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## **1.0 DESCRIPTION OF WORK – GENERAL**

Except as otherwise expressly provided herein, Construction Quality Control (CQC) Contractor, (herein after referred to as “Contractor”) shall supply all adequate and competent labor, travel to, from, between, and within the work sites, supervision, tools, equipment and testing devices, installed and consumable materials, and each and every item of expense necessary for the sampling, analysis, handling, hauling, unloading, receiving, inspection, testing, storing, archiving, evaluation, monitoring, reporting, document transmittal, and quality assurance required to support the On- Site Waste Disposal Facility (OSWDF) construction, infrastructure construction, impacted material placement, and any other construction that may be scheduled during the CQC contract period of performance.

OSWDF/Soil Remediation planned work scope; however, work scope subject to change during the contract period of performance:

- OSWDF Waste Placement Operations Cells 1 through 6 – *Radiological work. (Requires radiological worker II and Hazwoper training provided by SOCCo).*
- Cell 7 Liner Construction
- Cell 1 and 2 CAP Final Cover Construction
- Valve House #7 & #10 - Mechanical Equipment Installation
- West Heavy Maintenance Building
- Clay Processing – Conformance Testing
- Environmental Restoration (ER) Type 1 Impacted Material Testing & CQC Support. *(Requires Hazwoper training provided by SOCCo)*
- Miscellaneous Infrastructure Construction – earthwork excavation, utilities, and soils and aggregate conformance testing.

The CQC contractor will provide support during OSWDF impacted material placement to confirm the acceptance, placement and compaction are compliant with CQC requirements specified in the Impacted Material Placement Plan (IMPP), Operations & Maintenance Plan (O&M), Technical Specifications, and the Construction Quality Assurance (CQA) Project Plan (Exhibits 2 & 3).

### **1.1 Background**

Portsmouth Gaseous Diffusion Plant (PORTS) Decontamination and Decommissioning (D&D) Project is located in southern Ohio approximately 25 miles north of Portsmouth, Ohio and is situated on a 3,777-acre parcel of Department of Energy (DOE) land. Approximately 1,200-acres of DOE's property are located within the facility's Perimeter Road and comprise the centrally developed portion of the facility. Approximately 500-acres of the land within the Perimeter Road are fenced for controlled access. Approximately 190 buildings are located within the facility, and there are numerous utility structures on the site. The DOE land outside the Perimeter Road is used for a variety of purposes and contains a water treatment plant, holding ponds, sanitary and inert landfills, cemeteries, and open and forested buffer areas.

An On-Site Waste Disposal Facility (OSWDF) is the selected remedy for waste disposition in support of the PORTS D&D Project. The location selected for the proposed OSWDF lies outside the Perimeter Road in an area consisting of open and forested land.

The construction area lies entirely within the DOE property in an area free of potential contaminants outside the Limited Area fence. SOCCo (herein after referred to as “Company”) is the DOE's prime Contractor performing this remediation and D&D work.

## 1.2 Scope of Work Summary

The scope of the CQC contract includes conformance and performance testing, monitoring, inspections, and documenting and reporting results as required by contract documents.

The OSWDF CQC support is a time and materials contract. The Company Contract Technical Representative (CTR) will establish the required level of effort/CQC resources required to support construction, waste placement, and associated operations.

## 2.0 DRAWINGS, SPECIFICATIONS, ATTACHMENTS, EXHIBITS, AND REFERENCES

CQC Contract related work activities shall be performed in accordance with CQC requirements included in approved drawings, technical specifications, referenced ASTM and ACI Standards, exhibits, attachments, and other documents, which by this reference are made a part hereof.

### 2.1 OSWDF Project Drawings and Specifications

2.1.1 A controlled set of Certified for Construction (CFC) drawings and specifications will be issued to the CQC contractor through the company Records Management Document Control (RMDC) in advance of the start of any new construction project, in ample time to allow the contractor to review and prepare for the support required for the project(s).

2.1.2 The specifications and ASTMs listed herein are not all inclusive. The list is provided for reference only. A list of ASTMs are included in Exhibit 2, Construction Quality Assurance Project Plan. A controlled set of drawings and specifications applicable to a specific project will be issued to the contractor prior to the start of each construction project.

2.1.3 The CQC contractor shall be capable of performing, with qualified personnel the ASTM's listed in 2.3, and the Construction Quality Assurance Project Plan.

### 2.2 Specifications

| Specification No.     | Title                             |
|-----------------------|-----------------------------------|
| FBP-CSPEC-02100-OSWDF | Surveying                         |
| FBP-CSPEC-02110-OWSDF | Clearing, Grubbing, and Stripping |
| FBP-CSPEC-02200-OSWDF | Earthwork                         |
| FBP-CSPEC-02215-OSWDF | Trenching and Backfilling         |
| FBP-CSPEC-02225-OSWDF | Compacted Clay Liner and Cap      |
| FBP-CSPEC-02230-OSWDF | Aggregate Base                    |

|                              |                                               |
|------------------------------|-----------------------------------------------|
| <b>FBP-CSPEC-02240-OSWDF</b> | Protective and Contouring layers              |
| <b>FBP-CSPEC-02235-OSWDF</b> | Asphalt Concrete                              |
| <b>FBP-CSPEC-02270-OSWDF</b> | Surface Water Management and Erosion Control  |
| <b>FBP-CSPEC-02271-OSWDF</b> | RipRap                                        |
| <b>FBP-CSPEC-02500-OSWDF</b> | Tapping 48-Inch Raw Water Supply              |
| <b>FBP-CSPEC-02510-OSWDF</b> | Raw Water Supply                              |
| <b>FBP-CSPEC-02605-OSWDF</b> | HDPE Manholes, Pipes, & Fittings              |
| <b>FBP-CSPEC-02714-OSWDF</b> | Geotextiles                                   |
| <b>FBP-CSPEC-02510-OSWDF</b> | Raw Water Supply                              |
| <b>FBP-CSPEC-02760-OSWDF</b> | Pavement Markings                             |
| <b>FBP-CSPEC-02721-OSWDF</b> | Surface Water Control Structures and Pipes    |
| <b>FBP-CSPEC-02770-OSWDF</b> | Geomembrane                                   |
| <b>FBP-CSPEC-02772-OSWDF</b> | Geosynthetic Clay Liner                       |
| <b>FBP-CSPEC-03100-OSWDF</b> | Concrete                                      |
| <b>FBP-CSPEC-03110-OSWDF</b> | Concrete Protective Liner                     |
| <b>FBP-CSPEC-13005-OSWDF</b> | Liner Penetration Boxes                       |
| <b>FBP-CSPEC-15060-OSWDF</b> | Process Piping, Flexible Hose & Appurtenances |
| <b>FBP-CSPEC-15074-OSWDF</b> | Pumps                                         |
| <b>FBP-CSPEC-15080-OSWDF</b> | Valves                                        |

2.3 Standards:

| <b>Standard No.</b> | <b>Title</b>                                              |
|---------------------|-----------------------------------------------------------|
| ASTM D422           | Standard Test Method for Particle Size Analysis for Soils |

|            |                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------|
| ASTM D698  | Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort              |
| ASTM D1140 | Percent Passing No. 200 Sieve                                                                              |
| ASTM D1556 | Standard Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method                  |
| ASTM D1557 | Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort              |
| ASTM D2041 | Standard Test Method for Theoretical maximum Specific Gravity and Density of Bituminous Paving Mixtures    |
| ASTM D2172 | Standard Test Method for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures                |
| ASTM D2216 | Standard Test Methods for Laboratory determination of Water (Moisture) Content of Soil and Rock by Mass    |
| ASTM D2434 | Standard Test Method Permeability of Granular Soils                                                        |
| ASTM D2487 | Standard Practice Classification of Soils for Engineering Purposes                                         |
| ASTM D2726 | Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures |
| ASTM D2937 | Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method                             |
| ASTM D3203 | Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures          |
| ASTM D4220 | Standard Practice for Preserving and Transportation of Soil Samples                                        |
| ASTM D4318 | Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils                       |
| ASTM D4643 | Standard Test Method for Determination of Water (Moisture) Content of Soil by Microwave Oven Heating       |
| ASTM D4644 | Standard Test Method for Slake Durability of Shales and Other Similar Weak Rocks                           |
| ASTM D5084 | Standard Test Methods for Measurement of Hydraulic Conductivity                                            |
| ASTM D5240 | Standard Test Method Soundness of Rock for Erosion Control                                                 |
| ASTM D5444 | Standard Test Method for Mechanical Size Analysis of Extracted Aggregate                                   |
| ASTM D6307 | Standard Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method                             |
| ASTM D6913 | Standard Test Method Particle Size Distribution of Soils Using Sieve Analysis                              |

|            |                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------|
| ASTM D6938 | Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) |
| ASTM C31   | Standard Practice for Making and Curing Concrete Test Specimens in the Field                                              |
| ASTM C39   | Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens                                           |
| ASTM C88   | Standard Test Method of Soundness of Aggregates by use of Sodium Sulfate or Magnesium Sulfate                             |
| ASTM C131  | Standard Test Method for Resistance of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine      |
| ASTM C136  | Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates                                                     |
| ASTM C138  | Standard Test Method for Density (Unit Weight) Yield, and Air Content of Concrete                                         |
| ASTM C143  | Standard Test Method for Slump of Hydraulic-Cement Concrete                                                               |
| ASTM C172  | Standard Practice for Sampling Freshly Mixed Concrete                                                                     |
| ASTM C231  | Standard Test Method for Air Content of Freshly Mixed Concrete by Pressure Method                                         |
| ASTM C1064 | Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete                                                    |

2.4 Exhibits:

- Exhibit 1 - OSWF Project Quality Assurance Plan (PQAP)
- Exhibit 2 - Construction Quality Assurance (CQA) Project Plan
- Exhibit 3 - Operations & Maintenance Plan (O&M)
- Exhibit 4 - Milestone Activity Schedule

**3.0 DESCRIPTION OF WORK – SPECIFIC**

The Work described in Articles 1.0 and 2.0 of this Section C shall include the following:

- 3.1 The work described in this contract shall be performed in accordance with contract documents, Attachment J-13; Contractor's approved Work Plan, and PORTS, Company, and State of Ohio rules, orders, regulations, guidelines, and requirements, as applicable.
- 3.2 The Contractor shall supply standard Level D Personnel Protective Equipment (PPE) for all on-site field personnel. This consists of standard work clothes, steel-toed work boots, hard hat, safety vest, safety glasses, protective gloves and hearing protection, as required.
- 3.3 Testing and inspection equipment shall be calibrated to standards traceable to the National Institute of Standards and Technology (NIST) or other nationally recognized standards when available and appropriate.
- 3.4 As incidental to the work, Contractor shall perform office work required to prepare and transmit required documentation, submittals and invoices, and to perform necessary administrative activities. Contractor shall incorporate costs associated with these activities into other work items.
- 3.5 Initial Submittals, Training, and Requirements.
  - A. Contractor shall provide Company with all the required initial submittals of the Contract in accordance with Attachment J-6 and as per Attachment J-8 Submittal Register and applicable additions/revisions thereto.
  - B. Contractor personnel working on-site shall complete all training identified in Attachment J-13, and any other required general or site-specific training. Site specific training will be provided by the Company. Radiation Worker II training, including rad worker dress-out will be required for CQC personnel supporting soil remediation and waste placement operations. Work in radiological areas may require anti-contamination clothing, respirators, or other PPE as appropriate by the company. The Company will issue PPE above level D to the Contractor as required and manage the handling of used PPE. **Note: Attachment J-13 can be found at [teamsocco.com](http://teamsocco.com). Go to Working With US. Click on Documents.**
  - C. Contractor personnel working on-site for more than a total of 30-days in a rolling year shall be included in the Company medical monitoring program. The medical monitoring physicians will be provided by Company.
  - D. Contractor shall submit copies of resumes and certifications of the CQC Lead Technician and CQC Technician, **OS&H Representative (refer to J-13 for OS&H qualifications)**, and other personnel as requested by the CTR to Company within the timeline listed in the J-8 Submittal Register.
  - E. Contractor shall submit an Operation/Lab Manual detailing the specific procedures that will be used for the following laboratory and field tasks with bid proposal:
    - 1. Sample Control (handling, storage, chain of custody, etc.)
    - 2. Testing (ASTM methods, deviations, from ASTMs, etc.)
    - 3. Documentation (material appearance, defects, workability, etc.)

4. Data review (quality control, data verification methods, etc.)
    5. Reporting (ASTM reporting guidelines, data sheets, documentation, etc.)
  - F. Contractor shall with bid proposal submit a CQC Technician Qualification and Certification Procedure that meet the requirements of NQA-1 -2008 through 2009 Addendum, Non-Mandatory Appendix 2A-1, "*Guidance on the Qualification of Inspection and Test Personnel.*", or equivalent as approved by CTR.  
  
The same CQC technician and qualification requirements flowdown to CQC sub-tier subcontractors.
- 3.6 Personnel qualification, certification, and responsibilities for the specified classification of labor required for the Work shall be as follows: (*Multi-Discipline Certified Technicians Preferred*)
  - A. CQC Lead & Field Technician - Soil
    1. The CQC Soil Technicians shall perform the on-site CQC work as required by the contract, construction drawings, and technical specifications.  
  
Qualifications and experience requirements:
      - a. Minimum Level II QC Certification to the contractor's Qualification and Certification procedure.
      - b. Applicable discipline experience – Minimum 5 years. Techs per NQA-1 experience requirements.
  - B. CQC Lead & Field Technician – Concrete/Asphalt
    1. The CQC Concrete Technicians shall perform work as required by the contract, construction drawings, and technical specifications.  
  
Qualification and experience requirements:
      - a. American Concrete Institute (ACI) certified Concrete Field Testing Technician - Grade 1.
      - b. Minimum Level II QC Certification to the contractor's Qualification and Certification procedure.  
  
Applicable discipline experience – Minimum 5 years per NQA-1 experience requirements. Techs per NQA-1 experience requirements.
  - C. CQC Laboratory Lead & Technician - Soil
    1. Same qualification and experience requirements as Field Lead & Soil Technician.
  - D. CQC Laboratory Lead & Technician - Concrete
    1. Same qualification and experience requirements as Lead & Field Concrete Technician, and



2. ACI certified Concrete Strength Testing Technician.

E. Construction Quality Assurance (CQA) Officer

1. BS Civil Engineering, Registered Professional Engineer, State of Ohio
2. Five years' experience certifying similar waste disposal facilities.

F. CQC Project Field Lead - On Site support

1. The Project Field Lead will provide direction and support to the CQC on-site field and laboratory technicians and administrative assistance to Project Management.

Qualification and Experience

- a. Minimum Level II QC Certification to the contractor's Qualification and Certification procedure. Multi-Certification CQC Technician.
- b. Five years' experience providing direction and support to CQC construction technician staff similar to the OSWDF project.

G. Geosynthetics Lead & Technician

1. The CQC Geosynthetics Technicians shall perform work as required by the contract, construction drawings, and technical specifications.

Qualification and experience requirements:

- a. Minimum Level II QC Certification to the contractor's Qualification and Certification procedure.
- b. Applicable discipline experience – Minimum 5 years per NQA-1 requirements.

H. CQC Lead & Field Technician – Mechanical/Leak Testing

1. The CQC Mechanical/Leak Test Technician shall perform the on-site CQC work as required by the contract, construction drawings, and technical specifications.

Qualification and experience requirements:

- c. Minimum Level II QC Certification to the contractor's Qualification and Certification procedure.
- d. Applicable discipline experience – Minimum 5 years per NQA-1 requirements.

J. CQC Administrative Technical Assistant

1. Provide technical support to the CQA officer. (Future)

Qualification and Experience:

- a. Applicable technical knowledge and experience to assist the CQA officer with document control, preparation, and distribution.

**3.7 CQC Field and Laboratory Technicians**

- 3.7.1. CQC Technicians shall perform CQC technician services associated with the construction components and related technical specifications. The CQC Technicians will become familiar with the construction drawings, technical specifications, CQC requirements, project schedule, and be available when CQC technician support is required.

Note: Bidders shall have the capability to perform CQC testing listed in Exhibit 2, CQA Project Plan, with qualified personnel.

**3.8 CQC Laboratory Testing Services**

- 3.8.1 Geotechnical Laboratory Services shall be performed in accordance with Contractor Work Plan, Operations Manual, Project Specific Quality Assurance Plan, and Standard Operating Procedures, as applicable. The Geotechnical Laboratory will have a minimum five years' experience testing in accordance with ASTM and applicable soil, concrete, asphalt test standards, and comply with the requirements within the CQA Project Plan, Exhibit 2, and subsequent revisions.
- 3.8.2 Geosynthetics Laboratory – Comply with the requirements within the CQA Project Plan, Exhibit 2, and subsequent revisions.
- 3.8.3 On-Site Soils Laboratory to support OSWDF Cell impacted waste placement. The company will provide the physical structure w/utilities. Contractor to provide the required testing equipment.

**3.9 Contractor's Work Plan**

- 3.9.1 Contractor shall submit a Work Plan with within the time frame listed on the J-8 submittal register, covering the range of tasks to be performed. Submittal of the Work Plan shall be in accordance with Attachment J-6. The Contractor shall follow the format specified in Attachment J-25 and include:
  - A. Description of work activities, incorporating hazard controls as identified by the Contractor.
  - B. Documentation of the HSE portion of the Work Plan as described in Attachment J-13.

**3.10 Hazard Assessment**

- 3.10.1 Contractor shall submit in accordance with Attachment J-8 Submittal, a job hazard assessment (JHA) for the work to be performed as per Attachment J-13.

**4.0 MATERIAL, EQUIPMENT, OR SERVICES FURNISHED BY COMPANY/GOVERNMENT**

The Company will furnish or cause to be furnished to Contractor, without cost to Contractor, the following items for or in connection with performance of the Work:

**4.1 Material and Equipment**

4.1.1 Contractor shall supply all equipment and material required to perform CQC work associated with this contract.

**4.1.2 Temporary Access Control**

**4.2 Permit and Licenses**

Notwithstanding the Article entitled the "Permits and Licenses" in Section H, the Company will furnish the permits listed in Article 5.2.17.

4.2.1 Permits required for performance of the Work at the jobsite will be arranged by the Company, provided Contractor shall in a timely manner prepare all applications for such permits and submit them to the Company.

4.2.2 Inspection of the Work required by governmental agencies shall be arranged by the Company. Contractor shall request such inspection through the Company only after the Work is ready for inspection.

**4.3 Services**

4.3.1 Company Quality Representative will conduct an annual assessment to verify compliance to Contractor Project Specific QAP and applicable project contract documents, as applicable.

**5.0 TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES**

**5.1 Furnished by Company**

Company will supply or cause to be supplied the following temporary construction facilities and utilities to Contractor, without cost to Contractor, for or in connection with performance of the Work.

5.1.1 Parking areas for the Contractor's Work vehicles will be limited to a location near the Work area as designated by the CTR.

A. Neither Company nor Client will be financially responsible for any damage or unlawful acts to any Contractor equipment or private vehicles parked in designated parking areas.

5.1.2 The Company will make available construction water at points on the PORTS Site as designated by the CTR.

5.1.3 Limited medical services on a "good Samaritan" basis. Initial first aid shall be provided by the Contractor.

**5.2      Furnished by Contractor**

Except as expressly set forth in Section 5.1 of this Statement of Work, the supply, installation, provision, maintenance, repair, and final removal of all temporary facilities and utilities, necessary for full and complete performance of the Work, is the sole responsibility of the Contractor.

Such items shall include, but not necessarily be limited to those listed below. Contractor has the sole responsibility to identify and provide all required temporary facilities and utilities to perform the Work. The type of facilities, move-in and move-out dates, and locations on the work Site shall be subject to and in accordance with the review and approval of the CTR.

**5.2.1    Temporary Facility and Lay-down Area**

- A. As required, Contractor mobile facilities must be secured or anchored to prevent movement or turnover from high winds. Trailer anchoring shall meet Ohio Basic Building Code (OBBC) & DOE-STD-1066-2012. Preferred Anchor system is a Minuteman LLBS system with drive pins as determined in length per project condition. Contractor may choose to anchor the trailer by using 10 foot long Jersey Barriers with ½" galvanized wire rope tie downs in accordance with the spacing table 1 in 24 CFR 3285.402. Trailer manufacturer shall provide anchor calculations to ensure overturning, lateral movement is in compliance with anchor system specified or for any alternative anchor systems. Electrical connections must be made by a qualified electrician.
- B. Company reserves the right to inspect and approve the Contractors mobile facility.
- C. Smoking Areas:
  - (1) Contractor will only be permitted to smoke at smoking areas designated by the CTR. Meeting the requirements for establishing and maintaining the smoking area will be the sole responsibility of the Contractor. No smoking will be allowed within the Work area.
  - (2) Provide a fire extinguisher.
  - (3) Designate smoke area with a non-flammable barricade.
  - (4) Use containers for extinguishing and disposal of cigarette butts.
  - (5) Provide and maintain safe walking access to the smoking area.
  - (6) Provide a waste disposal container for debris other than cigarette butts.
  - (7) Follow good housekeeping practices.

**5.2.2    Break Facilities**

It is the Contractor's sole responsibility to provide break and lunch areas for their employees, vendors and subcontractors.

**5.2.3 Storage Compounds**

The Contractor shall be responsible for provision of adequate weather-tight storage for storage of materials, tools, and equipment which are subject to damage by weather. The location of storage compounds must be agreed with CTR before storage of materials commences. Such compounds shall be maintained for the storage of the approved materials and for no other purpose.

**5.2.4 Construction Power / Temporary Facility Area Power**

- A. On-site generation of power is allowed providing that such power is obtained through the use of properly installed, acoustically insulated diesel electric generating units approved by the CTR.
- B. Contractor's distribution system, lighting systems and wiring shall be installed in accordance with the National Fire Protection Association (NFPA) and the National Electric Code (NEC) and maintained in a satisfactory condition.
- C. No weight shall be imposed upon any electric cable and staging, ladder or similar equipment shall not rest against or be attached to it. Temporary power cables in use by Contractor must be positioned so that they do not cause a tripping hazard. (Run 8 ft. overhead or laid neatly out of walkways.)
- D. Contractor will be responsible for maintaining and removing any equipment or devices installed.

**5.2.5 Potable Water**

- A. Potable water will not be available at the construction area. The Contractor will be solely responsible for providing potable water during construction.

**5.2.6 Water Disposal and De-watering**

- A. Contractor shall perform all necessary de-watering and disposal of ground water. Storm drainage and surface drainage shall be managed to prevent unapproved pooling of water on the site and to prevent interference with the operations of other Contractors and organizations on or adjacent to the discharge areas. If applicable, Contractor shall submit proposed location(s) of storm water discharged to CTR for approval.

**5.2.7 Temporary Buildings**

If applicable, Contractor shall provide, operate, maintain, and remove all temporary buildings in accordance with all requirements of the Contract, specifically including but not limited to, the Attachments covering Safety Regulations and Site Rules.

**5.2.8 Fuels and Lubricants**

- A. Oils, greases, and similar materials must be properly labeled and stored in nonflammable bins or buildings or in a fenced compound remote from other combustible materials in accordance with NFPA and as approved by CTR.
- B. "No smoking" signs shall be provided by Contractor and prominently displayed in areas where flammable materials are stored. Additionally, Contractor shall provide and maintain suitable fire extinguisher in such areas.
- C. Contractor shall provide all fuel for heating and ventilation for his Temporary Facilities.
- D. Stationary fuel powered equipment (e.g. generators, pumps, light plants, etc.) with a fuel holding capacity equal to or greater than 55 gallons of fuel must be equipped with a double walled fuel tank. If a double wall fuel tank is not available then the stationary fuel powered equipment must be placed in an acceptable secondary containment device as approved by HSE and the CTR. The secondary containment device must be sized to hold the equivalent of the largest tank volume within that containment.
- E. For equipment requiring secondary containment that will be stored outdoors, the containment area must provide for accumulated precipitation, and as such, be sized to 120% of the largest tank volume within that containment. The secondary containment's material(s) of construction shall be impervious to and compatible with, the liquid to be contained. Any spills within the dike or outside the dike shall be reported immediately to the CTR. Provisions shall be made for draining off accumulations of water.
- F. The Contractor shall ensure that any equipment drain valves remain closed except when draining. The stationary fuel powered equipment and all secondary containment areas must be inspected and maintained daily. The Contractor shall ensure documentation of these inspections is recorded daily, and that the inspection log is available for the Company for inspection upon request.

#### 5.2.9 Communication Facilities

Contractor shall provide and operate all means of communication, including but not limited to telephones, facsimiles, and radios which shall be approved by CTR. Wireless communication systems shall be requested and approved prior to bringing the system on site.

#### 5.2.10 Material Handling and Rigging

- A. Contractor work activities, material deliveries, and off-loading operations shall be conducted to minimize interruptions to the Company's normal operations and require prior coordination and approval of the CTR.
- B. Contractor shall provide and operate all necessary equipment for handling, hauling, unloading, and receiving Contractor-supplied materials, tools, and equipment.

5.2.11 Weather Protection of the work and any methods required to allow continuation of the work during periods of inclement weather.

5.2.12 Electric Power Tools and Equipment

A. All electric power tools and equipment shall be double insulated or protected with a Ground Fault Circuit Interceptor (GFCI) and Nationally Recognized Testing Laboratories (NRTL) complaint. The GFCI must be plugged in at the power source and shall be inspected, tested daily or prior to use.

B. Power tool cords and extension cords must be kept in good condition and out of the way of traffic. Electrical cords shall be routed safely to prevent a tripping hazard and damage to the cord. Faulty or damaged cords must be properly disposed of or removed from site. Faulty or damaged cords on electrical hand tools must be repaired by a qualified electrician or removed from site.

5.2.13 Temporary lighting: shall have provision and operation to allow the Work to be performed in a safe manner regardless of ambient lighting conditions.

5.2.14 Personnel Protective Equipment as identified in the Contractor's Hazard Assessment

5.2.15 Permits

A. Temporary Facilities: It is the Contractor's sole responsibility to ensure that these facilities are provided, operated, maintained, and removed of in accordance with all applicable laws and regulations.

B. Job Site Work Permits: All permits required for performance of the Work at the job site will be arranged by the Company. The Company shall provide all required permits. The Contractor shall request the permit a minimum of (3) working days in advance of the permit need.

5.2.16 Transportation facilities on and off site: only Contractor's company vehicles, as approved by CTR, will be allowed in the work area.

5.3 Environmental Protection

5.3.1 The Contractor shall comply with Ohio's applicable or relevant and appropriate laws, regulations, and requirements and utilize best management practices, in accordance with ODNR guidance, where applicable. The Contractor shall immediately notify the CTR of any spills, regardless of the quantity, type, or location of the spill. Spill cleanup will be managed by the CTR or Construction Manager/designee; if possible, the Contractor will provide clean up services. All cost associated with any spills resulting from negligence by the Contractor will be the sole responsibility of the Contractor.

5.3.2 Vehicles, equipment, or liquid storage containers shall not be stored or parked in areas where spillage or leakage of materials would enter any of the streams or wetlands located onsite. Equipment fueling and maintenance areas will be located at least 100 feet from any waterbody.

- 5.3.3 All products or hazardous materials brought on-site by the Contractor shall be maintained under the control of the Contractor. No excess products or hazardous materials are to remain onsite after the project is complete. Contractor shall submit Safety Data Sheets (SDS) for review and approval prior to bringing such items on-site.
- 5.3.4 The Contractor will be permitted to wash equipment at PORTS if it can be done in accordance with applicable federal and state regulations and as approved by the Company ESH&Q. Disposal of accumulated debris from washing activities shall be governed by Article 10.0.
- 5.3.5 Environmental Emissions Consideration:
  - A. All fuel-burning equipment such as, but not limited to mobile equipment, cranes, bulldozers, earthmovers, welders, generators, compressors, pumps, and light plants must meet regulatory permit requirements. Unless a piece of equipment is specifically exempted under the regulations, it must have an air permit. Off-road diesel-powered vehicles and equipment (both mobile and stationary), with engine horsepower (hp) ratings of 50 hp or more shall be Tier 2 compliant. Any regulatory exemptions must be reviewed by the Company ESH&Q prior to equipment use. The Contractor shall submit documentation of compliance with applicable regulatory permits and standards to the CTR prior to delivery of equipment to PORTS.
  - B. Fuel Requirements: To the extent practicable, construction equipment with engine hp ratings of 50 hp or more shall utilize Ultra-Low Sulfur Diesel (ULSD) or biodiesel fuel.
  - C. Permit Exemption: The Contractor shall maintain logs for any piece of equipment exempted from permitting based on hours of operation (e.g.: emergency generators, emergency compressors, and emergency pumps) to document fuel use and to verify that the equipment was not operated in excess of 500 hours annually. The Contractor shall submit to the Company prior to delivery of equipment to PORTS documentation of equipment operating logs for any regulatory exempt piece of equipment.
- 5.3.6 Fugitive Dust Emissions:
  - A. The Contractor shall minimize emissions of fugitive dust.
- 5.4 Excavation/Penetration:
  - 5.4.1 A Penetration Permit is required when breaching or penetrating any building surface more than 1-½" (unless excluded), any blacktop or concrete pavement surface more than three (3) inches, or the earth's surface twelve (12) or more inches by any means other than those considered excavation or trenching. These methods include, but are not limited to, auguring, drilling, driving, and coring, or penetrating. Penetrations include drilling wells and boring soil samples up to and including 12 inches in diameter.
- 5.5 Existing Utilities/Service Interruption
  - 5.5.1 Where Work involves tying into or connecting to existing services or utilities, carry out work at times as directed by the Company.



## **6.0 PERFORMANCE SCHEDULE AND SEQUENCE OF WORK**

- 6.1 Contractor shall commence the submittal process, training and other pre-mobilization activities after receiving Notice to Proceed (NTP) from Company. Authorization to Mobilize will be required prior to performance of work at the jobsite.
- 6.2 General scheduling, reporting and coordination requirements are described in Section H, Special Contract Requirements.
  - 6.2.1 Contractor, if applicable, shall submit the detailed schedule required by Section H in accordance with Attachments J-6 and J-8.
  - 6.2.2 Specific scheduling and coordination requirements may include but not necessarily be limited to the following:
    - A. Mobilization time for manpower and equipment
    - B. Contract Submittals
    - C. Any qualifying conditions of Company or Client
    - D. Other as necessary
  - 6.2.3 Contractor's schedule will be determined based on the need to provide CQC support to the OSWDF projects.
- 6.3 Normal site work hours will be 4 days per week, 10 hours per day, (Monday through Thursday), between the hours of 7:00 am. and 5:30 pm. However, hours may be adjusted based on scheduled construction, and/or holiday observance. Contractor shall be prepared to work the hours required by Contract, and as directed by the CTR.
  - 6.3.1 Requests for non-scheduled extended work hours in emergency situations shall be made to the CTR at least three hours in advance for overtime during the normal work week and at least by noon of the last regular workday.

Requests for scheduled overtime, weekend, or holiday work during normal situations shall be made to the CTR at least two working days before the start of these shifts for any special arrangements for security, safety, escorting, health physics, and all other the Company provided resources. The Contractor shall be advised that plant entry and exit requirements may change when working outside of the normal work schedule. It is the Contractor's sole responsibility to coordinate with the CTR to plan accordingly for personnel, deliveries, and all other requirements needed to perform work during non-normal scheduled work times.

## **7.0 REPORTING REQUIREMENTS AND COORDINATION MEETINGS**

Contractor shall promptly submit the schedules and reports set forth in Attachment J-8 (Contractor / Supplier Submittal Register).

- 7.1 Daily Reports

Contractor shall make written Daily Reports (Attachment J-5) for each day worked and submit to the CTR weekly.

**7.2 Weekly Progress Meetings**

7.2.1 Contractor's CQC Technician shall attend weekly progress meetings. The Contractor shall be prepared to discuss scheduled progress versus actual progress giving details of Work completed in relation to the approved schedule, together with a two (2) week "look ahead" which provides details of how the Work will be completed.

7.2.2 The person or persons designated by Contractor to attend the meetings shall have all the required authority to make decisions and commit Contractor to solutions agreed upon during any meetings.

7.2.3 Contractors CQC Technician shall attend scheduled construction project coordination meetings, or other meetings as directed by the CTR.

**8.0 CORRESPONDENCE, SUBMITTALS AND COMMUNICATION REQUIREMENTS**

8.1 Correspondence, submittals and communication with the Contractor shall be in accordance with Attachment J-6

8.2 When required by the Contract, Contractor shall transmit to Company, technical submittals, shop drawings or samples, including supporting catalog cuts, manufacturer's literature, sketches or drawings, calculations, work documents, personnel qualification and certifications, and other pertinent data, in sufficient detail to enable Company to review the information and determine that Contractor clearly understands the requirements of the Contract. Documents shall be transmitted to Company under cover of formal contract correspondence utilizing Attachment J-6 Contractor/Supplier Cover Sheet. Contractor shall provide submittals listed on Attachment J-8 (Contractor / Supplier Submittal Register) as part of the Statement of Work.

8.3 Contractor shall submit all engineering data, work documents, samples, test/inspection reports, and shop drawings (herein called "data") listed on "Attachment J-8 (Contractor / Supplier Submittal Register)" for review in accordance with Attachment "J-6".

8.3.1 Refer to the Attachment J-8, (Review Period Column) for the Company required review period of data submitted by Contractor.

8.3.2 Each submittal of Contractor's data shall be signed by Contractor and accompanied by a letter of transmittal containing the date of submittal, Contract Number, and all pertinent information required for identifying and checking submittals.

8.3.3 Although Work may proceed on receipt of data with a Code "B" notation, Contractor must incorporate the changes indicated, resubmit for final approval Code "A" before release of materials or equipment for shipment can be approved by Company. Returned copies of data with Code "B" and "C" shall be resubmitted not later than ten days after the date of transmittal by Contractor of such copies of such data.

**9.0 CLEAN-UP, SAFETY, WORK RULES, AND REGULATIONS,**

- 9.1 Contractors shall perform the work in a safe manner and keep the work site in a clean condition in accordance with Attachment J-13, Health & Safety Requirements for Onsite Work and shall comply with all work rules and regulations

- 9.2 For Fire Protection Requirements refer to Attachment J-29.

#### **10.0 WASTE MANAGEMENT**

- 10.1 Contractor shall not collect or store debris. When debris piles are necessary for work the Contractor shall maintain the piles. This includes minimizing the volume and hazards associated with the material and disposal of the material as quickly as practicable.
- 10.2 Any waste generated, including sanitary waste and packaging material, shall be packaged by the Contractor in containers provided by the Company and removed from site by the Company.
- 10.3 All containers that collect liquid used oil from spills, leaks, or service shall be appropriately marked as "Used Oil."

#### **11.0 SECURITY**

- 11.1 For Security requirements while working on the PORTS Site the Contractor shall refer to Attachment J-15, Specification 01546 PORTS Site Security Requirements.

#### **12.0 QUALITY ASSURANCE**

- 12.1 Contractor shall be responsible for the performance of all quality assurance program criteria specified in Attachment J-16 Quality Assurance Requirements. The Contractor shall submit a Project Specific Quality Assurance Plan (QAP) within the time frame listed in the Attachment J-8 Submittal Register. The attached Exhibit 1 is the OSWDF PQAP, which flow down company QA requirements to the contractor. The contractor should consider the OSWDF PQAP when developing their Site Specific QAP. A corporate QAP and QC/Technician certification procedures shall be submitted with the bid proposal.
- 12.2 Contractor quality document(s) submittal shall be approved by the Company prior to activities affecting quality start. The Company may audit the Contractor 's quality program prior to initiating work.

#### **13.0 EXECUTION**

- 13.1 Contractor shall perform the Work in accordance with this Statement of Work. All contractual inquiries should be addressed to the Contract Administrator. Technical inquiries shall be addressed to the Contract Technical Representative in accordance with Attachment J-6.
- 13.2 Acceptance of Contract:
- 13.2.1 Acceptance will be dependent upon Contractor having completed and submitted as required, all deliverables associated with the Work, those deliverables having been accepted by the Company, and all condition, corrective action, non-conforming, and problem reports having been addressed and closed.

- 13.2.2 The Contractor shall verify and document that all deliverables have been received and that all requirements have been satisfied. Any nonconformance shall be just cause for rejection of the service provided and delayed payment until the supplier complies with the SOW.