Contractor Quality Control Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project

U.S. Army Corps of Engineers
Buffalo District, Buffalo, New York
Completion of Independent Technical Review

This document has been produced within the framework of the North Wind Portage (NWP) quality management system. As such, an independent technical review (ITR), appropriate to the level of risk and complexity inherent in the project, has been conducted. This included review of assumptions (methods, procedures, and material used in analyses), alternatives evaluated; the appropriateness of data used, and level of data obtained; and reasonableness of the results, including whether the product meets the project objectives. Comments and concerns resulting from review of the document have been addressed and corrected as necessary.

ITR performed by: [Redacted]
Signature: [Redacted] Date: 1/9/2020
## History of Revisions

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1. INTRODUCTION

The United States Army Corps of Engineers (USACE), Buffalo District, has contracted North Wind Portage, Inc., (NWP) under Contract Number W912P4-15-D-0006 to remediate the Luckey Site located in Luckey, Ohio. NWP will complete this remediation under the USACE’s Formerly Utilized Sites Remedial Action Program (FUSRAP), which was established to identify, investigate, and clean up or control sites previously used by the Atomic Energy Commission. This site has been identified as having materials contaminated with FUSRAP-related constituents of concern, which include beryllium, lead, radium-226, thorium-230, uranium-234, and uranium-238.

1.1 Project Description and Scope

This contractor quality control plan (CQCP) describes the quality protocols required for work activities to be completed at the Luckey FUSRAP site. The work includes development of work plans, environmental monitoring, excavation, waste characterization, waste packaging, transport and disposal of materials, building demolition, backfill, site restoration, and development and implementation of site closure protocols. A more complete description of work activities can be found in NWP PLN-5500, Site Operations Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project.

1.2 Quality Objective

This CQCP was developed in accordance with the contract W912P4-15-D-0006 to ensure that project activities are completed as defined in the project planning documents and procedures and cleanup requirements are met as delineated in the Record of Decision (ROD) for the Soils Operable Unit, Luckey Site (USACE 2006). NWP shall meet this goal by implementing this CQCP to monitor all quality-affecting site activities. NWP shall prepare and maintain documentation and field records during and after completion of work activities, demonstrating that work has been completed, and performance requirements established by the contract specifications and the project plans meet quality control (QC) requirements. In addition, NWP maintains a rigorous Quality Assurance (QA) Program, which will be followed throughout this contract.

The objectives of this CQCP are to anticipate the specific operating requirements of the project, and to establish procedures to ensure that the construction quality meets technical design specifications and conforms to the requirements of the contract. Specifically, this plan:

- Identifies the project QC organization and defines each individual’s respective authority, responsibilities, and qualifications.
- Defines project communication, documentation, and recordkeeping procedures.
• Establishes QC procedures, including the necessary supervision and tests, to ensure that the work meets applicable specifications and drawings.

1.3 Layout and Use of this Document

Section 2 of this CQCP describes the NWP QC program, management, and three-phase system for controlling the quality of work. Section 3 discusses the testing requirements for all aspects and phases of work. Section 4 identifies and describes the Luckey FUSRAP definable features of work (DFW) associated with the scope of this contract. Section 5 describes reporting, QA for deliverables, and recordkeeping. Section 6 describes data quality management. Section 7 discusses nonconformance and corrective actions. Section 8 discusses the NWP change control process. Section 9 identifies references used in the preparation of this CQCP.

1.4 General Requirements

In this plan (and other plans developed through its use), the following terms are used in accordance with the USACE guidance:

• QC comprises the measures taken by the contractor to ensure the work performed by the contractor, its subcontractors, and suppliers complies with the requirements of the contract. Although the primary objective of QC is to anticipate potential problems, QC measures also include corrective actions. The QC measures are to be adequate to cover all operations, including both on-site and off-site activities, and keyed to the proposed work sequence.

• QA comprises the measures taken by the USACE to oversee the work of contractors. QA measures include inspections, verification, audits, and evaluations of materials, workmanship, and implementation of the Contractor Quality Control (CQC) system by the contractor.

The QC program defined herein will be implemented for this project by personnel knowledgeable in QC theory and practice, and with adequate and defined responsibilities and authority. The effectiveness and implementation of the program described herein are to be verified and documented in accordance with the requirements specified in Section 3 of this plan.

1.5 Project Work Plans

All work to be performed at the Site will be in accordance with the following NWP project documents:

• PLN-5500, Site Operations Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
CONTRACTOR QUALITY CONTROL PLAN FOR THE LUCKEY FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM REMEDIATION PROJECT

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- PLN-5501, Accident Prevention Plan/Site Safety and Health Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5503, Uniform Federal Policy Quality Assurance Project Plan for the Luckey FUSRAP Remediation Project – Sampling and Analysis Plan
- PLN-5504, Regulatory Compliance Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5506, Water Management Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5507, Waste Management, Transportation, and Disposal Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5508, Final Status Survey Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5509, Contamination Control Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5510, Backfill and Restoration Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5511, Stormwater Pollution Prevention Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5512, Chronic Beryllium Disease Prevention Program for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5513, Radiation Protection Plan for the Luckey Formerly Utilized Sites Remedial Action Program Remediation Project
- PLN-5514, U.S. Environmental Protection Agency Tier I Qualified Facility SPCC Plan

2. QUALITY CONTROL PROGRAM

2.1 Project Quality Control Personnel

A central element for controlling quality is to establish a control organization that is independent of those persons performing the work. The function of the organization is to ensure implementation of the processes outlined in this CQCP, project plans, and contract specifications for project activities, via conducting inspections and assessments, including observation of worker performance. The organization is responsible for observing, measuring, recording, and documenting the work performed and for controlling the quality by providing timely feedback to the project manager (PM) and client. Inspections, tests, and other evaluations will be documented
in Daily Quality Control Reports (DQCRs). The format and content of the DQCRs are discussed further in Section 5.1.

Project quality shall be ensured by means of review and oversight by NWP corporate QC personnel. The primary responsibility of the corporate QC manager (QCM) is to ensure adherence and compliance to the corporate QC Program. Personnel responsible for implementing the CQCP while on-site, under the supervision of the QCM, include the contractor quality control systems manager (CQCSM) or Alternate.

Quality control personnel shall have the necessary authority, access to work areas, and organizational freedom to:

- Identify quality problems.
- Stop work if non-conformance issues are identified.
- Initiate, recommend, or provide solutions to quality problems through designated channels.
- Verify implementation of solutions.
- Assure that further processing, delivery, installation, or use is halted or controlled until a nonconforming, deficient, or unsatisfactory condition has been resolved.

An organizational chart showing the lines of authority and reporting relationships of project personnel is provided as Figure 2-1. The CQCSM or Alternate shall ensure that the QC structure of the CQCP is effectively implemented throughout the project via inspection, testing, and documentation requirements presented in this CQCP. Appendix A presents the résumés of the QC organization.
2.1.1 Project Manager

The NWP PM is responsible for evaluating the appropriateness and adequacy of the technical services provided for the project, and for developing the technical approaches and level of effort required to address each task. The PM is also responsible for the day-to-day conduct of work, including integration of input from supporting disciplines, the USACE, and subcontractors. Responsibilities of the PM include:

- Direct and monitor project field activities to safely execute work in accordance with the work scope, schedule, and budget.
- Ensure that qualified technical personnel, including subcontractors, are assigned to tasks.
- Ensure adherence to contract specifications, approved work plans, and all federal, state, and local laws and regulations.
- Identify and fulfill equipment and other resource requirements.
- Ensure that hazards and hazard controls are identified and communicated to all affected
individuals.

- Ensure overall technical quality and consistency of all project activities and deliverables.
- Serve as the primary point of contact with the USACE.
- Stop work for conditions adverse to quality or safety.

### 2.1.2 Corporate Quality Control Manager

NWP’s corporate QCM shall be responsible for ensuring that the project team implements the procedures required under the USACE contract and the project work plans. The QCM is also responsible for ensuring that corrective action is taken if performance does not meet internal or the USACE standards or quality requirements. The QCM shall work closely with the Luckey PM and NWP CQCSM to ensure that the established procedures and protocols for this project are implemented and the work is performed in accordance with the *Final Scope of Work, Remediation of Soils Operable Unit, Luckey Site* (USACE 2014) and other supporting project work plans. The QCM may conduct periodic audits as part of the quality control process.

Responsibilities of the corporate QCM include:

- Stop work for conditions adverse to quality or safety.
- Ensure that overall project quality objectives are met.
- Interact with the CQCSM to confirm that daily quality goals are being met.
- Conduct periodic audits to ensure that quality goals are met.

### 2.1.3 Contractor Quality Control System Manager

NWP delegates the responsibility and authority to the CQCSM to adequately perform the functions of the position, including the authority to stop work that is not in compliance with the contract and project plans. The CQCSM reports directly to the corporate QCM.

The CQCSM is responsible for executing a QC inspection monitoring, observation, and surveillance system through implementation of the three-phased control process using formal reports. The CQCSM is responsible for day-to-day compliance with the project plans, procedures, and contract specifications as well as providing operational support to the site superintendent and on-site personnel. Résumés and certificates for *Construction Quality Management for Contractors* training for the QC organization are provided in Appendix A. The authorization letter for the CQCSM is provided in Appendix B. The CQCSM or Alternate shall be on-site during remediation.
Duties of the CQCSM include, but are not limited to, the following:

- Implementing and evaluating the effectiveness of the project CQCP.
- Stopping work for conditions adverse to quality or safety.
- Providing operational support.
- Managing on-site QC staff.
- Monitoring on-site subcontractors.
- Preparing the DQCRs.
- Reviewing project deliverables, revised plans, and procedures.
- Submitting DQCRs and project deliverables to the USACE through the Resident Management System (RMS).
- Maintaining the Submittal Register in RMS.
- Conducting three-phase inspections.
- Identifying, reporting, and documenting (in RMS) nonconforming items, conditions, or activities.
- Initiating or recommending corrective actions.
- Verifying implementation of corrective actions.
- Notifying the PM of conditions adverse to quality that cannot be resolved at the project level.
- Monitoring operations activities for compliance with contract requirements and project plans and procedures.
- Monitoring laboratory testing activities.
- Monitoring sampling activities.
- Filing and archiving project records.

2.1.4 Site Superintendent

The site superintendent is responsible for ensuring that equipment operators and craft personnel are sufficiently trained and qualified to execute assigned tasks and for assessing and reporting field progress to the PM. The site superintendent is responsible for supervising field activities, supervising in-house and subcontract laborers, and coordinating site logistics. The site superintendent shall routinely assess work activities to ensure that tasks are performed in
accordance with the requirements detailed in work packages. The site superintendent shall also ensure that equipment is inspected and adequate to meet the specifications of the remediation. The site superintendent shall work closely with the CQCSM to ensure that all required testing, including quality tests, are performed in a timely manner.

Responsibilities of the site superintendent include:

- Stop work for conditions adverse to quality or safety.
- Provide day-to-day technical execution of on-site project activities.
- Provide supervision of on-site project personnel.
- Ensure that equipment and other project resources are in working order.
- Work closely with CQCSM to ensure that quality tests are completed as required.

2.1.5 Quality Control Staff

Under direction of the CQCSM, or Alternate, QC staff shall be assigned as needed to perform QC functions during execution of the project. Responsibilities of the QC staff include oversight and verification that the project is being conducted in accordance with defined quality criteria, as specified in project documents and contract specifications.

2.2 Three-Phase Control System

To ensure that construction activities comply with the requirements of specifications, the CQCSM shall implement the three-phase QC system. This system consists of:

- Preparatory phase meetings/inspections.
- Initial phase inspections.
- Follow-up phase.

These phases are described in the following subsections and will be performed for each DFW. A DFW is a task that is separate and distinct from other tasks and has separate control requirements. The DFWs for this project are presented in Section 4 of this CQCP.

2.2.1 Preparatory Phase Meeting/Inspection

A preparatory phase meeting/inspection shall be performed prior to commencement of work on each DFW and include the team lead from each area that shall be involved with the activity. The preparatory phase meeting/inspection shall consist of:
• Reviewing contract requirements.
• Reviewing contract plans, specifications, and drawings.
• Ensuring that plans have been approved or accepted by the contracting officer’s representative (COR).
• Ensuring that provisions have been made for required QC control inspection and testing.
• Discussing of procedures for controlling quality.
• Ensuring that all materials and equipment have been tested, submitted, and approved.
• Reviewing the activity hazard analyses.
• Examining the work area to ensure that any required preliminary work has been completed and complies with the scope of work (SOW) and accepted work plans.
• Examining required materials, equipment, and sample work to ensure that they are available and conform to approved submittal data and that they are properly stored.
• Reviewing the required level of workmanship with applicable workers for the DFW and tolerances, if applicable.
• Discussing the initial control phase.

The USACE’s COR shall be notified at least 8 hours in advance of each preparatory phase meeting/inspection. Using a preparatory phase checklist, the CQCSM shall create a record of each preparatory phase inspection, including meeting minutes and a list of meeting attendees. Documentation of the preparatory phase shall be included with the DQCR.

2.2.2 Initial Phase Inspection

Initial phase inspection(s) shall be performed at the beginning of each DFW. The initial phase shall include:

• Reviewing preparatory phase inspection meeting minutes.
• Verify adequacy of controls to ensure full compliance with the contract specifications, SOW, and approved work plans.
• Verifying required control inspection and testing.
• Establishing the level of workmanship and verifying that it meets acceptable workmanship standards.
• Reviewing the results of QC tests.
• Resolving any differences.
• Reviewing activity hazard analyses with all workers.

The scope/level of the evaluation shall be completed using a graded approach linked to the hazard level of the work. The USACE shall be notified at least 8 hours before beginning an inspection. Using an Initial Phase Checklist, the CQCSM shall prepare a record of each initial phase inspection, including meeting minutes and include the documentation in the DQCR.

2.2.3 Follow-Up Phase

The purpose of the follow-up phase in the three-phase QC process is to monitor work in progress to ensure continuous quality compliance. The CQCSM or Alternate shall conduct daily QC inspections to ensure ongoing compliance with contract requirements, including control testing, until completion of each DFW. The assessments will be documented in the DQCRs. The QC reports will present an accurate and complete picture of the control activities and work items completed. Follow-up inspections may occur on a daily, routine, or predetermined basis to ensure strict compliance with the work plans.

The CQCSM shall identify, document, and track to completion outstanding and nonconforming items. Final follow-up checks will be conducted, and all deficiencies corrected before the start of additional DFWs. The CQCSM shall continually refer back to the standards set during the preparatory and initial phases.

Additional preparatory and initial inspections on the same DFW may be required when new workers are assigned at the discretion of the CQCSM. Reasons for additional inspections may include: unsatisfactory work, as determined by NWP or the USACE; changes in key personnel; resumption of work after a substantial period of inactivity; or changes to the project SOW/specifications.

3. TESTING REQUIREMENTS

Table 3-1 presents requirements for testing, sampling, and analysis expected to be encountered during the execution of this project. Requirements for testing and sampling will be discussed at the preparatory-phase meeting for the respective DFW and shall be reported as part of the DQCR. Specifics regarding control, verification, and acceptance for each requirement in Table 3-1 can be found in the associated implementation documents.

NWP used department of defense (DOD) Environmental Laboratory Accreditation Program (ELAP) certified laboratories for analytical analysis of samples collected. ARS is the on-site laboratory used. ARS also has an off-site laboratory that samples can be sent to as needed. NWP uses GEL laboratories as an additional off-site laboratory as needed.
### Table 3-1. Testing Specifications

<table>
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<tr>
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<td>Air monitoring and sampling</td>
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<td>Sampling soil and sediment</td>
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<td>Sampling radioactive contaminated media</td>
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<td>Laboratory chemical analysis</td>
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Table 3-1. (continued)

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<td>On-site laboratory operations</td>
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4. DEFINABLE FEATURES OF WORK

A DFW is a task that is separate and distinct from other tasks and has separate control requirements. As discussed in Section 2, DFWs require preparatory, initial, and follow-up inspections to ensure that the quality of work performed meets contract specifications, work plan requirements, and specified level of workmanship. A list of the current DFWs for this project are shown below but may change because of changing site conditions, work methods, technology, or changes in the SOW. The contractor and the USACE shall determine and agree upon DFWs during coordination meetings held before each task. DFWs and their preparatory, initial, and follow-up inspections will be documented in RMS and in the DQCRs. DFWs are as follows:

- Backfill and Restoration Ops.
- Beryllium and Chemical Monitoring.
- Concrete pad installation.
- Excavation of beryllium, lead, and radiological contaminated soil.
- Final status survey.
- Monitoring.
- Waste packaging and off-site transportation (including radiological and beryllium survey waste containers).
- Radiological and Beryllium Survey Waste Containers.
- Water pollution prevention (includes stormwater and the water treatment system).
- Transport of Waste Containers.
- Treat and Excavate Contaminated Soils.
- Waste Process Equipment Installation (no longer applicable to SOW).
- Water Supply Well Rehabilitation.
- Weighing of Waste Containers.

5. REPORTING AND RECORDKEEPING

NWP will use the RMS throughout the contract period to record all phases of the contract. NWP will transmit required submittals through the RMS and maintain a submittal record. The RMS includes the means to manage the preparatory, initial, and follow-up control phases of the contract. This automated tool will assist in scheduling and recording the preparatory and initial
phases since the program furnishes the initial inspection check-sheets for organizing these inspections. During the follow-up phase(s), the DQCR will be key in tracking daily activities, including any quality deficiencies and their resolution. In addition, NWP will use the RMS for completion and closeout of the contract.

5.1 Daily Quality Control Reports

NWP shall maintain daily records pertaining to site work activities and shall submit DQCRs detailing those activities. The reports shall be factual records containing written and numerical data of the contractor’s daily QC activities and resulting actions. NWP will submit the reports to the USACE COR in RMS by close of business the next workday following the day of the work activity.

The reports shall contain a record of activities related to the three-phase QC system. The CQCSM or Alternate shall verify and sign each DQCR. The verification shall contain the statement that all supplies and materials incorporated in the work are in compliance with the terms of the contract, except where noted.

The DQCRs shall include:

- A listing of equipment and personnel on-site and hours worked.
- Summary of work performed that day.
- Weather information.
- Field instrument measurements in cases where results are produced. If results are not available by the time the report is submitted, NWP will note that measurements were taken, and results will be included in a later DQCR when received.
- Completed QC activities.
- Results of QC activities, including nature of any deficiencies observed and corrective actions taken or to be taken.
- Documentation of all field and control samples collected, including quality assurance samples (duplicates, splits, blanks, etc.).
- Copies of chain-of-custody forms, and other project-generated forms.
- Lists of site visitors.
- Issues encountered during the day.
- Summary of any instructions received from the USACE.
5.2 Document and Material Submittals

NWP will submit documents and materials through RMS the USACE Engineer (ENG) Form 4025, as appropriate. The contractor shall track submittals using ENG Form 4288.

5.2.1 QA for Written Deliverables

Project deliverables will undergo independent technical review (ITR) by an applicable subject matter expert (SME) and the CQCSM or Alternate. Project deliverables will undergo the ITR process to ensure that the deliverable meets contract and project requirements and that the deliverable is a quality product. Once the ITR process is complete, the SME will sign off on the ITR form. Submittal reviews will include NWP-developed deliverables, as well as any subcontractor, off-site fabricators, or suppliers’ deliverables. The CQCSM, or Alternate, will submit project deliverables that have gone through the ITR process through RMS and sign the ENG Form 4025 certifying the quality of the deliverable.

5.2.2 Submittal Register

NWP shall track formal submittals on a Submittal Register, ENG Form 4288. The approval status of outstanding submittals shall be reviewed at each weekly progress meeting.

The Submittal Register shall include current submittal numbering sequences and dates; however, this document is subject to change during the course of remediation, and, as such, NWP shall keep the Submittal Register updated in RMS.

5.3 Recordkeeping

NWP shall maintain current records of QC operations, activities, and tests performed, including the work of subcontractors and suppliers. Contract-required deliverables generated shall undergo review and signoff by the CQCSM. Deliverable review may also be conducted by safety or other subject matter experts, as applicable.

NWP will maintain a master file of CQCP documents on the project “Q” Drive. The electronic signed document of this CQCP will be considered the record document and will be maintained on the corporate record keeping system (e.g. the corporate Document Management System (DMS)). As needed, hard copies of project documents may also be kept on-site for site use and will be stamped “Copy.”

The electronic master file may include the following documents, as applicable. Hard-copy files may also be used on-site as working copies but will not be considered the record files.

- Project plans and contractual documentation (contract plans and specifications).
• Area maps for site identification and documenting sampling locations.
• Project photographs (including pre-remediation conditions, post-remediation conditions, and key activities in the interim).
• Project logbooks, forms, logs, and tables.
• Field logbooks (completed in indelible ink pen).
• Sample summary tables.
• Field instrument calibration tables.
• Tables for recording any field data generated.
• DQCRs.
• Shipping container checklist.
• Chain-of-custody forms.
• Laboratory notification checklist.
• Sample shipping documents (e.g., air bills, weight tickets).
• Waste shipment manifests.
• Site visitor logs.
• Significant communication and phone logs.
• Copies of ENG Form 4025, transmittal of documents.
• Safety data sheets.
• Field instrument manuals.

Storage, preservation, and safekeeping of quality records shall be in accordance with approved corporate procedures and should describe the following:

• The indexing system to be utilized.
• The system for verifying that the records received are legible and otherwise acceptable.
• The system for verifying that the records are those designated.
• Rules governing access to and control of project records.
• The system for filing supplemental information and disposing of superseded records.
• Responsibility for distribution and receipt control.

NWP shall turn over quality control records to the USACE after completing the final closure report.
6. DATA QUALITY

Specific procedures for sample acquisition, chain-of-custody, laboratory instrument calibration, laboratory analysis, reporting of data, internal QC, audits, preventive maintenance of field equipment, and corrective action are described in the NWP PLN-5503, Uniform Federal Policy Quality Assurance Project Plan for the Luckey FUSRAP Remediation Project – Sampling and Analysis Plan.

7. NONCONFORMANCE AND CORRECTIVE ACTIONS

NWP shall initiate a corrective action through a systematic approach for any work activity, feature, material, or test result that is found to be deficient, does not meet specifications, or is adverse to quality. Any time a condition exists that does not comply with drawings, specifications, codes, workmanship standards, or contract requirements, the CQCSM shall take the following actions:

- Initiate prompt corrective action or stop work if necessary.
- Notify the COR of any nonconformance as soon as possible. Notification will include information for the intended corrective action and schedule to alleviate the nonconformance.
- For any non-compliant issue, it shall be the responsibility of the CQCSM to initiate and maintain a Corrective Action Log. In addition, NWP maintains a comprehensive Corrective Action Management System that reports, assigns responsibility, and verifies issues adverse to quality.
- The CQCSM shall evaluate discrepancies to coordinate the resolution and determine methods of correction.
- When corrective action is complete, implementation of the corrective action will be assessed.

The system fully supports the efforts of personnel tasked with resolving an issue adverse to quality. Significant conditions found to be adverse to quality or safety may result in a root cause analysis performed by a team of individuals representing diverse disciplines.

8. CHANGE CONTROL

A formal process shall identify, document, and track status of procedural and condition changes in project design and remedial construction work. Changes shall be documented in writing.

Design changes are required to have an “Approved for Construction” drawing or specification. Other changes to be documented include the following:
• Change in project conditions due to technical failures, delays, resources.
• Differing site conditions due to extreme unanticipated weather or environmental event.
• Variations in estimated quantities.
• Change in the USACE direction regarding the SOW or NWP approved methodology that may necessitate a contractual change order.
• Delays caused in providing funding or award of expected notice to proceed.

Personnel shall notify the CQCSM and the site superintendent immediately when a change is anticipated. All such changes shall be reviewed by, and closely coordinated with and through, the USACE COR.

Any change will be documented by the CQCSM or any other individual initiating the change. The change will then be coordinated with the USACE COR and routed to the PM or site superintendent for review. The PM shall discuss potential changes with the USACE as well as with NWP’s technical staff. Upon resolution, the PM and contract manager, along with the USACE representative, will sign a change order, modification will be issued as appropriate, and the change will be implemented when approved.

9. REFERENCES


APPENDIX A
Résumés of Key Quality Personnel
APPENDIX B
Letter of Assignment of CQCSM
05/08/19

North Wind Portage

SUBJECT: Contractor Quality Control Systems Manager Assignment Luckey Formerly Utilized Sites Remedial Action Program Luckey, Ohio

Dear [Name],

By this letter, we establish your duties and responsibilities as the Contractor Quality Control (CQC) System Manager for the Luckey Formerly Utilized Sites Remedial Action Program in Luckey, Ohio. Your authority includes, but is not limited to:

- Exercising stop work directives for North Wind, its subcontractors, and its offsite vendors when it is anticipated or known that such work is or will be a detriment to the project, or does not comply with contractual requirements or safe work procedures.
- Inspection of on-site equipment, including the verification of proper calibration of measuring and test equipment and safety and health equipment to assure proper operation and accuracy.
- Inspection of materials and equipment received on-site to assure compliance with contractual requirements.
- Inspection of field operations.
- Supervision of executing the three phases of control, testing, and completion inspections as required by the summary of work.
- Authority to immediately implement changes to correct deficiencies discovered as a result of the above inspections.
- Verification of testing requirements, procedures, equipment, availability of testing facilities, and documentation are in accordance with contractual requirements and performed as required.
- Inspections and documentation of completed work.
- Perform duties as project CQC System Manager as required.

You have the authority to stop work of North Wind or any of its subcontractors where the work does not comply with the contract, planning documents, or safe work procedures. As the CQC System Manager, you will be on-site at all times during the performance of field activities. Your alternate CQC System manager will be on-site in the event of your absence during field activities.

Sincerely,

[Name]

North Wind Quality Assurance Manager