

**Final
Quality Control Plan**

**Remedial Action Construction
Remediation of Contaminated Soil and Sediment
Plum Brook Ordnance Works – TNT Area C
Sandusky, Ohio**

Contract Number: W91237-10-C-0002

Prepared for:

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Huntington District, Corps of Engineers
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TMG Project Number: TMG 09-22

July 2010

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DEFINITIONS AND ACRONYMS

2-ADNT	2-amino-4,6-dinitrotoluene
4-ADNT	4-amino-2,6-DNT
AHA	Activity Hazard Analysis
AOC	Area of Contamination
APP	Accident Prevention Plan
CELRH	USACE Huntington District
CFR	Code of Federal Regulations
COC	Contaminant of Concern
COTR	Contracting Officer Technical Representative
CPR	Cardio-Pulmonary Resuscitation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CY	Cubic Yards
DD	Decision Document
DERP	Defense Environmental Restoration Program
DOD	Department of Defense
DNT	2,4-Dinitrotoluene and 2,6-Dinitrotoluene
HAZWOPER	Hazardous Waste Operations and Emergency Response
HI	Hazard Index
HTRW	Hazardous, Toxic, and Radioactive Waste

IDW	Investigative Derived Waste
IQCT	Independent Quality Control Team
ISO	International Organization for Standardization
ISRA	Interim Soil Removal Action
LDR	Land Disposal Restrictions
mg/L	Milligrams per Liter
mg/kg	Milligrams per Kilogram
NASA	National Aeronautics and Space Administration
OEPA	State of Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
PAH	Polynuclear Aromatic Hydrocarbon
PBOW	Plum Brook Ordnance Works
PBS	Plum Brook Station
PCB	Polychlorinated Biphenyl
POC	Point of Contact
PPE	Personal Protective Equipment
QA	Quality Assurance
QAP	Quality Assurance Plan
QAR	Quality Assurance Report
QC	Quality Control
QCFOCs	Quality Control Field Oversight Checklists
QCO	Quality Control Officer

QCP	Quality Control Plan
QCR	Quality Control Review
QSM	Quality Systems Manual
RA-C	Remedial Action Construction
RCRA	Resource Conservation and Recovery Act
RG	Remedial Goal
RI/FS	Remedial Investigation/Feasibility Study
SOW	Scope of Work
SSHO	Site Safety and Health Officer
SSHP	Site-Specific Safety and Health Plan
TCLP	Toxicity Characteristic Leaching Procedure
TMG	TMG Services, Inc.
TNT	2,4,6-Trinitrotoluene
TNTA	TNT Area A
TNTB	TNT Area B
TNTC	TNT Area C
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

Final Quality Control Plan

Remedial Action Construction Remediation of Contaminated Soil and Sediment Plum Brook Ordnance Works – TNT Area C Sandusky, Ohio

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1.0 PURPOSE

This TMG Services, Inc. (TMG) Quality Control Plan (QCP) is based on the professional competence of the employees performing the project tasks and consists of checklists and documentation to ensure that all project activities are of high standards. TMG has high standards for its employees and subcontractors involved in all projects. Project tasks are assigned in accordance with clearly demonstrated capabilities. Quality Control (QC) is implemented within the project framework by a distinct QC organization functioning under established guidelines. This QCP ensures the development of a high quality technical product that requires little revision prior to the final Quality Assurance Review (QAR).

The Huntington District of the United States Army Corps of Engineers (USACE) has achieved International Organization for Standardization (ISO) 9000 certification. TMG is dedicated to providing quality services to the USACE in order to support them in continuing to meet the ISO 9000 standards.

2.0 SCOPE OF QC SERVICES

The general QC program is designed to ensure quality performance, traceable results, and confidence in the documents prepared for all projects completed by the firm. This project will adhere to the following guidelines established by the Department of the Army, Corps of Engineers:

EM-200-1-3, *"Requirements for the Preparation of Sampling and Analysis Plans,"* U.S. Army Corps of Engineers, February 2001

EM-200-1-6, *"Chemical Quality Assurance for Hazardous, Toxic and Radioactive Waste Projects (HTRW),"* U.S. Army Corps of Engineers, October 1997

ER-1110-1-263, "*Chemical Data Quality Management for Hazardous Waste Remedial Activities*," U.S. Army Corps of Engineers, April 1998

CELRHR 5-2-7, "*Quality Management Plan*," U.S. Army Corps of Engineers, May, 1999

ER 385-1-92, "*Safety and Health Document Requirements*," U.S. Army Corps of Engineers, March 1994

EM 385-1-1, "*Safety and Health Requirements Manual*," U.S. Army Corps of Engineers, September 2008

EM 200-1-2, "*Technical Project Planning Process*," U.S. Army Corps of Engineers, August 1998

Department of Defense Quality Systems Manual for Environmental Laboratories, Version 3 Final, January 2006

ER 1165-2-132, "*HTRW Guidance for Civil Works Projects*," U.S. Army Corps of Engineers, June 1992

All field procedures and reporting requirements, as identified in the Scope of Work (SOW) found in Appendix A of the Plan of Operations (TMG, July 2010), are monitored and reviewed as shown in the attached checklists. Draft and final documents are subject to internal peer review and senior review. All project deliverables are subject to review by the USACE.

2.1 Training

All field personnel performing intrusive work and soil sampling on this project have received 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training in accordance with 29 Code of Federal Regulations (CFR) 1910.120. At least two personnel on-site have received first aid and cardiopulmonary resuscitation (CPR) training. Appendix B of the Site-Specific Safety and Health Plan (SSHP) contains copies of all training certifications and dates of refresher training for employees who may work on this project. The SSHP is located in Appendix A of the Accident Prevention Plan (TMG, July 2010).

2.2 Project Planning

Project planning encompasses the preparation of a series of procedures that specify the manner in which project activities will be conducted. The purpose of these procedures is to provide step-by-step control on how and when tasks will be completed. In general, the following procedures are followed for USACE projects:

- The Senior Project Manager assigns the project to an On-Site Project Manager experienced in the type of work to be completed.

- The Senior Project Manager reviews the SOW to determine the extent of work required and to determine the best personnel to be assigned to the project.
- The On-Site Project Manager discusses their personnel requirements with a TMG Administrator who authorizes the use of those personnel.
- The Senior Project Manager then notifies the On-site Project Superintendent that a project is in the planning status and informs the On-site Project Superintendent what personnel he/she would like to use for the project.
- An initial project team will be formed consisting of the Senior Project Manager, On-Site Project Manager, On-site Project Supervisor, Site-Safety and Health Officer (SSHO), Quality Control Officer (QCO), an administrative assistant, and a technical support person.
- The project team will discuss the project objectives, data requirements, and identify the possible regulatory requirements associated with all aspects of the project.
- The project team will gather and evaluate site information. This would include a site reconnaissance and review of any available background data including previous site assessments.
- Using this information, draft plans will be prepared as appropriate.
- After plan preparation, an internal Independent Quality Control Team (IQCT) will review the plans and make comments, which will be resolved or incorporated into the plans e.g. QCP, APP, SSHP, etc.
- Draft plans will be submitted to the USACE.
- During the IQCT and USACE reviews, the On-Site Project Manager tentatively schedules equipment, personnel for the project, and subcontractors.
- Upon receipt of comments from the USACE, the technical support person will review the comments with the Senior Project Manager and On-Site Project Manager.
- Comments from the USACE will be incorporated in the plans or resolved prior to beginning work.
- The On-Site Project Manager notifies all appropriate parties of concern (utilities, property owners, and so forth) of the intended project schedule. Coordination with the USACE Point of Contact (POC) and the National Aeronautics and Space Administration (NASA) POC will be very important to the performance of this project.
- The On-Site Project Manager has the utilities marked prior to performing any intrusive activities. A digging permit from NASA Plum Brook Station (PBS) is required for this project. Intrusive activities cannot be performed without approval from NASA PBS.
- The On-Site Project Manager confirms the scheduling of equipment and personnel for the project and then performs the project.
- The On-Site Project Manager in coordination with the QCO and SSHO supplies copies of all field documentation and give a narrative of field activities to the technical support person who will prepare the draft report.
- After the draft report is prepared, an internal IQCT will review the report and make comments, which will be resolved or incorporated into the report.
- A draft report will be submitted to the USACE.
- Upon receipt of comments from the USACE, the comments will be resolved or incorporated into the draft report and the final report will be issued.

2.3 Technical Reviews

This includes issuance of all project-related documents controlled by a technical review system. Plans and reports will be reviewed by the Senior Project Manager and by qualified, independent reviewers to ensure proper documentation. All project submittals will independently be reviewed by, at a minimum, one senior reviewer and one peer reviewer. Reviews will be performed by personnel who are knowledgeable concerning regulatory requirements and/or who are experienced in performing field work associated with this project. All comments resulting from the technical reviews are resolved and/or incorporated in the project submittals.

A peer review of the plans and reports is performed to determine their adequacy, completeness, and verification that the work was conducted in accordance with the SOW, policies, and guidelines. A senior reviewer shall review all project submittals. The senior reviewer will perform a review of all plans for precision, accuracy, representativeness, comparability, completeness, and verification that the work has been conducted in accordance with the SOW, policies, and guidelines.

2.4 Document Control

Project technical and administrative files will be maintained at TMG's Corporate Office in St. Albans, West Virginia. Additionally, copies of all work plan documents will be kept in the field office trailer for reference during the construction efforts.

2.5 Quality Evaluation/Audit Surveillance

Qualified personnel who are independent of project activities will perform quality evaluation at predetermined intervals. The purpose of evaluations and audits is to ensure compliance with technical procedures and to document quality control. The Senior Project Manager will perform quality evaluations of technical procedures and paperwork documentation during the course of the project. The quality evaluations may take the form of site visits to evaluate personnel's field procedures and/or review of field documents. Additionally, an administrative review is performed to ensure that project submittals are performed in a timely manner.

2.6 Project Management

The Senior Project Manager will oversee the project and ensure that all details are followed and that project activities are on track. Any project problems will be directed to the Contracting Officer Technical Representative (COTR) for quick resolution.

2.7 Analytical Laboratory

The overall QC objective is to ensure that data of known and acceptable quality is generated from both field and laboratory activities. TMG will use TestAmerica, Inc. located in North Canton, Ohio to perform laboratory analysis for this project. TestAmerica, Inc. meets the

Department of Defense (DOD) Quality System Manual (QSM) requirements. Refer to Appendix D for a copy of TestAmerica's DOD QSM certification.

Pursuant to the SOW, no quality assurance (QA) samples will be collected. The laboratory will be responsible for ensuring that their personnel adhere to their laboratory's Quality Assurance Plans (QAP), located in Appendix D of the Plan of Operations (TMG, July 2010). The number and types of internal quality control checks for each analytical method is defined in the laboratory's QAP.

The Contract Laboratory shall follow United States Environmental Protection Agency (USEPA) guidelines for reporting as outlined in Level 3, QA/QC Levels of Reporting. The Level 3 report shall include the following:

- Case Narrative (information shall include the number and type of samples received, analysis of those samples, any problems that occurred, whether quality control was within acceptable limits, etc.)
- Analytical Report (summary of all sample analysis information including surrogates for organic methods.) Detection limits/reporting limits shall be included.
- Chain-of-Custody
- Summary of Quality Control (a summary shall be included of all quality control specific to the project.) This may include method reagent blanks, mid-level calibration checks, spike and spike duplicates, sample duplicates, laboratory control samples, laboratory control sample duplicates (if applicable), and surrogate recoveries (if applicable). All QC shall include acceptance criteria and relative percent data where applicable.

Any sample failing the method or laboratory quality control limit may be reanalyzed. The analytical laboratory, TMG, and the USACE will jointly make the decision regarding re-analysis.

2.8 Field Quality Control

2.8.1 Field Quality Control for Chemical Data Measurement

Field quality control is as vital to a project as is quality control within the laboratory. Proper execution of each project task is needed in order to yield consistent, reliable information that is representative of the media and conditions being measured. The overall quality assurance objective is to ensure that data of known quality is generated which will be responsible for seeing that field personnel adhere to the QCP. Quality Control Field Oversight Checklists (QCFOC) to be used for field activities are provided in Appendix B. The QCFOCs will be completed for each project area.

Quality controls utilized in sample collection include, but are not limited to, following the approved plans and procedures for sample collection, proper documentation of sample collection activities and site conditions, reporting and resolving any problems during sampling activities, and proper handling, preserving, packaging, and shipment of samples. In addition, quality

control samples (duplicates and trip blanks) are collected to check the accuracy, completeness, precision, and comparability of the actual field samples.

2.8.2 Quality Control for Field Activities

Field quality control for site activities is important to the proper completion of a project. The Senior Project Manager, On-Site Project Manager, and/or the On-site Project Superintendent are responsible for ensuring that personnel and subcontractors perform work in accordance with the specifications of the SOW and the approved plans. The Quality Control Officer (QCO) will be responsible for performing quality control oversight and reporting findings to the On-site Project Manager. General QCFOCs to be used for field activities are provided in Appendix B.

The Senior Project Manager, On-Site Project Manager, and/or the On-site Project Superintendent will be responsible for overseeing the work performed by TMG personnel and TMG's subcontractors. The QCO will be responsible for ensuring that QC measures are followed to ensure proper completion of the project. The QCO may stop work at any time that the quality of work being performed or any materials being used are found to be of inferior quality. Materials will not be accepted for delivery at the site if they do not meet contract specifications. Written records will be kept of all materials brought on-site, their condition at time of delivery, storage methods, and condition of the material at time of use. The work performed by subcontractors will be inspected to ensure that it meets requirements of the contract SOW. Work not meeting requirements of the contract SOW will be immediately stopped and remedied.

2.8.3 Daily Quality Control Reports

During the field investigation and excavation activities, Quality Control Reports (QCR) will be prepared daily, dated, and signed by the On-site Project Manager or the QCO. TMG will utilize the USACE QCR form (see Appendix A). The following information will be recorded on the QCR:

- Work performed
- Preparatory, initial, and follow-up phase inspections.
- Safety
- Samples taken and tests performed
- Weather information
- Field instrument measurements
- Departures from the approved plans (any deviation that may affect data quality objectives must be conveyed to the USACE immediately)
- Personnel on-site and their job activities
- Any problems encountered
- Instructions from government personnel
- A copy of the chain-of-custody and any other project forms generated on-site should be attached to the daily report.

2.9 Corrective Action

Corrective action procedures may be required in the event a discrepancy is discovered in the field, during an audit, and/or by the laboratory. Laboratory discrepancies that are unrelated to field procedures will be addressed by the laboratory's personnel and will be corrected in accordance with their QAP. The On-Site Project Manager will address discrepancies relating to field procedures. Any deviations from approved plans shall be fully documented. The USACE COTR shall be notified if deviations to the approved plans are necessary. No deviations to approved plans shall be made without the prior written approval of the USACE COTR. No deviations from the approved plans that compromise data quality or personnel safety shall be allowed. All deviations and corrective actions will be documented in the Deficiency Report located in Appendix A of this QCP.

2.10 Site Security

NASA PBS provides site-wide security and conducts site-wide checks and patrols 24-hours per day, 7 days per week. Pursuant to the SOW, coordination with PBS personnel will be conducted by USACE to ensure that TMG is allowed access to/from the site to perform all activities during this removal action. TMG and its subcontractors shall be required to enter/exit through the PBS security gate. TMG is responsible for ensuring that TMG employees and subcontractors follow all rules set forth by the PBS security. Security requirements, as set forth by PBS, shall not be compromised. TMG personnel and subcontractors are required by NASA to review a safety video prior to performing any on-site activities.

The On-site Project Manager will be responsible for checking all equipment, storage containers, excavated areas, and so forth prior to leaving the site each day. Caution tape or fence shall be constructed around excavation pits and storage areas. Work materials shall be picked up and properly stored each day.

3.0 GENERAL PROJECT INFORMATION

3.1 Project Type

Remedial Action Construction (RA-C), Remediation of Contaminated Soil and Sediment

3.2 Project Location

TNT Area C (TNTC) of Plum Brook Ordnance Works (PBOW) located in Sandusky, Ohio

3.3 Customer/Sponsor

USACE, Huntington District (CELRH) (Contract No. W91237-10-C-0002)

3.4 Project Description

3.4.1 Background and Purpose

The purpose of this contract is for the remediation of soil and sediment within TNTC of the PBOW site, located in Sandusky, Ohio. USACE Huntington District (LRH) is the responsible authority under the Defense Environmental Restoration Program (DERP) at the former TNTC. Based on the results of the completed Remedial Investigation/Feasibility Study (RI/FS) for soils and sediment, the USACE will conduct a RA-C in the TNTC. The remediation will be performed to prevent human exposure to the site soil and sediment containing any of the 13 contaminants of concern (COCs) for soils and 3 COCs for sediment at concentrations that exceed remediation goals. The remediation goals are chemical- and receptor-specific risk based remedial criteria that capture all the exposure assumptions and toxicological data used in the risk assessment.

The RA-C will consist of the excavation of approximately 9,205 cubic yards (CY) of material, backfilling of the excavation pit with clean material, treatment by alkaline hydrolysis and/or composting (if necessary), ex situ chemical stabilization (if necessary), and on-site/off-site disposal. The remediation is protective of human health and the environment, complies with Federal and State of Ohio Environmental Protection Agency (OEPA) requirements that are either applicable or relevant and appropriate to the remedial action, is cost effective, utilizes permanent solutions and treatment of resource recovery technologies to the maximum extent practicable, and satisfies the requirement for treatment as a principle element of the remedy. No soil or sediment contaminants will be left at levels to which direct exposure would be considered unacceptable.

The Plan of Operations (TMG, July 2010) provides complete details of the activities that are to be performed. Section 3.4.5 of this QCP provides a summary of the activities to be performed during this RA-C.

3.4.2 Site Location and History

The site of the former PBOW is located approximately 4 miles south of Sandusky, Ohio and 59 miles west of Cleveland, Ohio. Although the PBOW site is primarily situated in Perkins and Oxford Townships, the eastern edge of the site extends into Huron and Milan Townships. PBOW is bounded on the north by Bogart Road, on the south by Mason Road, on the west by County Road 43, and on the east by U.S. Highway 250. The surrounding area is mostly agricultural and residential.

The 9,009-acre PBOW site was built in early 1941 as a manufacturing plant for 2,4,6-trinitrotoluen (TNT), dinitrotoluene (DNT), and pentolite. Production of explosives at PBOW began in December 1941 and continued until 1945. It is estimated that more than 1 billion pounds of nitroaromatic explosives were manufactured during the 4-year operating period. The three explosive manufacturing areas were designated TNT Area A (TNTA), TNT Area B (TNTB), and TNTC. Twelve process lines were used in the manufacture of TNT, four lines at

TNTA, three lines at TNTB, and five lines at TNTC. The SOW for this contract deals primarily with the TNTC area.

The TNTC area occupies approximately 119 acres of land in the western portion of PBOW. Currently, the area is heavily vegetated and overgrown with trees and brush. Several aboveground features that indicate former PBOW facilities were present are still evident at TNTC. These include roads, fire hydrants, water valves, a water valve control well, railroad beds, and former building pad foundations. Below-ground features are also present, including manholes, drains, and underground utility lines (indicated by aboveground water valves). NASA does not currently use the areas, and no NASA buildings exist on TNTC. One building present on the site was constructed and used by the United States Environmental Protection Agency (USEPA) to perform noise abatement testing in the 1980s. This building is located near a former Wash House (Building 606) along former Process Line 10. Based on this use, there is no reason to expect that USEPA contributed in any way to contamination at TNTC.

The TNTC manufacturing site consisted widely of scattered buildings of wood frame construction with asbestos and sheet metal coverings. It also included a series of buried and/or overhead flumes and pipes used to transport various liquids associated with the manufacturing process.

After plant operations ceased, TNTC's manufacturing lines were decontaminated by the War Department in later 1945. During decontamination, all structures, equipment, and manufacturing debris were either removed and salvaged or removed and burned. After the property was certified as decontaminated, 3,230 acres were initially transferred to the Ordnance Department, then to the War Assets Administration in 1946. This transfer did not include the Plum Brook Depot area, which consists of 2,800 acres. The Department of the Army reacquired the 3,230 acres in 1954 and performed cleanup efforts from the mid-1950s until 1963. In 1955, the Army specifically completed further decontamination of TNTC. This effort included removal of contaminated surface and subsurface soil around the buildings and wooden and ceramic waste disposal lines containing TNT. Thousands of pounds of TNT were discovered in catch basins; this TNT was removed and burned at the burning grounds.

Two property use agreements were entered into by the Army and the National Advisory Committee of Aeronautics, the predecessor of NASA, in 1956 and 1958, respectively. On March 15, 1963, accountability and custody of the entire PBOW property was transferred to NASA by the Department of the Army. NASA performed further decontamination efforts during 1964. The NASA decontamination process included removing contaminated surface soil above the drain tiles, flumes, etc., destruction of all buildings by fire, then removal of all soils, debris, sumps, and above-grade portions of concrete foundations. Portions of the concrete foundations located below grade were left buried, and some that had been previously slightly above grade were likewise buried. All materials, including the soil in those areas, were flashed; the area was then rough graded. The decontamination process was also to have included burning of nitroaromatic-filled flumes that were excavated.

NASA has operated and maintained the former PBOW property since 1963, and the facility is currently known as the NASA Glenn Research Center, Plum Brook Station. NASA operates the property as a space research facility in support of their John Glenn Research Center at Lewis Field, Cleveland, Ohio. Most of the aerospace testing facilities built in the 1960s at the site are currently on standby or inactive status. On April 18, 1978, NASA declared approximately 2,152 acres of PBOW as excess. The Perkins Township Board of Education acquired 46 acres of the excess acreage and uses the area as a bus transportation area. The General Services Administration retains ownership of the remaining excess acreage and currently has a use agreement with the Ohio National Guard for 604 acres of this land. NASA presently controls approximately 6,400 acres.

Currently, TNTC consists mostly of early and late old field combined with shrubby thicket vegetation and is less than 10 percent wooded. Some wetland vegetation was found along TNTC drainage ditches and streams. During rain events, drainage from the ditches flows into any of three small streams that eventually flow to Pipe Creek, located northwest of TNTC. Areas east of TNTC are primarily old field and shrub, while to the south, southeast, northeast, north, and west, it is primarily forested, and to the southwest, it is old field and early shrub thicket.

3.4.3 Overview of Remedy and Proposed Action

To provide a basis for taking an action at this site, RI activities were conducted for TNTC soils (415 samples), surface water (10 samples), and sediment (15 samples). Groundwater was investigated under Project G05OH001826 – Sitewide Groundwater, and therefore not addressed in the RI. During the RI, TNTC soil was investigated by process line or process type, and the associated 29 building areas. As part of the RI, human health and ecological risk assessments were conducted for TNTC. Out of the 29 building areas investigated, 14 building areas and 1 drainage ditch area (total of 15 areas) were identified as having contaminants above the identified Remedial Goals (RGs). Thirteen COCs were identified in surface, subsurface soil and sediment. 5 of those COCs are nitroaromatics (2-amino-4,6-dinitrotoluene (2-ADNT), 4-amino-2,6-DNT (4-ADNT), 2,4-DNT, 2,6-DNT, and 2,4,6-TNT). The remaining 8 COCs are polychlorinated biphenyls (PCBs) (Aroclor 1254 and 1260), polynuclear aromatic hydrocarbons (PAHs) (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-c,d)pyrene) and lead. Sediment has only 3 COCs: nitroaromatics (2-ADNT, 4-ADNT, and 2,4,6-TNT).

Based on the results of the Human Health Risk Assessment, specific RGs were selected for soil and sediment. Contaminants of Concern were identified for TNT C soil and sediment as those chemicals that contributed most to an additional incremental lifetime cancer risk (ICLR) of 1×10^{-5} (or $1E-5$) or an additional non-cancer Hazard Index (HI) of 1. In addition to the ICLR and HI requirements, the RGs presented in Tables 1 have been approved for clean up of soils and sediment in TNTC.

Table 1: Contaminants of Concern

COCs for Soils	RGs (mg/kg)
Nitroaromatics	
2-ADNT	1.7
4-ADNT	1.3
2,4-DNT	6.5
2,6-DNT	1.0
2,4,6-TNT	8.0
Polychlorinated Biphenyls	
Aroclor 1254	1.0
Aroclor 1260	1.0
Polynuclear Aromatic Hydrocarbons	
Benzo(a)anthracene	1.0
Benzo(a)pyrene	1.0
Benzo(a)fluoranthene	1.0
Dibenz(a,h)anthracene	1.0
Indeno(1 ,2,3-cd)pyrene	1.0
Metals (Lead)	400

COCs for Sediment	RGs (mg/kg)
Nitroaromatics	
2-ADNT	5.0
4-ADNT	5.0
2,4,6-TNT	41.0

The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).

3.4.4 Overview of Tasks

TMG will provide all equipment, labor, materials, and supervision necessary for the RA-C as described by the SOW for TNTC. Activities generally consist of the excavation, backfilling of each excavation pit with clean material, treatment by alkaline hydrolysis and/or composting (if necessary), ex situ chemical stabilization (if necessary), and on-site/off-site disposal.

The following tasks are required to be performed under this SOW:

- Task 1** Preparation/Submittal of a SSHP
- Task 2** Preparation/Submittal of a QCP

- Task 3** Preparation/Submittal of a Plan of Operations
- Task 4** Field Activities/Utilities
- Task 5** Site Survey
- Task 6** Excavation
- Task 7** Treatment (Alkaline Hydrolysis and/or Windrow Composting, if necessary)
- Task 8** Stabilization, if necessary
- Task 9** Disposal/Investigative Derived Waste (IDW)
- Task 10** Confirmation Sampling
- Task 11** Preparation/Submission of Draft and Final Construction Completion Report
- Task 12** Public Meeting Support

The tasks outlined in this section are described in detail in the Plan of Operations (TMG, July 2010). This work will be conducted by TMG in an environmentally acceptable manner conforming to existing federal, state, and local regulations under CELRH supervision.

3.4.5 Summary of Field Activities

In accordance with contract requirements, TMG will notify the USACE POC and provide a schedule of events prior to beginning field activities. A description of all field activities is included in the Plan of Operations (TMG, July 2010).

3.5 Project Personnel and Lines of Authority

The collection of quality data and the completion of any given project are strongly affected by the project organization. A project that is properly organized with personnel responsibilities well-delineated results in a successful project conclusion. A listing of functional area and qualified personnel are given for this project.

- A. Government Technical POC** - This is the technical POC representing the USACE who will serve as a liaison between the USACE and the contractor.

USACE POC

Lisa Humphreys

Contact Information

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- B. NASA POC** - This is the technical POC representing NASA.

<u>NASA POC</u>	<u>Contact Information</u>
Robert Lallier	(419) 621-3234 Email: robert.f.lallier@nasa.gov

- C. Contractor's Senior Project Manager** - TMG's Senior Project Manager provides technical insight and provides corporate level supervision for the project. The Project Manager has overall responsibility to see that the project is completed in accordance with the Scope of Work.

<u>TMG Services, Inc. Senior Project Manager</u>	<u>Contact Information</u>
Rodney Bumgardner	Office Phone: (304) 722-6015 Cellular phone: (304) 545-4481 Email: rbumgardner@tmgservicesusa.com

- D. On-Site Project Manager** - The On-Site Project Manager will be in charge of on-site field activities in coordination with the Contractor's Senior Project Manager.

<u>On-Site Project Manager</u>	<u>Contact Information</u>
Helen Owens	Cellular Phone: (419) 504-8008 Alternate Cellular Phone: (937) 478-2322 Email: howens@tmgservicesusa.com

- E. On-Site Project Superintendent** - The On-Site Project Superintendent will be in charge of on-site field activities when the On-Site Project Manager is away from the site. It is anticipated that the On-Site Project Manager will be on-site for the majority of the project.

<u>On-Site Project Superintendent</u>	<u>Contact Information</u>
Dan Cashbaugh	Cellular Phone: (216) 404-8109 Email: dcashbaugh@tmgservicesusa.com

- F. Site Safety and Health Officer** - The SSHO is responsible for safety on site. This person has the authority to stop work if unsafe conditions warrant.

<u>TMG Services, Inc. SSHO</u>	<u>Contact Information</u>
Dan Cashbaugh	Cellular Phone: (216) 404-8109 Email: dcashbaugh@tmgservicesusa.com

- G. Quality Control Officer** - This person is responsible QC at the site. This person has the authority to stop the work if QC is not being met. The QC Officer shall be responsible for sampling activities.

<u>TMG Services, Inc. QC Officer</u>	<u>Contact Information</u>
James Russell	Cellular Phone: (216) 857-1112 Email: jrussell@tmgservicesusa.com

- H. Health and Safety Manager** - The Health and Safety Manager provides oversight of the Safety and Health Program. Additionally, the Health and Safety Manager will perform analytical data coordination and HI/ICLR calculations to verify “hot spot” remediation.

<u>TMG Services, Inc. Health and Safety Manager</u>	<u>Contact Information</u>
Matthew Ford	Office Phone: (304) 722-6015 Cellular phone: (304) 389-5112 Email: mford@tmgservicesusa.com

- I. Field Personnel** - These personnel are responsible for assisting the On-Site Project Manager in completing the tasks required under this contract.

<u>TMG Services, Inc. Field Personnel</u>	<u>Contact Information</u>
Dan Cashbaugh	Cellular Phone: (216) 404-8109 Email: dcashbaugh@tmgservicesusa.com

James Russell	Cellular Phone: (216) 857-1112 Email: jrussell@tmgservicesusa.com
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Delmar Hartness	Cellular Phone: (216) 215-2875 Email: N/A
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- J. TMG Services, Inc.’s Independent Quality Control Team** - An internal quality control team will independently review the work plans and reports to ensure that they meet requirements of the Scope of Work.

<u>TMG Services, Inc.’s Independent Quality Control Team</u>	<u>Contact Information</u>
Kimberlie Bumgardner	Office Phone: (304) 201-2205 Cellular Phone: (304) 215-0099 Email: kchambers@mctechreadymix.com

Richard Armstrong	Office Phone: (304) 201-2205 Cellular Phone: (304) 932-5490 Email: rarmstrong@mctechreadymix.com
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- K. TestAmerica, Inc.** - Samples will be sent to the following USACE QCM certified laboratory. TestAmerica, Inc. located in North Canton, Ohio.

<u>TestAmerica Contact</u>	<u>Contact Information</u>
Kenneth Kuzior	Phone: (330) 966-9374 Email: ken.kuzior@testamericainc.com

Deborah Dunn	Phone: (330) 966-9292 Email: deborah.dunn@testamericainc.com
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- L. Disposal Facility for Contaminated Soil** - Non-hazardous soil removed from the site will be disposed of at the Erie County Landfill.

<u>Erie County Landfill</u>	<u>Contact Information</u>
Fred Dubbert – Landfill Superintendent	Office Phone: (419) 433-9760 Cellular Phone: (419) 433-3624 Email: fdobbert@erie-county-ohio.net

Bob Sennish – Waste Approvals	Office Phone: (419) 433-9760 Cellular Phone: (419) 656-0554 Email: bsennish@erie-county-ohio.net
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- M. Barnes Nursery** - This Company may be used for the transportation of any non-hazardous materials removed from the site and to tra Barnes Nursery will be used for the transportation of any non-hazardous materials to the Erie County Landfill and to transport clean backfill material to the site. In addition, Barnes Nursery will provide the compost turning equipment plus an operator.

<u>Barnes Nursery Contact</u>	<u>Contact Information</u>
Jarrett Barnes	Cellular Phone: (419) 656-3652 Email: jsbarnes@barnesnursery.com

- N. John Hancock and Associates, Inc.** - Personnel from John Hancock and Associates, Inc. will perform a survey of the excavations and measure the volume of material excavated from the excavations.

<u>John Hancock and Associates, Inc. Contact</u>	<u>Contact Information</u>
Alex Etchill	Phone: (419) 625-7838 Email: NA

- O. Tetra Tech** - Personnel from Tetra Tech will perform soils treatment, including lead stabilization, alkaline hydrolysis, and composting as necessary. The Tetra Tech contact is Mikael Spangburg. Mr. Spangburg is not expected to be on-site; however, one or more of the other personnel listed from Tetra Tech will be on-site.

<u>Tetra Tech Project Manager</u>	<u>Contact Information</u>
Mikael Spangburg	Office Phone: (860) 461-0189 Cellular Phone: (860) 478-9658 Email: mikael.spangburg@tetrattech.com

<u>Tetra Tech On-Site Representatives</u>	<u>Contact Information</u>
Bobby Bobo	Cellular Phone: (865) 384-5469
Bryn Howze	Cellular Phone: (865) 771-9398

- P. Midwest Environmental Services, Inc.** - Midwest will be the primary provider of waste characterization, waste profiling, transportation and disposal services for hazardous (soil and liquid), non-hazardous wastes, and if necessary, PCB-contaminated soils (>50 mg/kg).

<u>Midwest Environmental Services, Inc. Contact</u>	<u>Contact Information</u>
Greg Wilfong	Office Phone: (513) 681-9990 Cellular Phone: (513) 368-4105 Email: gwilfong@midwestenvironmentalservices.com

Doug Gronauer	Office Phone: (513) 681-9990 Cellular Phone: (513) 535-5047
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- Q. EQ Environmental** - The hazardous disposal facility for the contaminated soil is EQ Environmental located in Michigan.

<u>EQ Environmental Contact</u>	<u>Contact Information</u>
Debbie Ferrari	Office Phone: (800) 592-5489

EQ Environmental's EPA ID Number: MID 000 724 831

- R. Enviro-Clean Inc.** - Non-hazardous IDW containing liquids will be transported to Enviro-Clean Inc. located in Wooster, Ohio for ultimate disposal.

<u>Enviro-Clean Inc.</u>	<u>Contact Information</u>
Dave Stroh	Office Phone: (330) 264-8080

Enviro-Clean, Inc.'s EPA ID Number: OHR 000 033 951

- S. Dart Trucking** - In the event that some of the soil does not pass the TCLP test for disposal at the Erie County Landfill then Dart Trucking will be available for the transportation of material to EQ Environmental located in Michigan. Dart is a backup transportation contractor.

<u>Dart Trucking Contact</u>	<u>Contact Information</u>
Debbie Celli	Office Phone: (800) 541-8206, extension 192

Dart Trucking's EPA ID Number: OHR 000 159 129

- T. McTech Corp** - TMG will rent heavy equipment from McTech Corp during this project. McTech Corp will also provide logistical support to the project.

<u>McTech Corp Contact</u>	<u>Contact Information</u>
Kimberlie Bumgardner	Office Phone: (304) 201-2205 Cellular Phone: (304) 215-0099 Email: kchambers@mctechreadymix.com

- U. Tuffman Equipment and Supply** - TMG will rent equipment from Tuffman Equipment and Supply.

<u>Tuffman Equipment and Supply Contact</u>	<u>Contact Information</u>
Mike Spear	Office Phone: (800) 622-7052 Cellular Phone: (419) 656-3683

4.0 INTERNAL QUALITY CONTROL AND INDEPENDENT QUALITY CONTROL TEAM

The project will be conducted under the guidance of the Senior Project Manager. The Senior Project Manager will be responsible for ensuring a quality product in the functional area through internal checks and reviews. An internal quality control team will independently review the work plans and reports. This work will be conducted with full communication between team members. Review of problems shall be in writing. Comments from the independent quality control team will be resolved or incorporated in the work plans and reports generated for this project. Only quality products will be released from the review team after signoffs.

In addition to the review of the plans/report by the Senior Project Manager, two independent reviewers (1 senior reviewer and 1 peer reviewer) shall review all project submittals. The Senior Reviewer will perform a review of all plans for precision, accuracy, representativeness, comparability, completeness, and verification that the work has been conducted in accordance with the SOW, policies, and guidelines. All comments resulting from the various reviews will be resolved and/or incorporated in the project submittals.

The Senior Reviewer for this project is:

Senior Review

Kimberlie Bumgardner

Contact Information

Office Phone: (304) 201-2205

Cellular Phone: (304) 215-0099

Email: kchambers@mctechreadymix.com

A Peer Review of the plans will be performed to determine their adequacy, completeness, and verification that the work was conducted in accordance with the scope of work, policies and guidelines.

Peer Review

Richard Armstrong

Contact Information

Office Phone: (304) 201-2205

Cellular Phone: (304) 932-5490

Email: rarmstrong@mctechreadymix.com

Appendix D contains resumes for members of the IQCT team, the Senior Project Manager, the Health and Safety Manager, the On-Site Project Manager, the On-Site Project Supervisor, the QCO, and the SSHO.

5.0 QUALITY CONTROL INSPECTIONS

The QCO shall be responsible for performing a three-phase quality control inspection of all definable work features. Notifications, meetings and plan preparation are not considered definable features of work. The three phases shall include a preparatory phase, an initial phase, and a follow-up phase inspection.

To provide evidence of satisfactory work performance, verification test data and results of field inspections will be completely documented in the Daily QC Report. As part of the work control activities, a digital color photographic record will be prepared. The photographic record will be saved to CDs and stored at the on-site construction trailer and at TMG's St. Albans, WV office.

5.1 Definable Features of Work

Notifications, meetings, and plan preparation are a definable feature of work for which the three phase inspection forms are not appropriate. Quality control reviews will be performed by TMG's IQCT on all plans, reports, maps, and other paperwork submitted to the USACE to ensure compliance with SOW requirements. The following are the definable features of work, which require a three-phase inspection:

Task 6 Excavation

Task 7 Treatment (Alkaline Hydrolysis and/or Windrow Composting, if necessary)

Task 8 Stabilization, if necessary

Task 9 Disposal/IDW

Task 10 Confirmation Sampling

The multi-phases of control and inspection of work performed by TMG will be performed for each definable feature of work listed above. The preparatory, initial, follow-up, and completion phases are described below, with required actions listed for each phase.

5.1.1 Preparatory Phase Inspections

The preparatory phase inspection is performed by the QCO prior to beginning each definable feature of work. The preparatory inspection will include:

- A review of the contract/project plans, drawings, and scope of work, if applicable;
- A review of each paragraph of applicable specifications and any identified variances ;
- A check to ensure that all materials and/or equipment have been approved and tested as required;
- A check to ensure that provisions have been made to provide required QC inspection and testing;
- Examination of the work area to ensure that all required preliminary work has been completed in conformance with contract requirements;
- A physical examination of required materials, equipment, and sample work to ensure that they are on-hand; that they conform to approved shop drawings or submitted data; and that they are properly stored;
- A review of the appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are in place ;
- Discussion of procedures for constructing the work, including elimination of repetitive deficiencies;
- Discussion of the acceptable level of workmanship required to meet the contract specifications;
- Project documentation of the tolerances and workmanship standards for the phase of work being inspected; and
- Verification that the necessary plans have been submitted to and accepted by the USACE.

The USACE will be notified at least 24 hours in advance of beginning the required actions of the preparatory phase to allow attendance by the USACE POC.

A meeting will be conducted by the QCO and attended by appropriate personnel responsible for the definable features of work. The results of the preparatory phase inspection will be documented on the inspection form and if necessary by separate minutes prepared by the QCO and attached to the Daily QC Report.

Additional preparatory phase inspections may be conducted on the same definable feature of work as determined by the USACE, if any of the following conditions occur:

- The quality of work is unacceptable;
- There are changes in the applicable QC personnel or in the on-site production supervision or work crew;
- Work on a definable feature has resumed after a substantial period of inactivity; and
- Other circumstances, as warranted.

The preparatory inspection will insure that the plan, materials, equipment and safety procedures meet the project requirements. Inspections will be made as soon as possible after the delivery of equipment and materials to the job site, and prior to their installation. The QCO will make sure that provisions have been made for the proper storage of materials and equipment in order to protect them from damage on the construction site.

Refer to Appendix A for a copy of a preparatory phase checklist.

5.1.2 Initial Phase Inspections

The initial phase inspection is performed at the beginning of each definable feature of work.

The initial inspection will include:

- A check of preparatory work to ensure that it is in compliance with contract/project requirements;
- A review of the minutes of the preparatory meeting;
- Verification of required control inspection and testing in accordance with the contract/project;
- Establishment of acceptable workmanship standards and verification that acceptable workmanship levels meet applicable standards;
- Resolution of differences or conflicts in interpretation of work scope or contract specifications; and
- A safety check to include verification of compliance with the AHA.

The USACE will be notified at least 24 hours in advance of beginning the required actions of the initial phase to allow attendance by the USACE POC.

The results of the initial phase inspection will be documented on the inspection form and by separate minutes prepared by the QCO and attached to the Daily QC Report, if appropriate. The initial phase will be repeated for each new crew to work on-site or anytime acceptable specified quality standards are not being met. Additional initial phase inspections may be conducted on the same definable feature of work as determined by the USACE, if:

- the quality of ongoing work is unacceptable;

- there are changes in the applicable QC personnel or in the on-site supervision or work crew;
- work on a definable feature is resumed after a substantial period of inactivity; or other circumstances warrant.

Refer to Appendix A for a copy of an initial phase checklist.

5.1.3 Follow-Up Phase Inspections

The follow-up phase inspection is performed as daily checks to ensure the continued compliance with contract requirements, including control testing and corrective actions until completion of the particular feature of work. Checks will be made a matter of record in the daily QC document.

At the completion of all work or any increment thereof, the QCO and USACE will conduct a final inspection of the work. The work will be inspected for conformance to plans and specifications and for quality, workmanship, and completeness. An itemized list containing QCO and USACE noted deficiencies will be compiled that includes a summary of work not properly completed, inferior workmanship, and work not complying with plans and specifications.

This “Punch List” will be included with the daily QC documents and submitted to the USACE POC with an estimated date for correction of each identified deficiency.

Following correction of work, a second inspection will be conducted by the QCO and USACE to ensure that all deficiencies have been corrected.

Refer to Appendix A for a copy of a follow-up phase checklist.

6.0 PROJECT SCHEDULE

The proposed project schedule is as follows:

Submission of 8 copies of the Draft SSHP, the Draft QCP, and the Draft Plan of Operations	May 2010
Submission of 6 copies of the Final SSHP, QCP, and Plan of Operations	10 days after approval of response to comments but prior to beginning intrusive fieldwork
Submission of Draft Construction Completion Report	510 days (17 months) after approval of work plans
Submission of Final Construction Completion Report	30 days after approval of response to comments

APPENDIX A Inspection Forms

Deficiency Report

Project Name: _____ Contract _____

Location: _____ Date: _____

Reference specifications paragraph: _____

Reference Contract Drawing Sheet: _____

Deficiency: _____

Corrective Action: _____

Project Manager/Date

QC Officer/Date

PREPARATORY PHASE CHECKLIST

Project Name: _____ Contract # _____

Location: _____ Date: _____

Definable Feature: _____ Spec. Section _____

PERSONNEL PRESENT

Name _____ Position _____

Company/Government _____

(List additional personnel on reverse side)

SUBMITTALS

1. Review submittals and/or submittal log 4288. Have all submittals been approved? _____ YES NO N/A
If No, what items have not been submitted?

YES NO N/A

2. Are all materials on hand?
If No, what items are missing?

3. Check approved submittals against delivered material.

Comments: _____

MATERIAL STORAGE

YES NO N/A

1. Are materials stored properly?
If No, what action is being taken?

SPECIFICATIONS

1. Review each paragraph of specifications and applicable specification

2. Discuss procedures for accomplishing work required by specification

3. Clarify or comment on any differences

PRELIMINARY WORK AND PERMITS

1. Ensure that preliminary work is correct and that permits, if required, are on file
If not, what action is being taken?

TESTING

1. Identify test to be performed, frequency, and by whom.

2. When is test required?

3. Where is testing required?

4. Is testing in compliance with approved plans

5. Has the testing facility been approved or certified

SAFETY

YES NO

Has the APP been approved (including the Activity Hazard Analysis)

Have all on-site personnel reviewed the APP and QCP?

DOCUMENTATION

YES NO

Have all QCFOCs and CQCR identified in the APP and QCP been completed?

COMMENTS

QC Officer Signature & Date

INITIAL PHASE CHECKLIST

Project Name: _____ Contract # _____

Location: _____ Date: _____

Definable Feature: _____ Spec. Section _____

PERSONNEL PRESENT

Name _____ Position _____

Company/Government _____

(List additional personnel on reverse side)

Identify full compliance with procedures identified at preparatory phase. Coordinate plans, specifications, and submittals.

Comment: _____

Preliminary Work- Ensure preliminary work is complete and correct. If not, what action is being taken?

Comment: _____

What Level of Workmanship was established?

Comments: _____

<u>TESTING</u>	YES	NO	N/A
Is percentage of QC testing being performed?	_____	_____	_____
Is required material testing being performed?	_____	_____	_____
Does the testing meet minimum standards?	_____	_____	_____
If not, what action was taken _____			

<u>DEFICIENCIES</u>	YES	NO	N/A
Have any deficiencies been encountered?	_____	_____	_____
Was a deficiency report completed, showing deficiency and corrective action?	_____	_____	_____

<u>SAFETY</u>	YES	NO	N/A
Have safety meetings been held and documented?	_____	_____	_____

<u>DOCUMENTATION</u>	YES	NO
Have all QCFOCs and CQCR identified in the APP and QCP been completed?	_____	_____

Comments: _____

QC Officer Signature & Date

FOLLOW-UP PHASE CHECKLIST

Project Name: _____ Contract # _____

Location: _____ Date: _____

Definable Feature: _____ Spec. Section _____

PERSONNEL PRESENT

Name _____ Position _____
Company/Government _____

Identify full compliance with procedures identified at preparatory and initial phase. Coordinate plans, specifications, and submittals.

Comment: _____

Preliminary Work- Ensure preliminary work is complete and correct. If not, what action is being taken?

Comment: _____

Is level of workmanship being met?

Comments: _____

TESTING

Is percentage of QC testing being performed?

YES NO N/A

Is required material testing being performed?

Does the testing meet minimum standards?

If not, what action was taken

DEFICIENCIES

Have any deficiencies been encountered?

YES **NO** **N/A**

Was a deficiency report completed, showing deficiency and corrective action?

SAFETY

Have safety meetings been held and documented?

YES **NO**

DOCUMENTATION

Have all QCFOCs and CQCR identified in the APP and QCP been completed?

YES **NO**

Comments: _____

QC Officer Signature & Date

CONTRACTOR'S QUALITY CONTROL REPORT (QCR) (ER 1180-1-6)

DATE: _____ REPORT NO. _____

CONTRACT NUMBER AND NAME OF CONTRACTOR _____

DESCRIPTION AND LOCATION OF THE WORK: _____

WEATHER CLASSIFICATION:

CLASS A No interruptions of any kind from weather conditions occurring on this or previous shifts.

CLASS B Weather occurred during this shift that caused a complete stoppage of all work.

CLASS C Weather occurred during this shift that caused a partial stoppage of work.

CLASS D Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather.

CLASS E Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner.

OTHER Explain. CLASSIFICATION:

CLASS _____

TEMPERATURE:

MAX ____ MIN ____

PRECIPITATION:

INCHES _____

CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY: (Attach list of items of equipment either idle or working as appropriate.)

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____

1. WORK PERFORMED TODAY: (Indicate location and description of work performed. Refer to work performed by prime and /or subcontractors by letter in Table above.)

2. TYPE AND RESULTS OF INSPECTION: (Indicate whether: P-Preparatory, I-Initial, or F-Follow-up and include satisfactory work completed or deficiencies with action to be taken.)

3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS:

4. VERBAL INSTRUCTIONS RECEIVED: (List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.)

5. REMARKS: (Cover any conflicts in plans, specifications or instructions: acceptability of incoming materials; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same.)

6. SAFETY: (Include any infractions of approved safety plan, safety manual or instructions from Government personnel. Specify corrective actions taken.)

INSPECTOR

CONTRACTOR'S CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in strict compliance with the contract plans and specifications except as noted above.

CONTRACTOR'S APPROVED AUTHORIZED REPRESENTATIVE

APPENDIX B General Checklists

Quality Control Field Oversight Checklist

General Procedures

The following checklist is provided for use in the field to assure that general QC procedures are followed. The Project Manager or his designee should complete and sign a checklist for the project site.

Project Site _____

Date: _____

Personnel on-site: _____

Signature: _____

		Yes	No	N/A
1.	Did the Field Superintendent or Project Manager discuss the following items with the field crew prior to beginning field activities?	_____	_____	_____
	Site Security issues	_____	_____	_____
	Contents of the Contract Specifications	_____	_____	_____
	Contents of Site-Specific Safety and Health Plan	_____	_____	_____
	Contents of Quality Control Plan	_____	_____	_____
2.	Was the USACE notified in writing 2 weeks prior to mobilization to the site?	_____	_____	_____
3.	Was the USACE provided a time schedule for field work?	_____	_____	_____
4.	Were digging permits obtained from NASA prior to mobilizing to the site for construction activities?	_____	_____	_____
5.	Did TMG personnel and subcontractors view the NASA PBA safety/orientation video prior to beginning work?	_____	_____	_____

	Yes	No	N/A
6. Were digging permit limits strictly adhered to?	_____	_____	_____
7. Were excavation limits surveyed by a qualified surveyor prior to performing excavation activities?	_____	_____	_____
8. Were all drawings done in English units and of engineering Quality with sufficient detail to show interrelations of major Features on the site map (i.e. north arrows, keys, scales, etc.)?	_____	_____	_____
9. Were all drawings done in Microstation V.8 (or the newest Version) and in conformance with the current USACE CADD standards?	_____	_____	_____
10. At a minimum, photos shall be taken of the following site activities.	_____	_____	_____
A. Surveying	_____	_____	_____
B. Sites prior to excavation (including Borrow Area)	_____	_____	_____
C. Excavation	_____	_____	_____
D. Loading of soil for transportation	_____	_____	_____
E. Sampling Activities	_____	_____	_____
F. Decontamination activities	_____	_____	_____
G. Storage/handling of IDW	_____	_____	_____
H. Backfilling of the excavation pits	_____	_____	_____
I. Seeding and mulching of all disturbed areas	_____	_____	_____
J. Alkaline Hydrolysis (if necessary)	_____	_____	_____
K. Windrow Composting (if necessary)	_____	_____	_____
L. Metals stabilization (if necessary)	_____	_____	_____
11. If water was generated during excavation, was it properly containerized, sampled, analyzed, and disposed in accordance with state and federal regulations?	_____	_____	_____
12. Prior to disposal, were excavated soils properly stored until analytical results were available?	_____	_____	_____
13. Was clean fill material placed in the excavation pits? (Note: Borrow materials must be tested prior to use as fill)	_____	_____	_____

	Yes	No	N/A
14. Were excavation areas rough graded as necessary to achieve proper drainage and reseeded/mulched?	_____	_____	_____
15. Was all IDW containerized and sampled?	_____	_____	_____
16. Were all IDW drums labeled as to project name, contents, date of collection, and generator? (Note: waste from different sites shall not be mixed)	_____	_____	_____
17. Were the IDW drums secured with tarps, ropes and placed on pallets?	_____	_____	_____
18. Was the USACE POC notified prior to the disposal of the IDW?	_____	_____	_____
19. Did all Contractor personnel document all correspondence, phone conversations and meetings with the USACE?	_____	_____	_____
20. Was water used at the site to control dust during excavation activities?	_____	_____	_____
21. Were flagmen or temporary signage used when working near roads?	_____	_____	_____

Quality Control Field Oversight Checklist HTRW Sampling Procedures

The following checklist is provided for use in the field to assure that general QC procedures are followed. The Project Manager should complete and sign a checklist for the project site.

Project Site _____

Date: _____

Personnel on-site: _____

Signature: _____

What type and how many samples were collected? _____

Describe the sampling procedure. _____

		Yes	No	N/A
1.	Were representative samples collected?	_____	_____	_____
2.	Were samples properly placed into sample containers?	_____	_____	_____
3.	Was the following information recorded on the sample labels?			
	Site location	_____	_____	_____
	Project number	_____	_____	_____
	Sample Identification number assigned in field	_____	_____	_____
	Description of the sample	_____	_____	_____
	Time and date sample was taken	_____	_____	_____
	Notation of whether preservatives were added to the sample	_____	_____	_____
	Type of preservative	_____	_____	_____
	Type of analysis requested	_____	_____	_____

Quality Control Field Oversight Checklist
HTRW Sampling Procedures
 Continued

	Yes	No	N/A
4. Were samples chilled with ice immediately after collection?	_____	_____	_____
5. Was a COC form filled out on-site?	_____	_____	_____
6. Was the following information recorded on the COC form?			
Project number	_____	_____	_____
Project manager	_____	_____	_____
Site location	_____	_____	_____
Client contact	_____	_____	_____
Description of the sample	_____	_____	_____
Time and date sample was taken	_____	_____	_____
Notation of whether preservatives were added to the sample	_____	_____	_____
Type of preservative	_____	_____	_____
Type of sample such as a grab or composite	_____	_____	_____
Matrix of sample	_____	_____	_____
Amount of sample being transported to the laboratory	_____	_____	_____
Sample number or ID assigned in the field	_____	_____	_____
The appropriate analytical parameters to be tested	_____	_____	_____
7. Were COC seals placed on each sample container (except samples for volatiles analysis)?	_____	_____	_____
8. Was the COC form signed and dated?	_____	_____	_____

Quality Control Field Oversight Checklist
HTRW Sampling Procedures
 Continued

	Yes	No	N/A
9. Were the following packing and shipping procedures performed?			
All containers, except the volatile organic analysis (VOA) vials, are to be taped shut.	_____	_____	_____
Was the drain plug taped shut on the picnic cooler from the inside and outside, and a large plastic bag used as a liner for the cooler?	_____	_____	_____
Was inert packing material placed in the bottom of the liner?	_____	_____	_____
Were the sample containers placed upright in the lined picnic cooler in such a way that they do not touch and will not touch during shipping?	_____	_____	_____
Were plastic ice packs or ice placed in double plastic bags placed around, among, and on top of the sample bottles?	_____	_____	_____
Was the paperwork going to the laboratory placed inside a sealed plastic bag, which was taped to the inside lid of the cooler?	_____	_____	_____
Was the cooler taped shut with strapping tape?	_____	_____	_____
Was at least two signed custody seals placed on the cooler (one in front, the other on the side)?	_____	_____	_____
10. Was the proper sampling procedure followed as outlined in the Sampling and Analysis Section of the Plan of Operations?	_____	_____	_____
11. Was sampling equipment properly decontaminated between samples?	_____	_____	_____
12. Was a decontamination area located where the cleaning activities would not cross-contaminate clean and/or drying equipment?	_____	_____	_____

Quality Control Field Oversight Checklist
HTRW Sampling Procedures
 Continued

	Yes	No	N/A
13. Was cleaned equipment properly stored?	_____	_____	_____
14. Were the cleaning and decontamination procedures conducted in accordance with the project plans?	_____	_____	_____
15. Were sampling locations properly selected?	_____	_____	_____
16. Were photographs taken of sampling/decon activities?	_____	_____	_____
17. Was sampling equipment constructed of Teflon, polyethylene, glass, or stainless steel?	_____	_____	_____
18. Were samples collected in proper order? (least suspected contamination to most contaminated?)	_____	_____	_____
19. Were clean disposable latex or vinyl gloves worn during sampling and field screening tests?	_____	_____	_____
20. Were gloves changed between sampling events and screening tests?	_____	_____	_____
21. Were equipment rinse blanks collected after field cleaning?	_____	_____	_____
22. Were proper sample containers used for samples?	_____	_____	_____
23. Were duplicate and split samples collected?	_____	_____	_____
24. Were samples properly field preserved?	_____	_____	_____
25. Were field and/or trip blanks utilized?	_____	_____	_____
26. Were field screening tests utilized for nitroaromatics and lead (where appropriate) prior to collection of the excavation pit confirmation samples?	_____	_____	_____
27. Were the procedures for the field test kits, as described in the Plan of Operations followed?	_____	_____	_____
28. Was all information generated during the field screening activities recorded in accordance with the Plan of Operations requirements?	_____	_____	_____

APPENDIX C **Authorized Letter to the On-Site Project Manager, Quality Control Officer and Site-Specific Safety and Health Officer**



TMG Services, Inc

240 Oliver Street, Suite One
St. Albans, West Virginia 25177
Voice : 304-722-6015
Data : 304-722-6017
www.tmgservicesusa.net

April 19, 2010

TO: Helen Owens

SUBJECT: Appointment of On-Site Project Manager
Remedial Action Construction, Remediation of Contaminated Soil and Sediment
Plum Brook Ordinance Works – TNT Area C
Sandusky, Ohio
Contract Number: W91237-10-C-0002

Dear Ms. Owens,

Please be informed, you are here by appointed as TMG's On-Site Project Manager for the above mentioned project.

In this role you are responsible for on-site coordination, direction, and implementation of all field activities performed under this contract. You are granted the authority to stop work at any time should a quality control or safety issue arise. As TMG's On-Site Project Manager, you are responsible for all manners of on-site supervision concerning the tasks of this project and are to ensure all work is done in accordance with the technical specifications and the Plan of Operations (PoO) developed for this project.

Should you have any questions, please do not hesitate to contact me at 304-722-6015.

Regards,

Rodney Bumgardner
Vice President
rbumgardner@tmgservicesusa.com

Acknowledged:

Helen Owens

4/19/2010
Date

Environmental Remediation and Consulting
Waste Management
Construction Management
General Contracting

B(A) - Hub Zone - MBE - WBE
An Equal Opportunity Employer



TMG Services, Inc

240 Oliver Street, Suite One
St. Albans, West Virginia 25177
Voice : 304-722-6015
Data : 304-722-6017
www.tmgservicesusa.net

April 19, 2010

TO: James Russell

SUBJECT: Appointment of Quality Control Officer
Remedial Action Construction, Remediation of Contaminated Soil and Sediment
Plum Brook Ordinance Works – TNT Area C
Sandusky, Ohio
Contract Number: W91237-10-C-0002

Dear Mr. Russell,

Please be informed, you are here by appointed as TMG's Quality Control Officer (QCO) for the above mentioned project.

In this role you are responsible for on-site quality control for all field activities performed under this contract. You are granted the authority to stop work at any time should a quality control issue arise. As TMG's QCO, you are responsible for all manners of quality control concerning the tasks of this project and are to ensure all work is done in accordance with the technical specifications and Quality Control Plan (QCP) prepared for this project.

Should you have any questions, please do not hesitate to contact me at 304-722-6015.

Regards,

Rodney Bumgardner
Vice President
rbumgardner@tmgservicesusa.com

Acknowledged:

James Russell

4-22-10
Date

Environmental Remediation and Consulting
Waste Management
Construction Management
General Contracting

RECEIVED
McTech
APR 26 2010

8(A) - Hub Zone - MBE - WBE
An Equal Opportunity Employer



April 19, 2010

TO: Dan Cashbaugh

SUBJECT: Appointment of On-Site Project Superintendent/Site Safety and Health Officer
Remedial Action Construction, Remediation of Contaminated Soil and Sediment
Plum Brook Ordinance Works – TNT Area C
Sandusky, Ohio
Contract Number: W91237-10-C-0002

Dear Mr. Cashbaugh,

Please be informed, you are here by appointed as TMG's On-Site Project Superintendent and Site Safety and Health Officer (SSHO) for the above mentioned project.

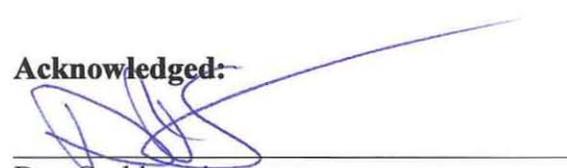
In this role you are responsible for on-site coordination, direction, and implementation of all field activities performed under this contract. You are granted the authority to stop work at any time should a quality control or safety issue arise. As TMG's On-Site Superintendent and SSHO, you are responsible for all manners of on-site supervision and safety concerning the tasks of this project and are to ensure all work is done in accordance with the technical specifications, Accident Prevention Plan (APP), 29 CFR 1910, and EM 385-1-1 dated September 2008.

Should you have any questions, please do not hesitate to contact me at 304-722-6015.

Regards,

Rodney Bumgardner
Vice President
rbumgardner@tmgservicesusa.com

Acknowledged:


Dan Cashbaugh

4-26-2010
Date

Environmental Remediation and Consulting
Waste Management
Construction Management
General Contracting

RECEIVED
McTech
APR 26 2010

8(A) - Hub Zone - MBE - WBE

An Equal Opportunity Employer

APPENDIX D Resumes of Key Personnel

Senior Project Manager

Rodney Bumgardner



Rodney R. Bumgardner

Vice President

Voice: (304) 722-6015

Data: (304) 722-6017

Cellular: (304) 545-4481

Email: rbumgardner@tmgservicesusa.com

Career Summary

After obtaining a BS degree in Chemical Engineering, Mr. Bumgardner began his career with an emphasis on environmental compliance management. Over the past 21 years he has provided guidance, consultation, and assistance on virtually all aspects of regulatory compliance to private parties, developers, contractors, waste management firms, local, state, and federal governments, financial institutions, environmental firms, oil companies, community based organizations, industrial sites, educational systems, and school age children. He has done this throughout the country including 20 States and 7 EPA Regions. Issues addressed have related to Storage Tank Management, Asbestos, Lead, NEPA, Air Emissions, Indoor Air Quality, Radon, Storm Water, Drinking Water, Waste Water, Hydraulic Analysis, Hydrology, Ground Water Remediation, Soil Remediation, Land Disturbance Reclamation, Landfill Citing and Operation, Multi Media Auditing, Environmental Management Systems, Training, Energy Conservation, Water Conservation, Landscaping, Emergency and Spill Response, Integrated Pest Management, and various safety related issues including Exposure Assessment, Training, Record Keeping, PPE Selection and Use, Program Evaluations, and Regulatory Liaison.

Education

Wahama High School, Mason, West Virginia
1981, Graduate

West Virginia Institute of Technology, Montgomery, West Virginia
1986, B.S., Chemical Engineering

Certifications

Registration of Professional Engineer, P.E. 1996

Registration of Certified Environmental Auditor, C.E.A. 2002

Registration of Certified Hazardous Materials Manager, C.H.M.M. 2002



Training

University of Wisconsin	1989, Landfill Design
West Virginia University	1989, 40 Hr Hazardous Waste Operations and Emergency Response (HAZWOPER)
	1990, AHERA Asbestos inspector/management planner
	1996, Forest Fire Training/Tactics
	1997, Managing Tactical Operations
	1997, Emergency Planner
	1998, Incident Command Officer
American Red Cross	1993, Medical First Responder (first aid/CPR/emergency response)
	2009, Medical First Responder (first aid/CPR/emergency response)
Colorado State University	2002, Hazardous Materials Manager
National Fire Academy	2003, Incident Command Systems
West Virginia Training Center	1989, Disinfection Control
	1989, Advanced Process Control
	1989, Time Management
Western Regional Training Center	1997, Radon Measurement and Control
Environmental Management	1995, Title V Air Permits
	1995, ISO 9000 & 14000
US Postal Service	1996, Environmental Management Systems
	1997, Accident Prevention
	1997, 24 Hr. Hazardous Materials Response
	1998, Government Contracting Officer Representatives
	1998, Managing Group Dynamics
	2002, Facilitative Instructor Workshop
	2003, Water and Waste Water Compliance Training Course
US Fish and Wildlife Service	2000, Conservation Landscaping
ABS Consulting	2003, Clean Water Compliance
EPA Region 3	2001-2005, Annual Conference and Training
ACHMM	2003-2006, Annual Conference and Training
WV Technology & Design	1999-2006, Energy 2006 Conference and Training
Federal Emergency Management Administration	2005, Professional Development Series from Emergency Management Institute, 65 hr
	2006, 11 Emergency management and response courses, 98 hr



Professional Experience

TMG Services, Inc., Saint Albans, WV

Vice President

March 2007 – Present

Duties include marketing, client relations, program management, project management, office manager, and all other duties necessary to build a sustainable full service environmental remediation and consulting company focusing on the clean-up and restoration of natural resources including construction, oversight, and monitoring. Consulting services include environmental assessments, sampling and analysis, debris and waste management, multimedia auditing, regulatory compliance assistance, 3rd party monitoring, NEP A, training, emergency management planning, and Environmental Programs Management

US Postal Service, Charleston, WV

Area Environmental Specialist

September 2001 - March 2007

Special Assignments

January 2006 - Present, Eastern Area Energy Coordinator, Charleston, WV

October 2001 - January 2002, USPS Headquarters Environmental Specialist, Washington D.C.

With Postal restructuring duties continued to increase to include responding to anthrax incidents and serve at Postal HQ during response actions. Also had responsibility to continue national training program development and water compliance programs. Coverage area has continually been adjusted with additional services to EPA Region 2 and an additional 4 states. Primary duties include providing environmental consulting to the US Postal Service to ensure compliance with all aspects of environmental compliance including; storage tank management, hazardous waste, solid waste, toxic materials, asbestos, lead, storm water, waste water, potable water, NEPA, training, recycling, contractor selection and oversight, project and program economics, and continued guidance to upper management Duties as Energy Coordinator include eight states and involve energy savings projects, green power purchasing, utility invoice review and verification, remote metering, and compliance with Energy Policy Act.

US Postal Service, Charleston, WV

District Environmental Compliance Coordinator

June 1996 - September 2001

Special Assignments

May 1998 - August 1998, Midwest Area Environmental Coordinator, St. Louis, MO

March 2001 - September 2001, Post Master, Winfield, WV



With the appointment to a full time position Mr. Bumgardner's duties also increased. Coverage areas continued to expand and included, with the work in the Midwest, EPA Regions 3, 4, 5, 7, and 8 and 14 States. National Program work included development of the national strategy, environmental management systems, lead paint, asbestos, energy, radon, storage tank management, RCRA compliance, grounds management, and training. These duties also included cost estimation, project economics, personnel supervision, management briefings, regulatory liaison, and contractor selection and oversight. Duties as Post Master included the total operation of a mid-level Post Office with 11 employees serving a community of 12,000 residences.

TAD Resources/US Postal Service, Charleston, WV
Environmental Coordinator
October 1994 - June 1996

Duties were to provide environmental consulting services to the US Postal Service to ensure compliance with environmental and safety regulations through training, auditing, regulatory relations, and culture change. Coverage area included services to seven states and Washington DC. Specifically addressed issue concerning bulk storage, hazardous waste generation, and management, and disposal, lead, asbestos, recycling, water supply, waste water treatment, and radon.

Bumgardner Environmental Services, St. Albans, WV
Owner/Proprietor
November/1992 - June/1997

Duties included the conception and operation of a sole proprietorship to assist developers in turning abandoned industrial sites into productive property, oil companies in complying with various tank and waste regulations, and individuals in dealing with water and wastewater regulations. Specific duties were to market the business, bid projects, develop site specific plans, oversee subcontractor, client relations, billing and collections, and compliance with business laws.

Earth Science Technologies, Kenova, WV
Team Leader
April 1991 - November 1992

Duties as team leader included the oversight and management of all field and office personnel including drafters, drill crews, laborers, geologist, other professional staff, subcontractors, laboratory services, and client relations pertaining to underground tank management and removal, soil remediation, groundwater remediation, asbestos and lead surveys, water and waste water permitting, and wetland delineation.



H.C. Nutting, Charleston, WV

Project Manager

November 1989 - April 1991

Duties as project manager included a variety of environmental projects including underground tank management and removals, soil and groundwater remediation, air permitting, wetland delineations, landfill design, asbestos surveys, and spill prevention control land countermeasure plan development. Duties also included as geotechnical engineer for slope stability analysis, foundation design, dam design, and landfill soils. Supervision included oversight of field and office personnel including drill crews, drafters, lab technicians, laborers, geologists, subcontractors, and laboratory services.

WV Department of Natural Resources, Charleston, WV

Project Engineer

February 1988 - November 1989

Duties as project engineer included the review and approval of permit applications for NPDES permitting associated with municipal waste water treatment operation and landfill citing, waste acceptance, and operational requirements. Also, provided assistance to the WVDNR Open Dump Program and WVDNR field inspectors during compliance audits and waste suitability.

Esmer & Associates, Boomer, WV

Project Engineer/Laboratory Manager

August 1986 - February 1988

Duties as a project engineer included abandoned mine lands reclamation projects with responsibility for project work plan, design, and oversight of field operations. As laboratory manager responsible for total operation of wet chemistry lab, including sampling protocols, sample collection, analysis, client relations, State reporting.

Organizations (non work related, current and previous)

Board of Directors – Secret Santa Foundation

Board of Directors – Lakewood Volunteer Fire Department

Fire Line Officer – Lakewood Volunteer Fire Department

Delegate – WV State Fireman’s Association

President – United Methodist Men’s Fellowship

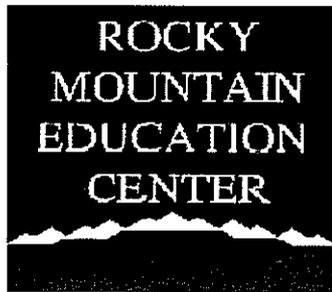
President – Sigma Pi Alumni Association

Board of Directors – WV/American Recycled Day Committee

Assistant Scout Master – Boy Scouts of America

Coach – Saint Albans Youth Basketball Association

Coach – Saint Albans Youth Soccer Association



Certificate of Course Completion

Rodney Bumgardner

Student's Name

OSHA - Course 500 Trainer Course in Occupational Safety & Health Standards for Construction

Course Title

08/06/2007 10:43 CST

Course Completion Date
MM / DD / YY


Student's Signature

30

of hours approved

991145

Certificate Number



Instructor Signature

Red Rocks Community College

13300 West 6th Avenue,

Campus Box 41,

Lakewood, CO, 80228-1255

Tel: 800-933-8394

Fax: 303-980-8339

OSHA Training Institute Education Center
Region VIII Rocky Mountain Education Center

Fraudulent course completion is subject to prosecution and reporting to employers. Student should retain certificates and refer to course instructions to receive official certification.



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

RODNEY R. BUMGARDNER

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

is awarded continuing education credits as indicated for 16 hours of organized instruction



Certified Provider #199309
1.3 CEUs



Registered Provider #1009
39 LUs



Registered Provider
13 PDHs

Given at Huntington, WV By
Location

Huntington District
Instructional District

03/11/08
Date

Sgt. J. [Signature]
Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Margaret Wilson
Chief, Engineering/Construction Division



Learn and Live

Heartsaver® First Aid

Rodney Bumgardner

This card certifies that the above individual has successfully completed the objectives and skills evaluations in accordance with the curriculum of the AHA for Heartsaver First Aid Program.

Modules Completed: A B C D E

November, 2009

Issue Date

November, 2011

Recommended Renewal Date

Training Center

West Virginia Region

TC Address Contact Info

K.C.E.A.A.

Course Location

K.C.E.A.A.

Instructor

Bridget Perry

Holder's Signature

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PEEL HERE

Fill in the circles of the modules NOT completed. This card contains unique security features to protect against forgery.



CERTIFICATE OF COURSE COMPLETION

Rodney Bumgardner

Student's Name

Hazwoper 8 Hour Annual Refresher Course

Course Title

05/06/2010 14:50 CST

Course Completion Date
MM / DD / YYYY

1546136

Certificate Number



Student's Signature

8

Approved # of Hours

I hereby attest and certify that I personally took the above named safety lesson in accordance to Osha Campus guidelines. I further state that I have paid for the course and that I did not use another's work (Plagiarism). Students should retain certificates and refer to course instructions to receive official certification where necessary.

360training
Corporate Headquarters
13801 N. Mo-Pac, Suite 100
Austin, Texas 78727
tel: 888-360-8764
fax: 512-727-7683
email: support@360training.com

Health and Safety Manager

Matthew Ford



Matthew Ford

Project Manager

Voice: (304) 722-6015

Data: (304) 722-6017

Cellular: (304) 389-5112

Email: mford@tmgservicesusa.com

Education

Marshall University Graduate College, M.S. Environmental Science, 2006

West Virginia University, B.S. Biology, 2004

Greenbrier West High School, Graduate, 2000

Training and Certifications

40 Hour HAZWOPER (with annual refreshers)

OSHA 30-Hour Construction Industry Outreach Training Program

Adult First Aid and CPR

US Army Corps of Engineers, CQM Training

OSHA Lead Awareness

OSHA Asbestos Awareness

OSHA Scaffolding Competent Person

EPA Method 9 Visible Emissions

Hazardous Waste Management and Shipping for Environmental Professionals

Dow Chemical/Bayer CropScience Site-Specific Safety training (with annual refreshers)

WVDEP Stream Monitoring

US Small Business Administration, Level I Cost and Pricing

WEIS Builders - Stormwater Pollution Prevention Plan Writing



Professional Experience

TMG Services, Inc., Saint Albans, West Virginia

Project Manager

April 2008-Present

As a project manager for TMG Services, I perform a wide variety of technical services for federal, state, and private clients including the United States Department of the Army at Fort AP Hill and Fort Pickett in Virginia, the United States Customs and Border Protection Agency at Harpers Ferry, WV, the United States Environmental Protection Agency, Region III in Philadelphia, PA, the West Virginia Department of Environmental Protection, and the United States Army Corps of Engineers, Huntington District.

- Construction and Environmental Project Estimating, Bidding, and Management
- Site planning using AutoCad LT.
- Project sequencing and planning using Microsoft Project Manager and Primavera project management software.
- Environmental permitting and compliance support
- Demilitarization environmental protection monitoring
- Groundwater monitoring and remediation
- Leaking underground storage tank consulting
- Groundwater protection and stormwater management planning and implementation
- Including development, installation, and inspecting of erosion and sediment controls.
- Soil and surface water sampling, monitoring, and remediation
- Air emissions monitoring
- Safety and health planning and on-site supervision
- Quality control planning and on-site supervision
- Website development (www.tmgservicesusa.net)
- FTP site development and management
- Various other technical duties

Mountain State University, College of Arts and Sciences, Beckley, West Virginia

Adjunct Professor

August 2007 - Present

I began teaching traditional, in-classroom biology and environmental science courses at Mountain State University's Beckley Campus as an adjunct professor in the College of Arts and Sciences. Following two successful semesters of traditional instruction, I was asked to work with



Distance Education to develop independent study environmental and safety courses for their associate level degree program in environmental studies. I currently manage and instruct several independent study courses at Mountain State University. The courses that I have instructed include:

- BIO 110 – Introduction to Environmental Science
- BIO 201 – Introduction to Ecology
- ENVR 207 – Chemistry of Hazardous Materials
- ENVR 210 – OSHA Regulations
- ENVR 211 – Map Reading
- ENVR 245 – Respiratory/Personal Protection
- ENVR 301 – Environmental Occupation Health and Safety I
- ENVR 302 – Environmental Occupation Health and Safety II
- ENVR 317 – Environmental Engineering I
- ENVR 318 – Environmental Engineering II
- ENVR 403 – Hazardous Materials Management
- ENVR 415 – Advanced Industrial Hygiene

TEST, Inc., Environmental Scientist/Project Manager
Poca, West Virginia
July 2005-April 2008

Duties included:

- Air Source Emission Sampling, Reporting, and Consulting.
- Title V Operating Permit Compliance Assistance.
- Sample Analysis and Laboratory Management.
- Soil and Water sampling and Remediation Consulting.
- Spill Prevention, Control, and Countermeasure Plans.
- EPA Method 9 and 22 Visible Emission Observations.
- NPDES Permit Applications.
- Hazardous Waste Disposal.
- Environmental Litigation Support
- Groundwater and Storm Water Sampling and Reporting.
- Discharge Monitoring Reports
- Various Federal and State regulation Compliance Assistance
- Various other project management duties including daily operations,
- invoicing, and marketing



**TEST, Inc./Wastetron, Inc., Environmental Technician/Technical Writer
Poca, West Virginia
July 2005-January 2006**

- United States Army Corps of Engineers environmental field work and reporting
- Air Source emission sampling and reporting

**WV Dept. of Agriculture, Plant Industries, Field Technician
Charleston, West Virginia
May 2001-August 2002**

- Set Gypsy Moth traps throughout southeastern West Virginia using GPS

**West Virginia University-Health Sciences Center, Laboratory Assistant
Morgantown, West Virginia
August 2000-May 2003**

- Preparation of solutions involved in Gel Electrophoresis and Western Blot Analysis
- Preparation and manufacture of polyacrylimide gels
- Preparation and analysis of samples
- Maintenance of scanning electron microscope and data entry

Affiliations

Air and Waste Management Association (AWMA)
Member
2006-Present

Society of American Military Engineers, Huntington Post
Member
2008-Present

Meadow River Watershed Association, Inc., Rupert, West Virginia
Founder/President
2008-Present

Western Greenbrier Youth Park, Inc., Rainelle, West Virginia
President
2009-Present



TMG Services, Inc

*240 Oliver Street, Suite One
St. Albans, West Virginia 25177*

Voice : 304-722-6015

Data : 304-722-6017

www.tmgservicesusa.net

Concerned Citizens of Quinwood and Vicinities, Inc., Quinwood, West Virginia

President

2010-Present

Lemelson- MIT, High School Invention Grant, Greenbrier West High School InvenTeam

Environmental and Safety Mentor

2009-Present

This is to certify that

Matthew Ford

has met the attendance requirements and successfully completed the

40-Hour HAZWOPER

(Hazardous Waste Operations and Emergency Response)

(Inclusive of Levels A, B, C, & D)

class in accordance with OSHA 29 CFR 1910.120



R T C
Regulatory Training Center

157 2nd Avenue, South Charleston, WV 25303
(304) 348-1346

10/20/2005

Date

Gary Vance

Instructor



CERTIFICATE OF COURSE COMPLETION

Matthew Ford

Student's Name

Hazwoper 8 Hour Annual Refresher Course

Course Title

06/29/2010 23:55 CST

Course Completion Date
MM / DD / YYYY

1610580

Certificate Number

Student's Signature

8

Approved # of Hours

I hereby attest and certify that I personally took the above named safety lesson in accordance to [Osha Campus](#) guidelines. I further state that I have paid for the course and that I did not use another's work (Plagiarism). Students should retain certificates and refer to course instructions to receive official certification where necessary.

360training
Corporate Headquarters
13801 N. Mo-Pac, Suite 100
Austin, Texas 78727
tel: 888-360-8764
fax: 512-727-7683
email: support@360training.com



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

Matthew Ford

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

*is awarded continuing education credits as
indicated for 16 hours of organized instruction*



Certified Provider #199309
1.3 CEUs

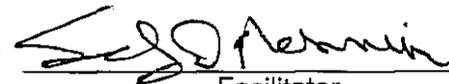


Registered Provider #1009
39 LU's

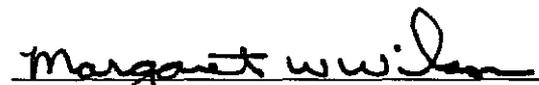


Registered Provider
13 PDHs

Given at Huntington, WV By Huntington District 03/10/09
Location Instructional District Date


Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE


for Chief, Engineering/Construction Division

OSHA

600334385

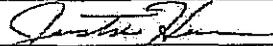


U.S. Department of Labor
Occupational Safety and Health Administration

MATTHEW FORD

has successfully completed a 30-hour Occupational Safety and Health
Training Course in

Construction Safety & Health


(Trainer)

07/17/2008
(Date)

OSHA recommends Outreach Training courses as an orientation to occupational safety and health for workers. Participation is voluntary. Workers must receive additional training on specific hazards of their job. This course completion card does not expire.

For further information see our web site at www.osha.gov/outreach.html



Learn and Live

Heartsaver® First Aid

Matthew Ford

This card certifies that the above individual has successfully completed the objectives and skills evaluations in accordance with the curriculum of the AHA for Heartsaver First Aid Program.

Modules Completed: **A** **B** **C** **D** **E**

November, 2009

Issue Date

November, 2011

Recommended Renewal Date

Training Center

West Virginia Region

TC Address Contact Info

K.C.E.A.A.

Course Location

K.C.E.A.A.

Instructor

Bridget Perry

Holder's Signature

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PEEL
HERE

Fill in the circles of the modules NOT completed. This card contains unique security features to protect against forgery.

On-Site Project Manager

Helen Owens



Helen Owens

Project Manager

Voice: (304) 722-6015

Data: (304) 722-6017

Cellular: (419) 504-8008

Email: howens@tmgservicesusa.com

Education

A.A.S., Environmental Quality Assurance, 1977

B.S., Business Management, June 2004

Training and Certifications

Class I Wastewater Operator, Ohio

Class I Laboratory Analyst, Ohio

Certified – 40 Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

Current HAZWOPER Refresher

Professional Experience

With over 33 years experience as an environmental consultant and technician, Ms. Owens has diverse experience in air and water pollution evaluations including protocol development, management of field activities, data collection, industrial and municipal wastewater treatment, process evaluations, and compliance consulting.

Ms. Owens is currently providing technical support to the US Army Corps of Engineers (USACE)-Huntington District on the Restoration Advisory Board for the Plum Brook Ordnance Works, Sandusky, Ohio. Her responsibilities include public outreach activities, coordination of public meetings, newsletters, development of the Community Relations Plan, and other tasks as directed by the USACE Project Manager. Also for the Huntington District, Ms. Owens provides technical support in the collection of seasonal groundwater level fluctuations to support groundwater modeling development, and collection and interpretation of monitoring well water levels, coordination and implementation of an off-site well survey to determine migration patterns of contaminants. Ms. Owens provided contractor support in USACE's composting project to reduce TNT and DNT contamination levels. In addition to the Huntington District, Ms. Owens also provides contractor support to USACE-Nashville District on the Remedial



Investigation / Feasibility Study of the former Plum Brook Ordnance Works (PBOW), located in Sandusky, Ohio. PBOW manufactured TNT and DNT in WWII and investigations have identified 16 areas of concern with regard to soil and groundwater contamination.

Ms. Owens currently provides program support to the City of Marysville, Ohio where she is responsible for the implementation of the Industrial Pretreatment Program (IPP). Ms. Owens provides similar support services to the City of Mason, Ohio. Her services include development of an industrial user survey; permit writing, and coordination of industrial compliance activities, enforcement and development of Local Limit parameters. Ms. Owens has served as the Contract Pretreatment Coordinator for the City of Middletown, Ohio.

Ms. Owens provided technical guidance to industrial operations in troubleshooting specific wastewater treatment problems, including the development and implementation of an industrial wastewater operator training seminar, evaluation of industrial wastewater treatment operations and making recommendations to achieve and maintain regulatory compliance. She has also been responsible for the day-to-day operation of sanitary wastewater treatment plants as a contractor to the USACE, and small municipal and industrial facilities.

Ms. Owens' experience includes numerous projects, such as groundwater monitoring well and soil sampling, storm water monitoring, Phase I environmental assessments, preparation of air and wastewater permit applications, development of Spill Prevention, Control and Countermeasure (SPCC) Plans under the direction and review of a Professional Engineer, air emissions monitoring programs and environmental audits of industrial facilities.

In addition to working full-time as a consultant, in 2005 Ms. Owens opened her own business to support USACE in maintaining electronic documents in a database and on the Huntington Districts' Formerly Used Defense Site (FUDS) website. This activity is on-going and is conducted on a part-time schedule.

Certificate of Completion

(T)his certificate was presented to

HELEN J. OWENS

for successful completion of the

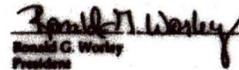
40-HOUR HEALTH & SAFETY TRAINING COURSE

In accordance with the

**OSHA Hazardous Waste and Emergency Response Operations Standard
(29 CFR 1910.120)**

JANUARY 14, 1992
Date

400229162891720
Certificate number


Ronald G. Worley
President

Unger & Associates Educational Services, Inc.

THE NATIONAL ENVIRONMENTAL TRAINERS

Helen Owens

has satisfactorily passed an exam and completed an 8-hour annual refresher training course entitled
Hazardous Waste Operations and Emergency Response
meeting the requirements identified in Title 29 CFR 1910.120.

This course has been awarded 1.34 Industrial Hygiene CM Points by the American Board of Industrial Hygiene-Approval Number 13334. This course is also eligible for .66 Continuance of Certification (COC) points from the Board of Certified Safety Professionals



June 27, 2010

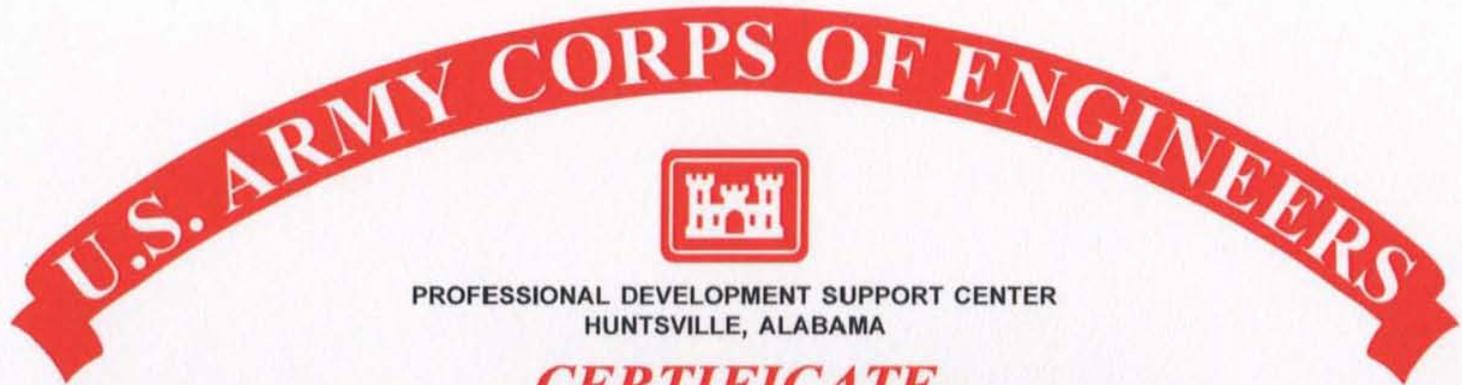
Course Number 1001, Awarded 8 PDH's
Florida Board of Professional Engineers
CEU Provider Number 0004284

www.nationalenvironmentaltrainers.com

Signature of Instructor

A handwritten signature in black ink, appearing to read 'C. Bednarz', written over a light gray grid background.

Clay A. Bednarz, MS, RPIH



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Helen Owens

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at Dayton, OH By CELRL-CD April 22-23, 2008
Location Instructional District Date

Wesley Barby
Facilitator

Sponsored by: Associated General Contractors

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Gary G. Anderson
Chief, USACE Professional Development Support Center

On-Site Project Superintendent/Site Safety and Health Officer

Dan Cashbaugh



TMG Services, Inc

240 Oliver Street, Suite One
St. Albans, West Virginia 25177

Voice : 304-722-6015

Data : 304-722-6017

www.tmgservicesusa.net

Dan Cashbaugh **Project Superintendent**

Voice: (304) 722-6015

Data: (304) 722-6017

Cellular: (216) 404-8109

Email: dcashbaugh@tmgservicesusa.com

Career Summary

Project Superintendent with over 10 years of experience in the construction and environmental trades. Experienced in the coordination and oversight of daily construction activities to ensure compliance with specifications, safety regulations, and schedules.

Training

OSHA – 30 Hour Construction

OSHA – 10 Hour Construction

40 Hour Hazardous Waste Operations and Emergency Response (with annual 8 hour refresher training)

Professional Experience

TMG Services, Inc., Saint Albans, WV

Project Superintendent

2010 – Present

McTech Corp, Cleveland, OH

Project Superintendent

2003-2009

CERTIFICATE OF COMPLETION

Daniel Cashbaugh

has successfully completed the 30 Hour OSHA Construction Safety Course in accordance with 29CFR 1926

C&K Industrial Services, Inc.

September 4, 2007 Date

John P. Yakovich Safety Instructor

CERTIFICATE OF COMPLETION

Daniel Cashbaugh

Has successfully completed the 40 Hour HAZWOPER Course in accordance with 29 CFR 1910.120

C&K Industrial Services, Inc.

June 22, 2006 Date

John P. Yakovich Safety Instructor

OSHA

600141826



U.S. Department of Labor Occupational Safety and Health Administration

Daniel Cashbaugh

has successfully completed a 30-hour Occupational Safety and Health Training Course in

Construction Safety & Health

Trainer signature

12/5/2006

(Trainer)

(Date)

Successful Completion Card

Basic TRAINING PROGRAMS

DAN CASHBAUGH Name

1-26-10 Issued

1-26-12 Expires

This certifies that the individual named above has successfully demonstrated the knowledge and skill objectives for:

- BasicPlus CPR, AED, and First Aid for Adults
Basic CPR and First Aid for Adults

Card not valid if more than one box is checked.



Instructor

LORI SAXTON

Registry Number

40397

Training Center Phone No.

Training Center ID

130902

MEDIC FIRST AID® BasicPlus follows ILCOR, AHA, and ASTM recommendations and guidelines for CPR, first aid, and emergency care.

Continued proficiency as a MEDIC FIRST AID Provider requires frequent retraining. This card expires as documented on the front of the card or within 24 months of issue.

TRAINING ACKNOWLEDGMENT

TYPE OF TRAINING:

New Hire

Hazwhoper

Refresher

Other Sub-Contractor Training and/or Basic Contractor

Total Hours Trained 8

I Don Cassano acknowledge that I have received instruction and understand the following subjects (initial all that apply):

C&K Safety Training Programs:

- OPC Hazard Communication
- OPC Lockout/Tagout
- OPC Confined Space
- OPC Fire Extinguisher/Emergency Action
- OPC Respiratory Protection
- NIA Forklift
- OPC Confined Space Communication
- NIA Asbestos Awareness

- OPC Personal Protective Equipment
- NIA Drug Free Workplace
- OPC General Company Safety Policies*
- NIA Vac Truck Safety & Operations
- NIA Waterblast Safety & Operations
- NIA Manlift
- NIA Lead Abatement
- NIA Inorganic Arsenic Awareness

Site Specific Trainings:

- NIA Alcoa- Contractor/Stand-down
- NIA Charter Steel

- NIA Reliant Energy
- Other _____

OPC Other Fall Protection

OPC Other Fits-Testing

Other Monitoring Equipment

Other _____

* I have received a copy of C&K Abridged Safety Policy Manual.

[Signature] 4-7-2010
Employee Signature Date

[Signature] 4-7-2010
Instructor Signature Date

Concentra Medical Centers (Ohio)

4660 Hinckley Industrial Pkwy CLEVELAND, OH 44109
Phone: (216) 749-2730 Fax: (216) 749-2735

PLHCP¹ WRITTEN STATEMENT for RESPIRATORS (EMPLOYEE)

Service Date: 04/06/2010

Employee Name: Cashbaugh, Daniel P.

Employee SSN: XXX-XX-1919

Address: 1551 Price Rd.

YOUNGSTOWN OH 44509

Employer: TMG Services Inc

You were evaluated in this office of your medical status related to your physical capability to wear a respirator. (Check one that applies)

- There were no abnormal findings that would hamper your ability to perform your job duties while wearing a respirator.
- The abnormal findings listed below were not related to wearing a respirator but should be reported to your personal physician for further evaluation.

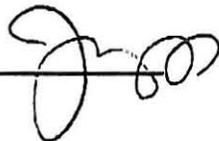
Based upon the results of this evaluation it is my opinion that you: (Check ALL that apply)

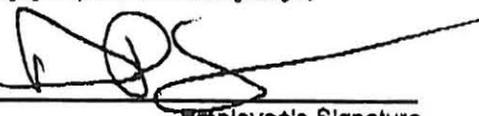
- ARE qualified to wear a respirator.
- Have the following restrictions concerning respirator usage: NO SCBA
- ARE NOT qualified to wear a respirator.
- Require further testing by your private physician who must submit a written report of his/her findings to Concentra Medical Centers (Ohio) so that a final decision on your ability to wear a respirator can be made.
- Must wear Special prescription eye-wear needed to accommodate respirator.
- Must use an Eye glass conversion kit.
- May need to shave Facial hair to assure tight seal on certain face masks.
- Need to stop smoking.

(Check ALL that apply)

- The above individual HAS been examined for respirator fitness in accordance with 29 CFR 1910.134. This limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- The above individual HAS NOT been examined by me for respirator fitness. The employee's medical evaluation consisted of a review of OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2. In accordance with 29 CFR 1910.134, this limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- In accordance with specific OSHA requirements, I have informed the above named individual of the results of this evaluation and of any medical conditions resulting from exposures that may require further explanation or treatment. Where applicable, the above named individual has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos, lead and/or other chemical exposure(s).

Respirators must be properly selected based on the containment and concentration levels to which the worker will be exposed. Failure to follow the use and fitting instruction and warnings for proper use contained on the respirator packaging and/or failure to wear the respirator during all times of exposure can reduce the respirator's effectiveness and result in sickness or death. Wearer must be trained in the proper care of any respirator. Refer to product literature and packaging for specific information regarding fit, use and/or limitations.

PLHCP Signature 


Employee's Signature
4/6/2011
(Expiration Date)

PLHCP Name (printed)

¹Physician or other Licensed Healthcare Professional

To be maintained in the employee's file with a copy to the employee

Quality Control Officer

James Russell



James Russell

Project Superintendent

Voice: (304) 722-6015

Data: (304) 722-6017

Cellular: (216) 857-1112

Email: jrussell@tmgservicesusa.com

Career Summary

Project Superintendent with over 10 years of experience in the construction and environmental trades. Experienced in the coordination and oversight of daily construction activities to ensure compliance with specifications, regulations, and schedules.

Training

OSHA – 30 Hour Construction

OSHA – 10 Hour Construction

USACE – Construction Quality Management for Contractors

40 Hour Hazardous Waste Operations and Emergency Response (with annual 8 hour refresher training)

Professional Experience

TMG Services, Inc., Saint Albans, WV

Project Superintendent

2009 – Present

McTech Corp, Cleveland, OH

Project Superintendent

2002-2009

Choice Construction Company, Inc., Cleveland, OH

Laborer

1999-2002

GeoTech Construction, Cleveland, OH

Laborer

2001-2002

Calabria Concrete, Cleveland, OH

Laborer

1998-2001

C&K INDUSTRIAL SERVICES, INC.

Certificate of Completion

This certifies that

James B. Russell

Has successfully completed the
40 Hour HAZWOPER Course
in accordance with 29 CFR 1910.120



Chuck Hawes

May 19, 2006

Date of Completion

TRAINING ACKNOWLEDGMENT

TYPE OF TRAINING:

New Hire

Hazwhoper

Refresher

Other Sub-Contractor Training and/or Basic Contractor

Total Hours Trained 8

I James B. Russell acknowledge that I have received instruction and understand the following subjects (initial all that apply):

C&K Safety Training Programs:

ABN Hazard Communication
ABN Lockout/Tagout
ABN Confined Space
ABN Fire Extinguisher/Emergency Action
ABN Respiratory Protection
NIA Forklift
ABN Confined Space Communication
NIA Asbestos Awareness

ABN Personal Protective Equipment
NIA Drug Free Workplace
ABN General Company Safety Policies*
NIA Vac Truck Safety & Operations
NIA Waterblast Safety & Operations
NIA Manlift
NIA Lead Abatement
NIA Inorganic Arsenic Awareness

Site Specific Trainings:

NIA Alcoa- Contractor/Stand-down
NIA Charter Steel

NIA Reliant Energy
Other _____

ABN X Other Fall Protection

ABN X Other Fits-Testing

X Other Monitoring Equipment

Other _____

* I have received a copy of C&K Abridged Safety Policy Manual.

James B. Russell 4-7-10
Employee Signature Date

John P. Gabriel 4-7-2010
Instructor Signature Date

Concentra Medical Centers (Ohio)

4660 Hinckley Industrial Pkwy CLEVELAND, OH 44109
Phone: (216) 748-2730 Fax: (216) 748-2735

PLHCP¹ WRITTEN STATEMENT for RESPIRATORS (EMPLOYEE)

Service Date: 04/06/2010

Employee Name: Russell, James B.

Employee SSN: XXX-XX-6578

Address: 2901 Hampton

SHAKER HEIGHTS OH 44120

Employer: TMG Services Inc

You were evaluated in this office of your medical status related to your physical capability to wear a respirator. (Check one that applies)

- There were no abnormal findings that would hamper your ability to perform your job duties while wearing a respirator.
- The abnormal findings listed below were not related to wearing a respirator but should be reported to your personal physician for further evaluation.

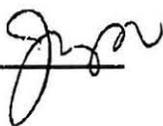
Based upon the results of this evaluation it is my opinion that you: (Check ALL that apply)

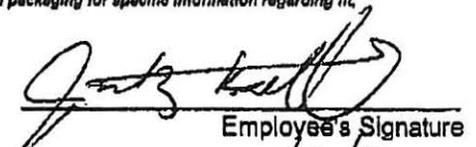
- ARE qualified to wear a respirator.
- Have the following restrictions concerning respirator usage: _____
- ARE NOT qualified to wear a respirator.
- Require further testing by your private physician who must submit a written report of his/her findings to Concentra Medical Centers (Ohio) so that a final decision on your ability to wear a respirator can be made.
- Must wear Special prescription eye-wear needed to accommodate respirator.
- Must use an Eye glass conversion kit.
- May need to shave Facial hair to assure tight seal on certain face masks.
- Need to stop smoking.

(Check ALL that apply)

- The above individual HAS been examined for respirator fitness in accordance with 29 CFR 1910.134. This limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- The above individual HAS NOT been examined by me for respirator fitness. The employee's medical evaluation consisted of a review of OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2. In accordance with 29 CFR 1910.134, this limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- In accordance with specific OSHA requirements, I have informed the above named individual of the results of this evaluation and of any medical conditions resulting from exposures that may require further explanation or treatment. Where applicable, the above named individual has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos, lead and/or other chemical exposure(s).

Respirators must be properly selected based on the containment and concentration levels to which the worker will be exposed. Failure to follow the use and fitting instruction and warnings for proper use contained on the respirator packaging and/or failure to wear the respirator during all times of exposure can reduce the respirator's effectiveness and result in sickness or death. Wearer must be trained in the proper care of any respirator. Refer to product literature and packaging for specific information regarding fit, use and/or limitations.

PLHCP Signature 

Employee's Signature 
4/6/2010
Expiration Date

PLHCP Name (printed)

¹Physician or other Licensed Healthcare Professional

To be maintained in the employee's file with a copy to the employee



Certificate of Course Completion

James Russell

Student's Name

OSHA - 30 Hour Construction Industry Outreach Training Program

Course Title

09/03/2009 15:10 CST

Course Completion Date

Student's Signature

30

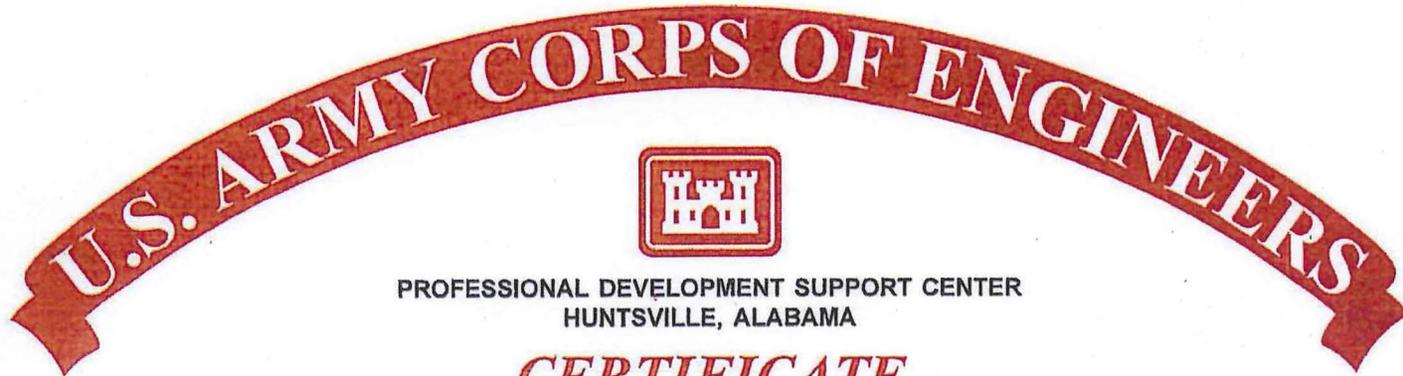
of hours approved

1321172

Certificate Number

I hereby attest that I have completed the above named safety course
in accordance with the ethical guidelines defined by, **Osha Pro's, Inc.**
I acknowledge that I consumed all information and took all Pertinent
quizzes and/or final tests.

Osha Pro's, Inc.
4101 West Green Oaks Blvd., Suite # 305-267
Arlington, TX, 76016
Tel: 866-442-6742



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

James Russell

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at Dayton, OH By CELRL-CD September 23, 2009
Location Instructional District Date

Barbara L. Smith
Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

*Sponsored by: Associated General Contractors
West Central Ohio Division*

Gary J. Anderson
Chief, USACE Professional Development Support Center



American
Red Cross



This recognizes that
James Russell
has completed the requirements for

CPR/AED - Adult

conducted by
Greater Cleveland Chapter

Date Completed 4/22/2010

The American Red Cross recognizes this certificate
as valid for 1 year(s) from completion date.

American
Red Cross



This recognizes that
James Russell
has completed the requirements for

Standard First Aid

conducted by
Greater Cleveland Chapter

Date Completed 4/22/2010

The American Red Cross recognizes this certificate
as valid for 3 year(s) from completion date.

www.RedCross.org

Instructor's Signature

Chapter

Greater Cleveland Chapter

Holder's Signature

Stock No. 653998 (Rev. 5/08)

www.RedCross.org

Instructor's Signature

Chapter

Greater Cleveland Chapter

Holder's Signature

Stock No. 653998 (Rev. 5/08)

TMG Services, Inc. Field Personnel

Delmar Hartness

CERTIFICATE OF TRAINING

Ohio Laborers' Training and Upgrading Trust Fund

25721 Coshocton Rd., Howard, Ohio 43028

(740) 599-7915



Delmar S Hartness

This is to certify that _____ has successfully completed

SAFETY TRAINING PASSPORT

A 16-hour OSHA Awareness Program which includes awareness training in the following topics:

- Personal Protective Equipment
- Equipment De-Energizing/Lockout
- Rigging and Material Handling
- Power Operated Tools
- Confined Space Hazards
- General Safety
- Asbestos/Lead
- Electrical Hazards
- Traffic Control
- Manlifts
- Fire Prevention
- Mobile Cranes
- Welding/Cutting
- Excavations
- Concrete Masonry
- Housekeeping

And Comprehensive Training In:

- Hazard Communication
- Fall Protection

* The STP Program includes requirements for certification of the OSHA 500 Safety 10-Hour Outreach Program.

2/10/07

EMPLOYEE FILE *Paul J. Worlan*

XXX-XX-6663

Date

Delmar S Hartness
Executive Director

Social Security Number

TRAINING ACKNOWLEDGMENT

TYPE OF TRAINING: New Hire Hazwhoper Refresher

Other Sub-Contractor Training and/or Basic Contractor

Total Hours Trained 8

I Delmar Huesch acknowledge that I have received instruction and understand the following subjects (initial all that apply):

C&K Safety Training Programs:

- Hazard Communication
- Lockout/Tagout
- Confined Space
- Fire Extinguisher/Emergency Action
- Respiratory Protection
- Forklift
- Confined Space Communication
- Asbestos Awareness

- Personal Protective Equipment
- Drug Free Workplace
- General Company Safety Policies*
- Vac Truck Safety & Operations
- Waterblast Safety & Operations
- Manlift
- Lead Abatement
- Inorganic Arsenic Awareness

Site Specific Trainings:

- Alcoa- Contractor/Stand-down
- Charter Steel

- Reliant Energy
- Other _____

Other Fall Protection

Other Fits-Testing

Other Monitoring Equipment

Other _____

* I have received a copy of C&K Abridged Safety Policy Manual.

[Signature]
Employee Signature

4-7-10
Date

[Signature]
Instructor Signature

4-7-2010
Date

Concentra Medical Centers (Ohio)

4680 Hinckley Industrial Pkwy CLEVELAND, OH 44109
Phone: (216) 749-2730 Fax: (216) 749-2735

PLHCP¹ WRITTEN STATEMENT for RESPIRATORS (EMPLOYEE)

Service Date: 03/23/2010

Employee Name: Hartness, Delmar S.

Employee SSN: XXX-XX-6663

Address:
23561 Spague rd
apt. 5
COLUMBIA STATION OF 44028

Employer: TMG Services Inc

You were evaluated in this office of your medical status related to your physical capability to wear a respirator. (Check one that applies)

- There were no abnormal findings that would hamper your ability to perform your job duties while wearing a respirator.
- The abnormal findings listed below were not related to wearing a respirator but should be reported to your personal physician for further evaluation.

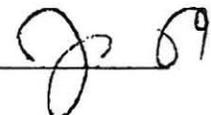
Based upon the results of this evaluation it is my opinion that you: (Check ALL that apply)

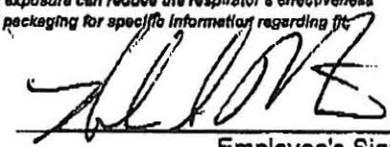
- ARE qualified to wear a respirator.
- Have the following restrictions concerning respirator usage: _____
- ARE NOT qualified to wear a respirator.
- Require further testing by your private physician who must submit a written report of his/her findings to Concentra Medical Centers (Ohio) so that a final decision on your ability to wear a respirator can be made.
- Must wear Special prescription eye-wear needed to accommodate respirator.
- Must use an Eye glass conversion kit.
- May need to shave Facial hair to assure tight seal on certain face masks.
- Need to stop smoking.

(Check ALL that apply)

- The above individual HAS been examined for respirator fitness in accordance with 29 CFR 1910.134. This limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- The above individual HAS NOT been examined by me for respirator fitness. The employee's medical evaluation consisted of a review of OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2. In accordance with 29 CFR 1910.134, this limited evaluation is specific to respirator use only. Employees should be instructed to report any difficulties in using respirators or change of any physical status to their supervisor or physician. This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.
- In accordance with specific OSHA requirements, I have informed the above named individual of the results of this evaluation and of any medical conditions resulting from exposures that may require further explanation or treatment. Where applicable, the above named individual has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos, lead and/or other chemical exposure(s).

Respirators must be properly selected based on the containment and concentration levels to which the worker will be exposed. Failure to follow the use and fitting instruction and warnings for proper use contained on the respirator packaging and/or failure to wear the respirator during all times of exposure can reduce the respirator's effectiveness and result in sickness or death. Wearer must be trained in the proper care of any respirator. Refer to product literature and packaging for specific information regarding fit use and/or limitations.

PLHCP Signature 


Employee's Signature
3/23/2011

PLHCP Name (printed) _____

Expiration Date

¹Physician or other Licensed Healthcare Professional

To be maintained in the employee's file with a copy to the employee

**Independent Quality Control Team
Senior Reviewer**

Kimberlie Bumgardner



KIMBERLIE K. BUMGARDNER

480 Roxalana Hills Drive

Dunbar, WV 25064

304-215-0099

kchambers@mctechreadymix.com

Education: **St. Cloud State University, St Cloud, MN**
Bachelor Degree in Earth Science, Geology, Hydrology, Chemistry
1993

Training and Certifications:

All Current

2006 16 Hours – USACE Construction Quality Management for Contractors

2006 30 Hours OSHA Basic Course in Construction Safety

2006 Certified Professional in Erosion and Sediment Control (CPESC)

2006 Visible Emissions Evaluation

2005 First Aid/CPR

2002 Certified Hazardous Materials Manager (CHMM 11519)

2001 Registered Environmental Manager (REM 11203)

1999 40 Hour Lead Inspector/Risk Manager

1996 40 Hour Asbestos Inspector/Management Planner

1995 EPA Certified to sample hazardous materials

1994 40 Hour Hazardous Water Site Operations (HAZWOPER)

Experience: **Project Manager**
McTech Corp, St. Albans, WV
2006 - Present

Project manager for multiple Federal, State and Local Government construction and environmental projects including broadly scoped Department of Army Construction Projects, Soil and Groundwater Remediation Projects, Defense Environmental Restoration Program for Formerly Utilized Defense Sites, Brownsfield Restoration and Redevelopment projects, and Soil and Ground Water Remediation System Designs & Implementations.

Successfully completed and ongoing projects for Department of the Army include:

- **Interim Soil Removal Action TNT B Plum Brook Ordnance Works, Sandusky, OH**

Serving as contractor's Project Manager for this project. This project includes the excavation, sampling, analysis, and disposal of nitroaromatic contaminated soil. Responsible for project oversight and coordination and worked directly with USACE, NASA, Ohio EPA, Erie County Landfill, subcontractors, and the

Restoration Advisory Board. Prepared and implemented Site-specific Safety and Health Plan, Quality Control Plan, and Plan of Operations.

- **Bulkhead Crane Replacement and Service Bridge Rehabilitation, Marmet Lock and Dam, Belle, WV**

Served as contractor's Project Manager during the execution of this project. This project included bridge rehabilitation, rebuilding of the bulkhead carts and building of a bulkhead crane. Responsible for project oversight and coordination with all subcontractors. Prepared and implemented Site-specific Safety and Health Plan and Quality Control Plan.

- **Bulkhead Crane Replacement, Pier 6 Crane Access and Dam Service Bridge Rehabilitation, London Locks and Dam, London, WV**

Serving as contractor's Project Manager for this project. This project included bridge rehabilitation and building of a bulkhead crane. Responsible for project oversight and coordination with all subcontractors. Prepared and implemented Site-specific Safety and Health Plan and Quality Control Plan.

- **Lime Treatment Pilot Study, Pentolite Road Red Water Ponds Area, Plum Brook Ordnance Works, Sandusky, OH**

Served as contractor's Project Manager during the execution of this project. The purpose of this project at Pentolite Road Red Water Ponds (PRRWP) was to study the application of lime for the treatment and reduction of nitroaromatics contamination present in the soil. Responsible for project oversight and coordination with all subcontractors. Prepared and implemented Site-specific Safety and Health Plan and Quality Control Plan.

- **Munitions Management, Former Talon Manufacturing Site, Alpoca, WV**

Served as contractor's Project Manager during the execution of this project. This project involved Mobile Ammunition Renovation, Inspection, and Demilitarization. Details of this project are kept confidential at the request of the Department of the Army Joint Munitions Command. Responsible for project oversight and coordination with all subcontractors.

- **Interim Soil Removal Action PRRWP, Sandusky, OH**

Served as contractor's Project Manager during the execution of this project. This project included the excavation, sampling, analysis, and disposal of nitroaromatic contaminated soil. Responsible for project oversight and coordination with all subcontractors. Prepared and implemented Site-specific Safety and Health Plan and Quality Control Plan.

- **Various construction projects under a Basic Ordering Agreement with the Department of the Army at Fort A.P. Hill near Bowling Green, VA**

Serving as contractor's Senior Project Manager for each project performed under the Basic Ordering Agreement. Responsible for project oversight and coordination with all subcontractors.

- **Interim Soil Removal Action, Soil Excavation and Disposal at Captina Island Erosion Control Dikes 2 &3, Ohio River Mile 108.2**

Served as Quality Control Officer during the execution of this project. This project included the excavation and disposal of contaminated dredge material that was placed in two erosion control dikes, immediately up stream of Captina Island located at Ohio River Mile 108.2. Approximately 700 tons of contaminated soil was removed from the erosion control dikes. Responsible for assuring that all work was completed according to the Scope of Work by performing quality control inspections and completing Daily Quality Control Reports.

Environmental Specialist

WTI, Poca, WV

2005 - 2006

Project manager for Superfund and NPL sites, Phase I and II Investigations, Groundwater Monitoring, Environmental Compliance and Regulatory Negotiations, Underground Storage Tank Removals, Water Treatment Plant Operations. Technical plan and report writing, plans include: Safety and Health, Quality Control, Work, Sampling and Analysis, Accident Prevention, Operations. Reports include: Limited Site Investigation, Remedial Investigation, Underground Storage Tank Closure, Groundwater Monitoring, Asbestos and Lead Abatement.

Environmental Analyst

United States Postal Service, Washington, DC

2004

Managed and directed the collaborative development of the United States Postal Service National Environmental Strategy (2005-2009)

Managed and guided the development of an Environmental Management System, based on the ISO 14001 standard, at Postal headquarters, Environmental Management Policy. Authored letters, guidance materials and other documents for top Postal Executive's signatures. Provided continuous coordination and collaboration with core functional areas at Postal Service Headquarters, Areas and Districts throughout the nation Managed numerous consultants as well as a 3 million dollar consultant budget.

Environmental Compliance Specialist

United States Postal Service, Minneapolis, MN

1998 - 2005

Developed sampling plans and provided interpretations and summary of analytical data including laboratory results from air, asbestos, lead, water, soil and waste testing. Performed Environmental Assessments of properties the Postal Service proposed for

acquisition. Managed Phase I and Phase II investigations and clean ups of petroleum, asbestos and lead contaminated properties. Prepared and provided quarterly and annual monitoring reports of contaminated sites to the Minnesota Pollution control Agency as well, permit and monitoring reports to the Minnesota Department of Health. Ensured compliance at 971 Postal facilities in Minnesota and Wisconsin including maintenance of NPDES permits, air quality permits, hazardous waste generator licenses, SARA Title III tire II reports, SPCC plans, storage tank operation and maintenance plans. Implemented changes to make possible the applications for the conditional exclusion of no exposure certifications. Conducted 337 multimedia compliance reviews in 7 states and 3 EPA regions in at Postal facilities including million square foot processing plants and vehicle maintenance facilities. Developed and delivered environmental training courses to employees. Applied for and received in excess of \$370,000 in reimbursements form the State of Minnesota for remediation at regulated tank sites. Managed asbestos abatements at 208 Postal facilities in 1999 saving 1.1 million dollars in asbestos abatement costs. Managed energy saving projects at 154 Postal facilities generating over 3 million dollars in energy savings.

Pollution Control Specialist

**Minneapolis Department of Transportation, St. Paul, MN
1994-1998**

Collected samples of soil waste and waste including unknown hazardous material at existing facilities and at proposed highway construction expansion sites. Provided analysis, interpretation and made recommendations based on site conditions and analytical results. Profiled waste streams and applied waste minimization practices to reduce. Minnesota Department of Transportation hazardous waste generator requirements by 90%. Conducted business and multimedia audits of waste transport, storage and disposal companies for the State of Minnesota. Authored Minnesota Department of Transportation and Minnesota Pollution Control Agency publications and guidance documents. Planned and presented a conferences sponsored by the Minnesota Pollution Control Agency

Traffic Engineering Technician

Minneapolis Department of Transportation, St. Cloud, MN

Designed Traffic Control Plans using Computer Aided Drafting. Participated in public meetings, inspecting contractor work.

Activities:

Vice Chairman of the Sylvan Township Planning Commission
Member of the Minnesota Planning Association
Girl Scout Leader for the Girl Scouts of St. Croix Valley



Mid-America
OSHA Education Center

This is to certify that

Kimberlie Chambers

has successfully completed OSHA 510

Basic Course in Construction Safety

on this 17th day of August, 2006



Instructor



Gary Bambauer, Vice President of Education

U.S. ARMY CORPS OF ENGINEERS



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

Kimberlie Chambers

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

*is awarded continuing education credits as
indicated for 16 hours of organized instruction*



Given at Louisville AB By CELR-CD-Q 08/23/06
Location Instructional District Date

Kathleen Hunter Wilson
Facilitator

Gary J. Anderson
Chief, USACE Professional Development Support Center

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

**Independent Quality Control Team
Peer Reviewer**

Richard Armstrong



8100 Grand Avenue, Cleveland, Ohio 44104-3110 (216)391-7700 FAX (216)391-6951
TOLL FREE WATS 800-391-7445
West Virginia Regional Office Location
240 Oliver Street-Suite 2
Saint Albans, West Virginia 25177-2074
P (304) 201-2205
F (304) 201-2206
www.mctechreadymix.com

Richard E. Armstrong

275 Thomas Road
St. Albans, WV 25177

Office: 304-201-2205
Cell: 304-932-5490

E-mail: rarmstrong@mctechreadymix.com

Objective: To obtain a professional position using my experience, ability and skills obtained throughout my career

Experience: **McTech Corp**
Project Manager
2008-Present

Project Manager for several construction projects for various Government clients including the United States Army Corp of Engineers, Huntington and Pittsburgh District and the United States Army at Fort A.P. Hill in Virginia. Duties include construction oversight, scheduling, and client relations. Projects have included:

- Lead and Asbestos Abatement at Winfield Locks and Dam, Red House, West Virginia.
- Erosion prevention by placing Type D aggregate protection on the upstream/downstream slope of the embankment at Beach City Dam in Tuscarawas County, Ohio.
- Rehabilitation of tanner gates at Fishtrap Lake Dam in Shelbiana, Kentucky.

- Road construction with 304 aggregate at Beach City Dam in Tuscarawas County, Ohio,
- Bulkhead crane replacement at London Locks and Dam in London, West Virginia
- Derrick crane replacement at Bluestone Dam in Hinton, West Virginia.
- Expansion joint repair and waterline replacement at Kinzua Dam in Warren County, Pennsylvania.
- Various other projects and duties as assigned.

Douglas Barrels, Inc.
Machinist
1990-2008

Responsibilities included all heat-treating and quality control of the metals used to craft rifle barrels, including several steps in the manufacturing of the barrels; shipping and receiving of products and materials; and provided informational tours to all visitors and customers to the facility.

H.C. Nutting Co.
Field Supervisor
1989-1990

Operated a core-drilling rig for the geo-technical engineering department of the company and represented the company in daily interaction with clients.

Esmer and Associates
Field Technician

Responsibilities included overseeing the daily construction of all aspects and phases of eleven coarse coal refuge impoundments; liaison between the company and the coal companies building the impoundments; daily communication and supervision of the employees building the impoundments; communicated all phases of the projects to OSHA and MSHA; provided daily written reports to Esmer & Associates; kept a written log of all phases of the construction; performed core-drilling, soil sampling, soil

compaction testing, water sampling, installed water monitoring stations and water decant systems for water overflow; and tested concrete for slump and made cylinders for testing.

Certifications obtained during this position were acquired for the removal and exploration of hazardous materials; to run a Troxler nuclear compaction gauge; and to obtain air samples for hazardous waste.

Education: St. Albans High Scholl, graduated 1982
West Virginia State College (University) 1982-1984

Training: 30 Hour OSHA Construction
Contractor Quality Control Certification – USACE
Asbestos Awareness Certification
Lead Awareness Certification
Scaffold Competent Person Certification
Adult First Aid and CPR

Affiliations: Scoutmaster of Boy Scout Troop 250

References: Available Upon Request



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

Richard Armstrong

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

*is awarded continuing education credits as
indicated for 16 hours of organized instruction*



Certified Provider #199309
1.3 CEUs



Registered Provider #009
39 LUs



Registered Provider
13 PDHs

Given at Huntington, WV By Huntington District 03/10/09
Location Instructional District Date


Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE


Chief, Engineering/Construction Division

Alkaline Hydrolysis Contractor

Tetra Tech



Certificate of Training

is hereby granted to

Mikael Spangberg

is hereby awarded this certificate to acknowledge completion of the
8-hour HAZWOPER Refresher Course in

**Hazardous Waste Operations and Emergency Response Refresher
Training for Compliance with OSHA 29 CFR 1910.120 (e)(3)(i)**

prepared and instructed by

Tetra Tech, Inc.

Date Course Completed: Nov 5, 2009

A handwritten signature in black ink, appearing to read 'Roberto Rolon', is positioned above a horizontal line.

Roberto Rolon, CIH, REM, CIPS
Health and Safety Specialist

G & S Safety Services Of Tennessee, Inc.

Environmental Training Division

presents this

Certificate Of Completion

to

BOBBY R. BOBO

for 40 hours of successful participation in

HAZARDOUS WASTE OPERATIONS TRAINING

this 23rd day of APRIL 19 93

this course is part of a series in

Hazardous Waste Management Training

Ralph E. Kauer

Course Instructor

K. W. R. O.

Director of Training



TETRA TECH

Safety Excellence

Certificate of Training

is hereby granted to

Bobby Bobo

is hereby awarded this certificate to acknowledge completion of the
8-hour HAZWOPER Refresher Course in

**Hazardous Waste Operations and Emergency Response Refresher
Training for Compliance with OSHA 29 CFR 1910.120 (e)(3)(i)**

prepared and instructed by

Tetra Tech, Inc.

Date Course Completed: **Feb 4, 2010**

Roberto Rolon, CIH, REM, CIPS
Health and Safety Specialist



HALLIBURTON NUS
Environmental Corporation

CERTIFICATE of COMPLETION

SUPERVISORY TRAINING FOR
HAZARDOUS WASTE AND EMERGENCY RESPONSE
SAFETY ORIENTATION COURSE
IN COMPLIANCE WITH
UNITED STATES FEDERAL REGULATIONS
8 HOURS — 29 CFR 1910.120

AWARDED TO

NAME **RANDALL BOBO**

SSN 587-25-5306

DATE July 26, 1993

BY *Thomas M. Samson*
THOMAS M. SAMSON, CIH
Director of Industrial
Hygiene and Safety



WORK STATUS REPORT

Employer Copy

TYPE OF EXAMINATION: Periodic Examination

EMPLOYEE: Bobo, Bobby R.
SSN: XXX-XX-5306
DATE OF EXAM: 09/10/2008
EXPIRATION DATE: 09/10/2010

COMPANY: TT/Divisions
POSITION: Field Supervisor
LOCATION: TT/Divisions-Oak Ridge
SITE: Oak Ridge

The following recommendations are based on a review of one or all of the following: a base history questionnaire, supporting diagnostic tests, physical examination, and the essential functions of the position applied for or occupied by the individual named above.

	Yes	No	Undecided
Has the employee any detected medical conditions that would increase his/her risk of material health impairment from occupational exposure in accordance with 29 CFR §1910.120?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the employee have any limitations in the use of respirators in accordance with 29 CFR §1910.134?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

STATUS

- 1. **QUALIFIED** The examination indicates no significant medical condition. Employee can be assigned any work consistent with skills and training.
- 2. **QUALIFIED - WITH LIMITATIONS** The examination indicates that a medical condition currently exists that limits work assignments on the following basis:
- 3. **NOT QUALIFIED**
- 4. **DEFERRED** The examination indicated that additional information is necessary. The employee has been given the following instructions.

COMMENTS:

I have reviewed the medical data of the above named employee, and informed the employee of the results of the medical examination and any medical conditions that require follow-up examination or treatment.

Name of Physician: Peter P. Greaney, M.D. Date: 09/17/08

Signature: *Peter P. Greaney MD*



IUOE National Training Fund
National HAZMAT Program

Class Date: 10/8/2009

To whom it may concern:

Bobby R. Babo has successfully completed the requirements
for the American Red Cross Adult CPR/AED.

Location: Oak Ridge, TN

A certification card will be mailed to you promptly.

If you need more information, please contact this office.

Sincerely,

Keith Jimmerson
Instructor



Certificate of Course Completion

Bobby R Bobo

Student's Name

OSHA - 10 Hour Construction Industry Outreach Training Program

Course Title

12/31/2008 08:32 CST

Course Completion Date

A handwritten signature in black ink, appearing to read "Bobby R Bobo", written over a horizontal line.

Student's Signature

Certificate Number

10

of hours approved

I hereby attest that I have completed the above named safety course in accordance with the ethical guidelines defined by, **Osha Pro's, Inc.** I acknowledge that I consumed all information and took all Pertinent quizzes and/or final tests.

Osha Pro's, Inc.
4101 West Green Oaks Blvd., Suite # 305-267
Arlington, TX, 76016
Tel: 866-442-6742



Together, we can save a life

This recognizes that
BRYN HOWZE
has completed the requirements for
CPR/AED - ADULT
conducted by
CENTRAL WV CHAPTER
Date completed **12-03-2008**
The American Red Cross recognizes this certificate
as valid for **1** year(s) from completion date.



Together, we can save a life

This recognizes that
BRYN HOWZE
has completed the requirements for
STANDARD FIRST AID
conducted by
CENTRAL WV CHAPTER
Date completed **12-03-2008**
The American Red Cross recognizes this certificate
as valid for **3** year(s) from completion date.



WORK STATUS REPORT

Employer Copy

TYPE OF EXAMINATION: Periodic Examination

EMPLOYEE: Howze, Bryn
ID:
DATE OF EXAM: 11/06/2009
EXPIRATION DATE: 11/06/2010

COMPANY: TT/TEN
POSITION: Geologist
LOCATION: TT/TEN-Oak Ridge
SITE: Oak Ridge

The following recommendations are based on a review of one or all of the following: a base history questionnaire, supporting diagnostic tests, physical examination, and the essential functions of the position applied for or occupied by the individual named above.

The following recommendations includes review of the following exam components:

	Yes	No	Undecided
Has the employee any detected medical conditions that would increase his/her risk of material health impairment from occupational exposure in accordance with 29 CFR §1910.120?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the employee have any limitations in the use of respirators in accordance with 29 CFR §1910.134?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

STATUS

- QUALIFIED** The examination indicates no significant medical condition. Employee can be assigned any work consistent with skills and training.
- QUALIFIED - WITH LIMITATIONS** The examination indicates that a medical condition currently exists that limits work assignments on the following basis:
- NOT QUALIFIED**
- DEFERRED** The examination indicated that additional information is necessary. The employee has been given the following instructions.

COMMENTS:

I have reviewed the medical data of the above named employee, and informed the employee of the results of the medical examination and any medical conditions that require follow-up examination or treatment.

Name of Physician: Peter P. Greaney, M.D. Date: 11/12/09

Signature: *Peter P. Greaney MD*

USACE QCM Certified Laboratory

TestAmerica, Inc.



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board/AClass
500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Test America-North Canton
4101 Shuffle Street NW
North Canton, OH 44720

has been assessed by AClass
and meets the requirements of

DoD-ELAP

while demonstrating technical competence in the field(s) of

TESTING

Refer to the accompanying Scope(s) of Accreditation for information regarding the types of tests to which this accreditation applies.

ADE-1437

Certificate Number

AClass Approval

Certificate Valid: 03/03/2010-03/03/2012
Version No. 001



APPENDIX E Quality Control Documentation

Quality Control Certification

**Final
Quality Control Plan**

**Remedial Action Construction
Remediation of Contaminated Soil and Sediment
Plum Brook Ordnance Works – TNT Area C
Sandusky, Ohio**

Contract No. W91237-10-C-0002

Assignment Name Signature Date

Senior Review

Kimberlie Bumgardner  7-1-10

Peer Review

Richard Armstrong  7-1-10

Comments on
Final
Quality Control Plan

Remedial Action Construction
Remediation of Contaminated Soil and Sediment
Plum Brook Ordnance Works – TNT Area C
Sandusky, Ohio

Contract No. W91237-10-C-0002

The following comments were provided by TMG's Independent Quality Control Team. All comments resulting from this review have been resolved and/or incorporated.

TMG IQCT Comment: Definitions and Acronyms, Page iii, The acronym for 2-amino-4,6-dinitrotoluene is listed as 2-DNT. The acronym should be 2-ADNT

TMG Response: Concur, the acronym for 2-amino-4,6-dinitrotoluene has been changed from 2-DNT to 2-ADNT.

TMG IQCT Comment: Section 2.10, Second Paragraph, First Sentence. The responsibility for checking all equipment, etc. should be defined rather than stating "the On-Site Project Manager, On-Site Project Superintendent, or QCO".

TMG Response: Concur, the responsibility has been changed to the On-Site Project Manager.

TMG IQCT Comment: Section 3.4.3, Second Paragraph, Sixth Sentence. Provide more information on the "20 times rule", as some readers may not be familiar with this.

TMG Response: Concur, the sentence was revised as follows: "The estimated volumes were calculated using the "20 times rule", which correlates the TCLP limit with the estimated maximum total concentration. For example, if the TCLP limit is 5 milligrams per liter (mg/L), then the "20 times rule" indicates that the estimated maximum total concentration for that constituent would be 100 milligrams per kilogram (mg/kg)."

TMG IQCT Comment: Add TestAmerica's QCM certificate to Appendix D.

TMG Response: Revision has been made as requested.

TMG IQCT Comment: Remove Eco-First from project organization list.

TMG Response: Concur; Eco-First has been removed as requested.

CELRH-EC-CE Review Comments on Draft QCP
Remedial Action Construction (RA-C) – for TNT Area C
Remediation of Contaminated soil and Sediment
Sandusky, Ohio
Contract Number W91237-10-C-0002, dated May 2010
06 June 2010

The following comments are offered from Lisa Humphreys, CELRH-EC-CE, 304-399-5953.

1. Pg 2, Section 2.1 Training – This section references the SSHP, however, the actual document submitted was the Accident Prevention Plan (APP) which is supposed to be part of the SSHP. Revise accordingly.

TMG Response: Concur; the SSHP is included as an appendix to the APP. Section 2.1 has been revised as follows “Appendix B of the Site-Specific Safety and Health Plan (SSHP) contains copies of all training certifications and dates of refresher training for employees who may work on this project. The SSHP is located in Appendix A of the Accident Prevention Plan (TMG, July 2010).

2. Pg 3, Section 2.2 Project Planning bullets – The SSHO and QCO aren't mentioned in this process. Revise accordingly.

TMG Response: Concur; the SSHO and QCO have been added to the process discussion in Section 2.2.

3. Pg 4, Section 2.4 Document Control – Mention that copies of the work plan documents will be kept in the field office trailer for reference during construction efforts.

TMG Response: Concur; Section 2.4 has been revised as follows “Project technical and administrative files will be maintained at TMG’s Corporate Office in St. Albans, West Virginia. Additionally, copies of all work plan documents will be kept in the field office trailer for reference during the construction efforts.”

4. Pg 4, Section 2.6 Project Management – Should that read “USACE Contracting Officer Technical Representative (COTR – Lisa Humphreys), rather than COR (which would be Ivan Farley or possibly someone from TMG in the Contracting office)?

TMG Response: Concur; revision has been made as suggested.

5. Pg 5, Section 2.7 Analytical Laboratory –

- a. I believe we are doing a greater level of lab QC than Level 2. Please verify in SOW / negotiated proposal and revise accordingly.

TMG Response: Concur; the lab QC level has been changed to Level 3. Additionally, the listing of the Level 3 QA/QC report have been updated.

- b. Need to mention that the laboratory QAPP is provided in the Plan of Operations.

TMG Response: Concur; a reference to the location of the QAPP has been added to Section 2.7 as requested.

6. Pg 5, Section 2.8.1, last sentence – Since this is the QCP, this is where the field QC info should be (but it can also be put in the Plan of Operations as a copy). The appropriate location for the sampling procedures would be in the Plan of Operations as mentioned. Revise writeup accordingly.

TMG Response: Concur; reference to Plan of Operations for additional QC information has been replaced with field QC details.

7. Pg 8, Section 3.4.1 Background and Purpose, 1st paragraph –
 - a. Next to last sentence – take out the “by the OEPA” and end sentence with “unacceptable”. For clarification, OEPA isn’t the lead on this project and risk levels were calculated by USACE through a site specific risk assessment for human health and the environment, not provided by OEPA on risk screening levels.

TMG Response: Concur; revision has been made to as requested.

- b. Last sentence – Remove this sentence or reword to say it “represents the removal of a potential source of direct contact with soil / sediment contamination. Something to that affect.

TMG Response: Concur; the last sentence has been removed.

8. Pg 10, Section 3.4.3 Overview of Remedy and Proposed Action –
 - a. 3rd sentence – change “was” to “were”.

TMG Response: Concur; revision has been made to as requested.

- b. Middle of 1st paragraph – remove the words “and are clearly site related”. By implying the nitros are clearly site related, it makes it sound like the rest of the contaminants may not be. This implication could mislead the reader to think cleanup of contaminants other than nitros might warrant this project to be designated as a PRP project if we are cleaning up contaminants not related to the manufacturing process. The COCs

provided in the RI/FS are left over from the manufacturing process in TNT Area C.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- c. 2nd paragraph, mid sentence – “clean-up requirements are set forth in the risk assessment portion of the RI, not the FS. The FS provides the remediation technologies for the cleanup. Revise FS to RI/FS.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- d. Take out the sentence about additional soil excavation may be required laterally.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- e. Next to last sentence – remove “OEPA cancer and noncancer risk goals. OEPA didn’t set the COCs, RGs, HI or ILCR for this project. USACE conducted a site specific risk assessment and those levels were calculated during that assessment. OEPA didn’t provide us that information.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- f. Revise the last sentence or remove it because not all of the excavations go to bedrock or groundwater. Some are as shallow as 2-4 feet.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been

added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- g. 3rd paragraph, first sentence – Change FS to RI.

TMG Response: Concur; revision has been made to as requested. TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- h. 3rd paragraph, next to last sentence – wouldn’t all of the lead contaminated soil will require treatment/stabilization prior to disposal to non-haz landfill?

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- i. Pg 10 & 11, 4th paragraph, 2nd, 3rd and 4th sentences – The way the sentences are worded it makes it sound like TCLP samples will be taken from the excavated areas (i.e., walls for confirmation), rather than the stockpiled soil generated from each of the excavated areas. Also, sampling list needs to include PAHs. Also, paragraph makes it sound like the TCLP will only be for nitros, lead and PCBs when in fact it will be a full TCLP required for landfill disposal.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- j. Pg 11, 5th paragraph first sentence – change “technologies outlined were” to “selected alternative stated was”. The Proposed Plan and Decision Document provides the selected alternative based on all the alternatives from the FS.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- k. General comment – Section 3.4.3 Overview of Remedy and Proposed Action through 3.4.5 Summary of Field Activities– These sections seems a little too “detailed” or “in the weeds” for the QCP. This information would fit better in the Plan of Operations. The Contractor may want to reduce this section but still use the comments provided here for the QCP to correspond to the Plan of Operations revisions.

TMG Response: Concur; the details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- l. The Contractor needs to make the distinction when talking about elevated nitros. If the nitros are not hazardous, then the soil may not need to be treated and then disposal of the PCBs control. The Contractor may want to make a little table to help portray the different scenarios when encountering PCBs with other COCs.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- m. 7th paragraph, 1st sentence – Reword sentence to say “Based on the analytical from the TCLP disposal tests, the excavated / stockpiled soil may either beLandfill.” (Just remove reference to RGs).

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- n. 7th paragraph, last sentence – disposal to a hazardous waste landfill is not part of the selected alternative. Remove this sentence. If you’re referring to PCBs, say a TSCA landfill or something to that affect

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the proposed approach for this RA-C have been removed from the QCP, and the following statement has been added to Section 3.4.3 “The proposed approach for this RA-C is described in the Plan of Operations (TMG, July 2010).”

- a. 1st paragraph, last sentence – use another word than “windrows”. Too confusing since composting could also be performed.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the field activities have been removed from Section 3.4.5, and the following statement has been added to Section 3.4.5 “A description of all field activities is included in the Plan of Operations (TMG, July 2010).”

- b. 2nd paragraph – use of earthen berms will generate additional work because the Contractor will have to initially create the berms prior to stockpiling and then regrade the area once stockpiles are removed. Use of straw bales were anticipated during the negotiation and also provided costs for them for erosion control and securing plastic to prevent run-off. Revise accordingly.

TMG Response: Concur; comment was addressed in the Plan of Operations (TMG, July 2010). The details regarding the field activities have been removed from Section 3.4.5, and the following statement has been added to Section 3.4.5 “A description of all field activities is included in the Plan of Operations (TMG, July 2010).”

10. Pg 13 – 16, Section 3.5 Project Personnel and Lines of Authority –
 - a. Change USACE POC office phone to (304) 399-5953 and add in cell phone number as well as email address.
 - b. Add in cell phone numbers and email addresses for all and don’t give an office number when that person is strictly in the field. It’s pointless to call the TMG office in St. Albans when they don’t work there.
 - c. H. Health and Safety Manager – Mr. Ford will not only be doing the HI calculations, but rather the analytical data coordination as well as the HI and ILCR calculations to verify if the “hot spot” has been remediated.
 - d. I. Field Personnel – These personnel are responsible for assisting the **On-Site** Project Manager. Also, give cell numbers for each person.
 - e. General – the lettering is off. TMG Services Independent QC Team should be J., not H. and so forth.
 - f. Test America, Inc. Please state “USACE QSM certified”
 - g. Tetra Tech – should include “composting” either here or under Barnes Nursery.
 - h. General – When providing information on Midwest Environmental or Eco First, the Contractor will need to provide the EPA ID transportation numbers and such information. This information should be provided in the Plan of Operations and the QCP could reference where that info is located.

TMG Response: Concur; Section 3.5 has been revised as requested. Composting has been added to the description for Barnes Nursery and Tetra

Tech. Additionally, EPA ID#s have been added for non-hazardous and hazardous disposal facilities and transporters have been added.

11. Pg 21, Section 5.1.3 Follow-Up Phase Inspections – Reword section to say that USACE will attend punch list site walk-thru and that one overall punch list will be generated. The current wording makes it sound like the final inspection is just for TMG and USACE get's no final inspection per say.

TMG Response: Concur; Section 5.1.3 has been revised as follows, “The follow-up phase inspection is performed as daily checks to ensure the continued compliance with contract requirements, including control testing and corrective actions until completion of the particular feature of work. Checks will be made a matter of record in the daily QC document.

At the completion of all work or any increment thereof, the QCO and USACE will conduct a final inspection of the work. The work will be inspected for conformance to plans and specifications and for quality, workmanship, and completeness. An itemized list containing QCO and USACE noted deficiencies will be compiled that includes a summary of work not properly completed, inferior workmanship, and work not complying with plans and specifications.

This “Punch List” will be included with the daily QC documents and submitted to the USACE POC with an estimated date for correction of each identified deficiency.

Following correction of work, a second inspection will be conducted by the QCO and USACE to ensure that all deficiencies have been corrected.

Refer to Appendix A for a copy of a follow-up phase checklist.”

12. General – what about photo documentation and QCRs? How will the Contractor be handling photo documentation to support the QCRs in case there are questions / issues that arise as to quality / progress of work.

TMG Response: Concur, the following statement has been added to Section 5.0, “To provide evidence of satisfactory work performance, verification test data and results of field inspections will be completely documented in the Daily QC Report. As part of the work control activities, a digital color photographic record will be prepared. The photographic record will be saved to CDs and stored at the on-site construction trailer and at TMG’s St. Albans, WV office.”

13. If resumes are going to include refresher training certification, then Rodney Bumgardner and James Russell needs their 8-hr refresher certificates included in Appendix D.

TMG Response: Concur; 8-hr refreshed certificates for Rodney Bumgardner and James Russell have been added to Appendix D as requested.

The following comments are offered from Jason Smithson, CELRH-EC-CE, 304-399-5040.

14. Pg 4, Section 3.4 Project Description, 2nd paragraph, 1st sentence – Remove extra space after “pit”.

TMG Response: Concur; revision has been made to as requested.

15. Pg 10, Section 3.4.3 Overview of Remedy and Proposed Action, 1st paragraph, 4th sentence – Change I5 areas to 15 areas.

TMG Response: Concur; revision has been made to as requested.

16. Pg 10, Section 3.4.3 Overview of Remedy and Proposed Action, 1st paragraph, 5th sentence – Reword the sentence to begin without using the number 13.

TMG Response: Concur; revision has been made to as requested.

17. Pg 13, Section 3.4.5 Summary of Field Activities, 1st paragraph, last sentence – Add “ed” to place.

TMG Response: Concur, sentence has been removed as noted in the response to Comment #9.

18. Appendix D – Update Kimberlie’s last name on her resume.

TMG Response: Concur; revision has been made to as requested.