2013 plans.

ATTACHMENT 6

STANDARD OPERATING PROCEDURE FOR CAP ISOLATION LAYER MATERIAL SAMPLING AND ANALYSIS FOR TOTAL ORGANIC CARBON

This Attachment incorporates by reference Attachment 6 of the 2011 DQAP (submitted as part of Addendum #2 to the 2011 RAWP on September 2, 2011) except that all references to 2011 and 2011 plans should be considered to refer to 2013 and the comparable 2013 plans.