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#### Introduction:

FirstEnergy Regulated Generation aims to foster a safe and secure environment for all employees, contractors and visitors. To that end, safety systems must be in place and work practices must support our vision for safety as a core value. Safety leadership, commitment and involvement by all personnel will drive the pursuit of an injury-free culture, where we control exposures for self and others.

These safety requirements shall be considered minimum standards applied to all construction work performed at FirstEnergy Regulated Generation Facilities. All Contractors are required to ensure that they and their employees, subcontractors, suppliers, vendors, and visitors, comply with the provisions of this manual. THE PROVISIONS OF THESE REQUIREMENTS SHALL BE STRICTLY ENFORCED.

These Contractor Safety Requirements are a supplementary document to all governmental rules, codes and regulations, and do not negate, abrogate, alter or otherwise change any provisions of those rules and regulations. It is understood that the ultimate responsibility for providing a safe worksite is the responsibility of the Contractor.

Contractors are reminded that FirstEnergy maintains its ownership rights over all safety manuals and training documents, etc. In the event the Contractor is investigated by Occupational Safety & Health Administration (OSHA) or any other government tribunal or agency, Contractor may not turn over any FirstEnergy property, including documents or manuals, unless authorized in writing by FirstEnergy.

#### **1.0 GENERAL**

Purchaser acknowledges and agrees that Contractor may have portions of the Work accomplished by subcontractors pursuant to written subcontracts between Contractor and such subcontractors. Contractor shall maintain all subcontracts at all times to be consistent with the terms or provisions of this document. Contractor shall be fully responsible to Purchaser for the acts and omissions of subcontractors and of persons directly or indirectly employed by them, to the same extent as it is for the acts or omissions of persons directly employed by Contractor. All subcontractors and personnel of subcontractors are to be instructed in the terms and requirements of Purchaser approved safety and regulations and shall be expected to comply with such regulations.

#### **Definitions:**

<u>Contractor Supervision</u>: is defined as personnel with responsibility for making site Work assignments and overall responsibility for the Work including, but not limited to, project manager, superintendent, general foreman and craft foreman. The craft foreman is an individual who oversees the Work typically being performed by up to ten (10) craft workers.

<u>Contractor Site Safety Coordinator(s)</u>: is defined as personnel dedicated to providing on site safety services as outlined in section 1.1.3. of this document.

Competent Person: An OSHA "competent person" is defined as one who is capable of

identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation and has the authority to correct them. Some standards add additional specific requirements, which must be met by the competent person.

<u>Job Safety Analysis / Pre-task (JSA):</u> A detailed 3-step analysis that helps eliminate or reduce risk and control exposures. This 3-step process breaks each task down into basic job steps, identifies existing and potential hazards associated with each step, and provides recommendations/procedures to eliminate, reduce, or control hazards, and the option of assessing potential severity.

Step One: Describe the operation to be performed in the sequence of the basic job steps.

Step Two: Identify the hazards or potential hazards at each step.

Step Three: Assess the risk the hazard presents or exposure to the hazard; describe how the exposure is controlled.

**Purchaser Representative(s):** The Purchaser Representative(s) serves as the primary interface between the Contractor, station personnel, and other corporate support functions. This individual is responsible for the oversight of contracted personnel to assure compliance with the contract documents (purchase order, specification and contract), field construction work and continuous monitoring of project safety.

#### **1.1 RESPONSIBILITIES**

## **1.1.1 CONTRACTOR RESPONSIBILITY**

Contractor shall take all necessary precautions for the safety and health of its employees and those of its subcontractors engaged in this Work, and shall comply with all applicable OSHA Standards and provisions of other Federal, State, and Municipal safety laws and Building Codes. The Contractor shall comply with all safety and health rules and regulations established by Purchaser, including, but not limited to, the safety and health rules outlined in Purchaser's Contractor Safety Orientation. The Contractor is **solely** responsible and accountable to ensure their personnel work safely, and Contractor management must enforce safe work practices. It is not the responsibility of Purchaser to supervise Contractor employees and subcontractors or certify equipment being used. For any job tasks or equipment operation requiring specialized certification or licenses (i.e. asbestos, crane, forklift, etc.), a copy of such certification and/or licenses shall be provided to the Purchaser Representative prior to performing said task/operation.

The Contractor shall designate a qualified person(s), acceptable to the Purchaser, to oversee site safety and health ("Contractor Supervision"). Contractor Supervision shall be at the job site at all times while Work is being performed. The name, position, and qualifications of Contractor Supervision must be provided to the Purchaser Representative prior to beginning work. Contractor Supervision shall have the FE Generation Personal Safety Manual on their person at all times, unless otherwise directed by FirstEnergy site management for reasons such as Foreign Material Exclusions (FME).

# **1.1.2 SAFETY TRAINING REQUIREMENTS / EMPLOYEE ORIENTATION**

#### FirstEnergy Regulated Generation Contractor Safety Orientation:

Contractor shall ensure that all personnel (including subcontractors) are given the FirstEnergy Regulated Generation Contractor Safety Orientation, prior to commencement of Work. Orientation content shall be obtained by accessing the SafetyPlusWeb website. There are two methods to receive orientation content:

- 1.) Preferred Method: Individual contract worker accesses the SafetyPlusWeb website and completes the orientation prior to arriving onsite.
- 2.) Contractor leadership or FE Rep conducts orientation in group setting by accessing SafetyPlusWeb. If this method is used, the Regulated Generation Contractor/Craft Safety Orientation Attendance Sheet (X-3920) and Knowledge Checks shall be used. Contractor shall email a copy of the Regulated Generation Contractor/Craft Safety Orientation Attendance Sheet (X-3920) to FieldServices@firstenergycorp.com and provide a copy to the Purchaser Representative. Knowledge checks shall be maintained by the Contractor.

The "FirstEnergy Regulated Generation Contractor Safety Orientation" shall consist of six modules: Module 1 (Basics plus site specific), Module 2 (Hazard Communication), Module 3 (Safe Work Practices), Module 4 (Clearance Control), Module 5 (Confined Space), and Module 6 (Environmental)

It is the responsibility of the Contractor to provide properly trained and qualified personnel to perform work under the contract. This includes training required by regulation (i.e. OSHA, etc.), general safe work practices, and all applicable hazards specific to the contracted Work. Training must be completed and documented prior to beginning Work. All training documentation must be available for review by the Purchaser upon request.

Frequency of orientation is addressed in FirstEnergy Regulated Generation Orientation Procedure- FGP-SAF-0054.

During the site safety and health orientation, Contractor Supervision shall conduct JSA/Pre-Task and hazard recognition training for all Contractor employees and subcontractors before beginning Work at Purchaser facility.

In addition to all training referenced above, at least one (1) member per shift of Contractor Supervision shall have successfully completed the OSHA 30-hour training for construction standards, as well as training (conducted at least annually) specific to hazards that may be encountered during the performance of their Work. Contractor shall provide documented evidence of successful completion to the Purchaser Representative.

NOTE: On a case-by-case basis, the station director or designee may waive the OSHA 30-hour requirement due to the nature of Contractor's Work (i.e. on a small two-person repair job).

#### 1.1.3 CONTRACTOR SITE SAFETY COORDINATOR (s):

FirstEnergy is committed to providing a safe workplace, and to drive this we have established the following requirements for education and training for the Contractor Site Safety Coordinator (s). Unless specifically exempted from this program by FirstEnergy, all Contractors and subcontractors shall participate in this program.

#### CONTRACTORS EXEMPTED FROM THIS PROGRAM

A Contractor company that is of the size that does not afford the employment of a dedicated Safety Professional within its organization, shall be vetted through FirstEnergy Contractor and Public Safety to ensure that policies and processes are in place to perform the Work safely.

The education and experience requirements for Contractor Site Safety Coordinators are as follows:

#### Lead, Site Safety Coordinator

#### Education and Training

Degree – Safety Discipline (Master's or Bachelor's) preferred OR

OSHA 500 Trainer Course for Construction with: Additional specialized training in: Fall protection, scaffolding, rigging, respiratory protection, confined space entry, inorganic arsenic, hexavalent chromium, industrial hygiene practices, electrical safety, OSHA competent person requirements etc.; OSHA 30 Hour Construction Standards Course *OR* 

Safety Trained Supervisor Certification (BCSP) with: Additional specialized training in: Fall protection, scaffolding, rigging, respiratory protection, confined space entry, inorganic arsenic, hexavalent chromium, industrial hygiene practices, electrical safety, OSHA competent person requirements etc.; OSHA 30 Hour Construction Standards Course

#### Work Experience

Site Safety Coordinator with a minimum of three (3) years of experience in safety in the power generation construction/maintenance industry combined with the Education and Training requirements above

OR

Superintendent, Craft Supervisor, General Foreman, Foreman with a minimum of five (5) years of experience in the power generation construction/maintenance combined with the Education and Training requirements above

**Supplemental, Site Safety Coordinator:** Each supplemental Site Safety Coordinator will report to the Lead Safety Coordinator:

#### Education and Training

Degree – Safety Discipline preferred. If possessing a Degree in a Safety Discipline with less than three (3) years of field safety experience additional training required: OSHA 510, OSHA 30 Hour Class and/or Safety Trained Supervisor Certification

#### OR

If no degree is possessed, the Site Safety Coordinator shall have at a minimum, completed the OSHA 30 Hour Class or the OSHA 510 and/or the Safety Trained Supervisor Certification and the appropriate work experience below.

#### Work Experience

A degreed professional who has completed an internship with the recommendation/approval of the FE Plant Safety Professional and/or the FE Plant Director combined with the Education and Training requirements above. *OR* 

Journeyman Craft with a minimum of ten (10) years of experience in the power generation construction/maintenance industry and with the recommendation and approval of the FE Plant Safety Professional and the FE Plant Director combined with the minimum training requirement of the OSHA 30 Hour Construction Standards course. It is preferable that this person has completed at least three (3) separate projects or outages at a FE Generating Facility

#### **Head Count**

Contractor shall provide, at a minimum, a separate on-site, full-time Contractor Site Safety Coordinator for each shift of Work where the total of Contractor employees and subcontractors exceeds twenty-five (25).

For projects or shifts that do not exceed twenty-five (25) Contractor employees and subcontractors, Contractor Supervision will assume responsibility for safety without need for a full-time Contractor Site Safety Coordinator, but must meet the following requirements:

- Direct support of Contractor's Corporate Safety Dept.
- Completed the OSHA 30 Hour class for construction.
- Additional training including the OSHA 510, OSHA 500 and/or Safety Trained Supervisor Board of Certified Safety Professionals (BCSP) is recommended.

Please note, the amount of dedicated safety professionals needed for a job site can depend upon familiarity and/or the scope of the work, and might exceed the number of Purchaser's safety professionals. The amount of and type of Contractor Site Safety Coordinators shall take these variables into account and be included in the Safe Work Plan as defined in 1.1.7. Purchaser may request Contractor to provide for a full-time Contractor Site Safety Coordinator for Work with fewer than twenty-five (25) craft personnel per shift, if Purchaser determines the nature of the Work justifies additional safety oversight.

Contractor shall provide Purchaser with the resumes of proposed Contractor Site Safety Coordinator(s). Purchaser will review the qualifications of each individual and notify the Contractor in writing of Purchaser acceptance/rejection of each individual prior to beginning Work.

#### **1.1.4 PRE-MOBILIZATION MEETING**

Contractor and Contractor's subcontractor representatives shall attend a pre-mobilization meeting to discuss, communicate, and assure compliance with appropriate safety and health procedures and requirements. This meeting shall be coordinated with the Purchaser Representative.

#### **1.1.5 ENFORCEMENT GUIDELINES**

It is not the Purchaser's responsibility to supervise, discipline or train Contractor employees and subcontractors. Contractor is solely responsible and accountable to ensure their personnel work safely and must enforce safe work practices. Contractor shall remain solely responsible for the proper and safe use of all its tools and equipment, and provide training and information necessary for safe work practices. Safety devices, such as guarding and roll over protection devices, shall not be removed from tools or equipment.

FirstEnergy Regulated Generation is committed to providing an incident free work environment. It is the responsibility of every person employed at FirstEnergy Corp. to always be safety conscious in the interest of ourselves, our families, our fellow employees, and the general public. Consequences of not adhering to our Core Life Saving Rules as defined below, may result in serious injury or death. As such, careless behavior or disregard for these rules is not acceptable.

# While all of our safety requirements were established to prevent injuries, the items listed below are so significant that any violation warrants immediate review and appropriate action.

Core Life Saving Rules:

Confined Space Entry: All confined spaces must be evaluated for hazards and classified before entry for Work or rescue activities.

Rigging/Lifting: Contractor employees and subcontractors shall not walk or work under a suspended load.

Arc Flash and Electrical Safety: Contractor employees and subcontractors shall wear personal protective equipment (PPE) and utilize electrical safety work practices when working on, or near, exposed electrical equipment/parts.

Fall Protection: Contractor employees and subcontractors shall utilize fall protection where there is a risk of a fall, as described in the applicable section of the FirstEnergy Generation Personal Safety Manual (GPSM).

Tagging/Clearance Program (lock out tag out): Contractor employees and subcontractors shall adhere to the Clearance Program which is mandatory to protect workers from all hazardous energy sources.

## Any individual found in violation of OSHA standards and/or any required site-specific rules or regulations is

<u>subject to removal from the site.</u> This includes any lack of safety performance, or unacceptable behavior, or work practices that place personnel at risk of injury, such as:

- Scaffold modifications made by anyone other than scaffold Contractor's Competent Person.
- Unsafe job performance.
- Failure to take or pass drug/alcohol test.
- Participating in pranks, horseplay or practical jokes.
- Failure to report injuries and/or accidents.
- Fighting or acts of aggression (i.e. workplace violence)

Removal from site applies to Contractor employees and subcontractors who violate the above rules, and/or Contractor Supervision that knowingly, willfully, overlooks or directs their employees or subcontractors to engage in activities that will result in a violation of these rules.

Dismissed Contractor employees and subcontractors shall be removed from all FirstEnergy Regulated Generation facilities for a period of time determined by FirstEnergy Field Services Management.

#### 1.1.6 DISCIPLINE

Contractor shall utilize (FGP-SAF-0054-12 - Contractor Removal Report), to report any Contractor employee or subcontractor who has been removed from the site for committing a safety, health, or security violation. The completed form shall be distributed <u>confidentially</u> to FE Station Management, FE Contractor Safety Representative and FirstEnergy Field Services Management. It is the Contractor's responsibility to notify any Contractor employees and subcontractors removed from the work site that they are prohibited from entry at any of the Purchaser's facilities for a period of time as determined by FirstEnergy Field Services Management. In addition, it is the Contractor's responsibility to notify the Contractor employee's union representative that a violation of an FE Safety Policy has occurred. FirstEnergy Field Services Management shall reserve the right to determine the affected Contractor employees and subcontractor's removal period applicable to all FirstEnergy Regulated Generation Facilities. (See Substance Abuse Compliance Policy, for specific instructions regarding substance abuse violations).

#### **1.1.7 CORRECTIONS OF SAFETY AND HEALTH VIOLATIONS**

Purchaser will notify Contractor of apparent safety and/or health violations and Contractor shall take all necessary steps to correct such violations. However, Purchaser assumes no responsibility or liability with reference thereto.

Contractor safety performance will be monitored and evaluated during the Work by Purchaser Representative(s). Purchaser may conduct random safety audits. Contractor shall cooperate fully with Purchaser Representative(s) during a safety audit.

Contractor shall immediately correct any shortcoming brought to the attention of Contractor by Purchaser. Purchaser shall have the authority to immediately stop any Work, which in the opinion of Purchaser constitutes a safety concern. It is Contractor's responsibility to undertake the necessary steps to satisfy Purchaser of remediation action to provide a safe workplace.

#### Safety Inspections:

The Purchaser Representative should initiate the weekly safety and health inspection, which is documented utilizing (FGP-SAF-0054-11- Contractor Walk Down). Contractor Supervision shall participate in all Contractor Walk Downs.

As established by the Federal, State or Local requirements, Contractor and their subcontractors shall conduct regular inspections of their work activities and implement corrective measures on any safe work practices or regulations.

#### Field Verification of Critical Controls (Safety Observations):

Applicable Contractors shall ensure that the proper critical controls are in place in an effort to prevent injuries and eliminate life changing events by conducting Field Verification of Critical Controls (FVCC). If controls are not in place, the job shall be paused until established. Verifications shall be made using the <u>Regulated Generation Field Verification of Critical Control Checklists</u>. The results of the required field verifications will be entered into Intelex which will provide reports for tracking and trending analysis.

Required number of field verifications are as follows:

- Contractor Superintendent 1 per week
- Contactor Safety Representative 2 per week
- Third Party FirstEnergy Representative 1 per week

# Safety Planning:

Planning for safety and health shall be a part of the overall management process and shall be Contractor's responsibility. Contractor shall implement a safety planning program that includes (at a minimum) the following:

- Daily job briefings
- JSA's/ Pre-task Analysis completion
- Weekly safety meetings
- Job Specific Safety Plan
- FE Human Performance Tools: Procedure Use and Adherence, Effective Communications, Effective Job Briefs, Questioning Attitudes, Self and Peer Checking including the 2-Minute Drill and STAR.

Contractor shall be responsible for maintaining all documentation and records of all safety meetings and shall make this information available to Purchaser upon request.

A Safe Work Plan as defined by either <u>FGP-SAF-0054-8</u> Job Specific Safety Plan Template or <u>FGP-SAF-0054-10</u> Contractor Job Safety Analysis, is required for all work performed at FirstEnergy Regulated Generation Facilities. Contractor employees and subcontractors shall be instructed to stop Work if a hazard is identified that was not anticipated and mitigated as a part of their Safe Work Plan. (Note: Contractor may use their own Job Specific Safe Work Plan format, however its content must meet or exceed that of the FGP-SAF-0054-8 Job Specific Safety Work Plan and it shall include an identification of the Risk Score from the "Regulated Generation Risk Management Business Practice- FGBP-SAF-0034" associated with each task).

The <u>FGP-SAF-0054-8</u> Job Specific Safety Plan Template shall be used for any Work that contains activities with a Risk Score of three (3) or higher in accordance with the "Regulated Generation Risk Management Business Practice- FGBP-SAF-0034" and for planned Work with a duration of more than five (5) days. Safe Work Plans completed to the standard of the FGP-SAF-0054-8 Job Specific Safety Plan Template should be submitted to Purchaser Representative a minimum of one (1) week prior to mobilization. For emergent Work, a mutually agreeable date for submittal of the FGP-SAF-0054-8 Job Specific Safety Plan Template between the designated Purchaser Representative and Contractor Supervision.

For all other Work, a Safe Work Plan that has equivalent content to "<u>FGP-SAF-0054-10</u> Contractor Job Safety Analysis" will be acceptable, unless otherwise specified by the designated Purchaser Representative. Regardless of which standard is followed, the Safe Work Plan shall be used in conjunction with the Regulated Generation Risk Management Business Practice- FGBP-SAF-0034. Safe Work Plans completed to the standard of FGP-SAF-0054-10 Contractor Job Safety Analysis shall be submitted to the Purchaser Representative prior to the start of Work.

Any deviation from the submitted Safe Work Plan shall be documented as a part of the job briefing process and attached to the original Safe Work Plan.

# 1.1.8 JOB SAFETY ANALYSIS (JSA) / HAZARD RECOGNITION

Contractor employees and subcontractors shall conduct a Job Safety Analysis/Pre-Task (JSA) review and accompanying hazard assessment for each job task. It is recommended that the Contractor use its own Job Safety Analysis/Pre-task (JSA), but if the Contractor does not have a process that meets or exceeds the Purchaser's Job Safety Analysis/Pre-task (JSA), the Contractor shall use FGP-SAF-0054-10 Contractor Job Safety Analysis form.

Should a hazard that is not listed on the FGP-SAF-0054-10 Contractor Job Safety Analysis form be recognized during the Work shift, Contractor shall implement measures necessary to make the Work site safe. Any sub-standard JSA processes observed or reviewed during the actual site Work shall be corrected immediately and retraining of Contractor's personnel shall be performed as necessary. Contractor shall implement a JSA review program, which includes Contractor Supervision review of JSA's. Copies of reviewed JSA's shall be made available for review by Purchaser Representative. If Contractor's personnel fail to comply with the JSA, Contractor shall take appropriate measures to correct the situation, which may include stopping the Work, taking disciplinary action to Contractor employees and subcontractors, or immediately removing Contractor employees and subcontractors from FirstEnergy Regulated Generation Facilities.

#### 1.1.9 NON-ENGLISH LANGUAGE PERSONNEL

In the event that Contractor or its subcontractors employ personnel with limited English speaking, reading, and/or writing abilities, Contractor shall take all steps necessary to ensure that personnel understand the scope of the Work they are to perform; the hazards associated with the Work; the necessary precautions to protect themselves from the Work hazards; and that they are able to perform the Work in a safe manner.

#### **1.1.10 REPORTING REQUIREMENTS**

The following is a detailed description of the safety reporting forms required for all contract Work at FirstEnergy Regulated Generation Facilities.

Contractor Supervision shall immediately report injuries, illnesses, near misses, and motor vehicle incidents to the Purchaser Representative. If the event requires outside medical responders, the control room shall be notified to coordinate emergency response personnel.

#### OSHA Form 300 – Log of Work-Related Injuries and Illness:

Contractor must submit a completed OSHA Form 300 to Purchaser upon request for at least the three (3) previous years. These forms must be legible and filled out completely, with the exception of column "B".

#### Third Party Vendor Prequalification:

Contractor may be asked by Purchaser to submit safety and insurance data to a third party. Should the Purchaser enter into agreements for these services, the Purchaser will expect full cooperation with the selected third party for these requests. Failure to submit data to Purchaser's third parties could lead to disqualification of Contractor for work on Purchaser's property. Data requests include, but are not be limited to, current insurance certificates, all safety data required to determine Contractor safety qualification as described in Section 3.0 Contractor Safety Standards of this document, and the reporting requirements included in this Section. Contractor shall verify qualifications of all subcontractors and document findings on FE Contractor Qualification Safety Information, Form X-3958 unless the subcontractor has subscribed to Purchaser's third party as a contractor under the Purchaser's account. FE Contractor Qualification Safety Information, Form X-3958 is to be submitted to the Purchaser's Representative after validating the subcontractor's status relative to Purchaser's safety requirements.

#### FGP-SAF-0054-3 - Contractor Orientation Attendance Sheet:

This form tracks Contractor employees and subcontractors who have completed the safety orientation. Submit completed form to the Purchaser Representative and maintain a copy onsite. This form is only required if utilizing Option 2 (Group Setting) as stated in section <u>1.1.2 of this document.</u>

#### FGP-SAF-0054-11 - Contractor Removal Report:

This form will be completed to report any Contractor employee or subcontractor who has been removed from the site due to a serious safety violation, controlled substance violation, core life saving rule violation, or security violation. Submit the form based on the routing instruction at the bottom of the page. Note: Since this form is also used to report anyone who is being removed for a substance abuse violation, please note that for substance abuse removals, the form must be sent confidentially, to the Field Services Department at: fieldservices@firstenergycorp.com.

**FGP-SAF-0054-12- Contractor Walk Down:** This form is to be initiated by the Purchaser Representative or designee and completed by Contractor along with corrective actions. All corrective actions must be documented on this form along with a date of completion.

#### **1.1.11 Contractor Incident Report Requirement:**

Contractor Incident Report [OSHA Recordable, Off Site Doctor Attended Injuries, Property Damage/Motor Vehicle Incidents, Near Misses, Minor Injuries (First Aid), Fire, Good Catches].

All incidents must be reported to the Purchaser Representative immediately. The Contractor must provide an initial update of the incident to their Purchaser Representative within twenty-four (24) hours on the Contractor's internal form. The Purchaser Representative will then initiate the electronic Contractor Incident Report through Intelex and the registered user for Contractor will receive an email from Intelex at the e-mail address of the Contractor identified as the contact for Incident Reporting.

The final incident report must be submitted through Intelex within five (5) calendar days of the incident. All pertinent training, statements, photographs, job briefs, etc. are to be attached within the Intelex report. For any recordable injuries/illnesses reported, be sure to also attach the OSHA Form 301, Injury and Illness Incident Report or equivalent. Contractors shall also attach a copy of the Contractor internal report.

#### 1.1.12 - Contractor Monthly Safety Log Requirement:

The Monthly Safety Log is used to report all on-site hours worked by contractors, at each power station (location). The safety log shall be completed on a monthly basis and submitted to Purchaser no later than the fifth day of the following month. Monthly Safety Logs are to be submitted even if no Work was performed on-site for that reporting period.

Monthly Safety Logs shall not include information about subcontractors. The Contractor must ensure that all subcontractors have submitted their Monthly Safety Logs through Intelex as well.

All Monthly Safety Logs shall be submitted through the Intelex Contractor Safety Application.

On the first day of each month, all registered users will receive a reminder email from Intelex at the e-mail address of the Contractor contact provided".

Note: A Monthly Safety Log is required by the FirstEnergy Contractor Safety Requirements. If you do not receive a reminder e-mail as indicated above, you are still obligated to log into the Intelex system and complete a Monthly Safety Log for each facility, no later than the fifth day of the month. E-mail contractorsafety@firstenergycorp.com with any questions.

#### To log in: https://contractorsafety.firstenergycorp.com/Login/Intelex

If Contractor is not currently registered in Intelex or you have technical issues, please send an e-mail to: contractorsafety@firstenergycorp.com requesting a registration form or assistance.

#### **1.2 SITE REGULATIONS**

## 1.2.1 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal safety and health equipment (e.g., hard hats, eye protection, respirators, electric arc/flame clothing and face protection, etc.) (PPE) necessary for proper protection of Contractor's employees and subcontractors shall be utilized in all required areas and shall be the responsibility of Contractor. High-Visibility outerwear (vest or equivalent) shall also be worn by all Contractor employees and subcontractors working outside around mobile equipment/vehicles. High visibility outerwear is not required at designated crosswalks and walkways or when vehicular/construction traffic is secured or barricaded. Refer to the Regulated Generation Personal Safety Manual (GEN-SAF-0001) for more details. All Contractor employees and subcontractors shall wear long sleeves rolled down when performing any hot-work, or when exposed to physical hazards such as trees, brush, hot steam lines, etc. At no time will PPE be loaned, sold or given to Contractor by Purchaser. All Contractor employees and subcontractors, including visitors, will carry standard issued gloves in areas where hard hats and safety glasses are required. Hard hats are to be worn brim forward, unless performing work specific tasks such as welding or grinding. Hearing protection shall be on their person and readily available for use **in all work areas, regardless of location.** Shaded or mirrored eyewear shall not be worn indoors.

#### 1.2.2 FALL PROTECTION

Fall protection requirements must be implemented and enforced when performing Work that exposes Contractor employees and subcontractors to a fall hazard of four (4) feet or greater. When personal fall arrest systems are utilized, 100% tie-off is required. Failure to tie-off when exposed to a fall that is four (4) feet or greater may result in immediate removal.

Personal fall protection systems shall be installed such that a Contractor's employees and subcontractors cannot free fall more than four (4) feet. Do not anchor to process piping, cable trays or other safety sensitive equipment.

Stepping, standing, walking, or working on piping or plant equipment is prohibited. Temporary work platforms, ladders or other means shall be considered in lieu of stepping, standing, walking, or working on piping or plant equipment.

#### Working on Roofs

Regardless of the distance from the leading edge, Contractors will use a standard guardrail or a personal fall protection system. Safety monitoring systems, in combination with warning line systems, are prohibited at FirstEnergy Regulated Generation facilities.

#### 1.2.3 HOUSEKEEPING

The Work site is to be kept in a safe and clean condition, as determined by Purchaser, as the job progresses and must be left in a condition that is neat, clean, safe and acceptable to Purchaser Representative at the completion of the Work. Contractor is responsible to barricade and identify danger areas and shall conduct its Work in such a manner that Purchaser employees and equipment are not jeopardized, injured or damaged.

#### **1.2.4 SITE VEHICLES**

Purchaser is not responsible for damages to Contractor's vehicles or to vehicles of Contractor's employees or subcontractors. Posted speed limits governing safe travel in and around the site shall be strictly adhered to. Purchaser shall have the right to inspect all vehicles. All personnel operating a vehicle on Purchaser Facilities must have a current driver's license.

All site construction vehicles must have audible back-up alarms and must be maintained in a safe operating condition. All occupants of construction vehicles must be properly restrained.

#### 1.2.4.1 Vehicles above 26,000-pound Gross Vehicle Weight Rating (GVWR)

Full compliance is expected with the "Contractor Large Hauling Vehicle Safe Work Requirements" document.". Drivers of vehicles above 26,000 pound Gross Vehicle Weight Rating (GVWR) must be a minimum of eighteen (18) years of age, meet DOT criteria described in 49 CFR 391.41 for physical examinations, and comply with the following while working on FirstEnergy Regulated Generation facility property for two (2) days or more.

- Annual driving record review documented and retained on file; Site Specific Orientation review (Driver Pamphlet) during the first visit each day; Initial driver training that is refreshed and documented every two (2) years; Observations, commentary drives, and additional monitoring; Rest breaks outside of the vehicle every four (4) hours during the first ten (10) hours of work and every two (2) hours thereafter.
- Pre-Use vehicle inspections that are documented and maintained for a minimum of ninety (90) days and include the following (in addition to requirements found in 29 CFR 1926.601(b) (14):
  - Gauges (fuel, etc.); Back-Up Alarm; Spill kit; Fire Extinguisher; Wheel Chocks; Windows/Mirror Condition; Fluid Levels (windshield washer, oil, hydraulic, etc.); Tire Condition; Frame/Suspension
- Compliance with Safety planning, job briefs, safety meetings, vehicle maintenance, communication, and any additional safe work practices as described in Contractor orientation material

In addition to OSHA requirements, Contractor employees and subcontractor's vehicles shall maintain, at a minimum, the following items:

• Back-Up Alarm (that is distinguishable above background noise levels in area of backing); functional gauges (i.e. fuel and speedometer); all manufacturer lights shall be functional; marker lights on top and backs of vehicles; driver and passenger side mirrors; windshield washer fluid; wheel chocks (minimum of one pair or equivalent means); fire extinguisher; and a spill kit

#### **1.2.5 POWERED INDUSTRIAL VEHICLES**

All Contractor employees and subcontractor's operators of powered industrial trucks (i.e., forklifts or other heavy equipment) on Purchaser Facilities must have a current driver's license. The Contractor must retain documentation of appropriate training in accordance with state and federal OSHA standards, Department of Transportation, and Department of Motor Vehicles codes and standards.

Contractor is responsible to meet all OSHA regulations pertaining to powered industrial trucks, mechanized equipment, motor vehicles, cranes, derricks and hoists which includes, but is not limited to, 29 CFR 1926 Subparts N and O.

Contractor shall maintain spill equipment materials on each industrial truck or near any stationary vehicles (i.e. cranes) and other vehicles brought on-site. The industrial trucks and vehicles shall be free of leaks and maintained in good condition. Leaking industrial trucks and vehicles shall not be brought on-site. All spills from industrial trucks and other vehicles shall be reported immediately to the Purchaser Representative. Daily documented inspections are required to assure the condition of equipment.

#### **1.2.6 ELECTRICAL HAZARDS**

Contractor's attention is called to the fact that there is high voltage energized facilities on the plant property (e.g., underground conductors, overhead lines, and numerous conductors in cable trays throughout the main facility). Contact with any exposed energized conductor, or exposure to electric arc flash, may produce serious injury or death. Contractor is responsible to instruct and supervise Contractor employees and subcontractors in such a manner to ensure effective protective measures are implemented. Upon Contractor's request, Purchaser will identify the energized facilities prior to commencing Work, and if at any time thereafter Contractor may have any doubt about whether the Work can be performed safely, Work will be stopped and necessary steps taken to ensure a safe work procedure.

## 1.2.7 OPERATING PLANT HAZARDS

Contractor's attention is called to the fact that there are high temperature/pressure piping and equipment; operating rotating equipment (e.g. pumps, cranes, and other equipment) and vehicle traffic on the Purchaser facilities property. Contractor is responsible to instruct and supervise all Contractor employees and subcontractors in such a manner to ensure Contractor employee and equipment safety. If at any time Contractor may have any doubt about whether the Work can be performed safely, Work will be stopped and necessary steps taken to ensure a safe work procedure.

No Contractor employees and subcontractors may walk on top of operating equipment such as: large fans, boiler structure and ductwork, or large Air Quality Control (AQC) equipment where falling into the equipment creates an immediate risk to life or health. This rule applies when the unit is on-line, or any time shortly after the unit is removed from service.

## **1.2.8 SANITARY FACILITIES**

Contractor shall be responsible for providing and maintaining toilet, washroom, change trailers, break areas, trash receptacles, and sanitary facilities for Contractor employees and subcontractors. The station facilities will not be available to Contractor or Contractor employees and subcontractors. Plans for the type of toilet and sanitary facilities must meet Purchaser approval prior to the commencement of Work and shall be maintained in compliance with governmental regulations.

#### 1.2.9 SCAFFOLDING

All scaffolding must be erected, maintained, and used in accordance with applicable OSHA standards along with site specific policies and procedures. The Contractor will be responsible to ensure all Contractor employees, subcontractors and agents working on scaffolding are properly trained and qualified as a Competent Person, erector/dismantler, or user. Scaffolding shall be inspected by a Competent Person prior to Work being performed on the scaffold and prior to Work each shift that scaffolding is utilized. Inspections shall continue for the duration of the period the scaffold is in use (defined as the start of erection to the final dismantling of the scaffolding). Contractor must notify Purchaser Representative when scaffolding is ready for inspection and shall incorporate a scaffolding inspection tagging system approved by Purchaser for all scaffold types.

Fall protection is required when exposed to a fall hazard four (4) feet or greater, including lead erectors. If fall protection is not feasible or poses a greater hazard, the Contractor shall stop Work and notify Purchaser Representative.

Contractor shall install swing gates on all scaffolds when feasible. When swing gates are not feasible, Contractor shall notify Purchaser Representative for review.

Scaffold ladders that exceed a twenty (20) foot vertical climb shall be protected by: fall protection systems utilizing an appropriate anchorage. This criteria is also applied to scaffolding that is erected on an elevated surface where access and egress ladders to any level of the scaffolding exposes individuals to a fall hazard of more than twenty (20) feet (i.e., duct work, elevated walkways, etc.). Breaking of a ladder to rest platform is acceptable from the ground to twenty (20) feet, however, it cannot be used when a fall hazard exists greater than twenty (20) feet for access and egress.

When constructing scaffolding platforms, the front edge of all platforms shall be located as close to the Work as reasonably possible, but in no circumstances, shall the front edge of platforms be greater than 12" away from the Work without proper fall protection.

If requested by Purchaser, and prior to the start of erection, Contractor shall submit a scaffolding design drawing (with appropriate Professional Engineer stamp) for review for each major installation of scaffolding.

#### 1.2.10 CRANE OPERATIONS

Contractors and subcontractors using cranes at FirstEnergy Regulated Generation facilities shall ensure that each crane is properly erected, inspected and used in a manner that complies with the various Federal (OSHA Subpart CC – Cranes & Derricks In Construction - 1926.1400), State and Local Agency and Industry specifications (ASME B30 standards) safety requirements, as well as FirstEnergy safety policies applicable to each facility.

#### 1.2.11 RIGGING PRACTICES

GEN-MNT-0002-01- Generation Rigging Checklist shall be completed for any lift not considered a simple lift. A simple lift is any lift that is less than or equal to 500 pounds and less than six feet total lift height and does not meet any Increased

Risk Lift criteria. The GEN-MNT-0002-01 -Generation Rigging Checklist along with a lift plan, shall be completed for any of the following:

- Under or near overhead electrical conductor as defined in the Generation Rigging and Lifting Manual GEN-MNT-0002 or when crane grounding is required.
- Two or more cranes/hoists lifting/transferring/moving a load or other complex lifts involving multiple picks.
- Weight within 10% of crane/hoist capacity or within 25% of the variable capacity of a mobile crane. OR sling angle is <45 degrees from horizontal on a load carrying leg
- Special handling required (unusual shape or size, highly radioactive, chemical hazard, susceptible to shock etc.).
- Load weight > 10,000 lbs. OR more than (4) rigging points OR rigging points below the center of gravity.
- As determined by FirstEnergy.

The critical lift plan shall be made available to the Purchaser Representative prior to making the lift. For all lifts, Barricades shall be established to prevent personnel that are not involved in the lift from entering the area. Suspended Loads SHALL NOT be left unattended unless specifically approved by the designated Purchaser Representatives.

A qualified Person in Charge (PIC) shall be designated by the contractor at the pre-job brief for all lifts that are not classified as a <u>Simple Lift</u>. The Contractor PIC be shall be qualified to perform rigging and lifting tasks and shall have received the FirstEnergy Contractor Rigging & Lifting PIC Training.

## 1.2.12 MATERIAL HANDLING

Contractor shall abide by all material handling provisions as outlined in the FirstEnergy Regulated Generation Material Handling document FGP-SAF-0026. Contractor shall obtain from Purchaser a copy of the FirstEnergy Regulated Generation Material Handling document FGP-SAF-0026.

## 1.2.13 WATERBLASTING AND VACUUM OPERATIONS:

Contractor shall perform all waterblasting and vacuum operations in accordance with WaterJet Technology Association (WJTA) industry best practices. Contractor shall utilize automated processes for waterblasting operations. Any deviation shall be established in writing explaining the justification for the deviation with precautions established. The deviation shall be reviewed and approved by FirstEnergy FE Rep and Site Safety Representative.

## **1.3 EMERGENCY PROCEDURES**

#### 1.3.1 PLANT PHONE SYSTEM

Contractor shall be familiar with and instruct Contractor employees and subcontractors on the use of the plant phone/paging system. Use of the plant phone system by Contractor employees and subcontractors shall be restricted to work-related business, and to inform the control room of emergency conditions (e.g., serious accidents, fire, equipment damage, malfunction, etc.). Horseplay involving use of the plant paging system will not be tolerated and violators shall be subject to immediate dismissal from the site. It will be Contractor's responsibility to remove any Contractor employees and subcontractors from Purchaser's property who violate this policy.

#### 1.3.2 FIRST AID

Contractor must make provisions for first aid services for Contractor employees and all subcontractors' employees. Contractor shall be responsible for proper management of any infectious waste generated by these activities.

## 1.4 CLEARANCE PROGRAM

## **1.4.1 CONTRACTOR RESPONSIBILITY**

Contractor shall obtain from Purchaser a copy of the FirstEnergy Regulated Generation Clearance Program. Contractor is required to understand their role in complying with the Purchaser's Clearance Program. Contractor will be assisted by the Purchaser Representative for all Clearance (lockout/tag out) activities. The Contractor will be required to familiarize Contractor employees, subcontractors and agents with the Purchaser's Clearance Program. Contractor employees and subcontractors must be familiar with Purchaser's Clearance Program prior to the commencement of Work.

Contractor Supervision shall be responsible for following the requirements of Purchaser's Clearance Program, including control of the Worker Signature Sheet – FirstEnergy Form 462 C.

#### 1.4.2 PERMISSION TO OPERATE EQUIPMENT

Contractor employees and subcontractors shall not operate any valves, electrical switches, or set in motion any machinery that is part of Purchaser's property without first obtaining approval and operating instructions from Purchaser or Purchaser Representative. This includes newly installed equipment being supplied by Contractor. This requirement does not apply to construction equipment and construction machinery supplied by Contractor, or equipment designated by Purchaser for Contractor's exclusive use.

#### 1.5 CONFINED SPACE

#### 1.5.1 CONTRACTOR RESPONSIBILITY

A copy of the Purchaser's Confined Space Program will be given to the Contractor. An agreement to train Contractor employees, subcontractors or agents about the Purchaser's Confined Space Program must be in place, with training completed, prior to the commencement of Work.

Contractor shall review all confined space classifications (i.e. permit required, alternate procedure, re-classified) with the Purchaser Representative prior to beginning Work. Contractor shall provide the following when working in a confined space:

- A Competent Person trained and responsible for determining acceptable entry conditions, capable of recognizing the hazards of a Permit Required Confined Space and able to specify necessary control measures to insure worker safety.
- Prior to entry into the confined space, Contractor shall provide all equipment and shall perform all atmospheric testing for oxygen, flammables and toxics, and for all subsequent monitoring.
- Purchaser Representative shall not perform atmospheric monitoring for Contractor other than initial monitoring
  used to determine classification of the confined space. Contractor shall supply monitoring equipment and shall
  monitor applicable confined spaces and maintain all required documentation.
- Upon request, Contractor shall provide air-monitoring results to the Purchaser Representative. Contractor shall not use Purchaser's atmospheric monitoring equipment.
- Contractor shall provide all equipment required to ventilate work areas.
- Contractor shall provide and install all barricades, signs, etc., required to identify confined spaces.
- Contractor shall provide all training of Contractor employees and subcontractors pertaining to confined spaces, as well as equipment Contractor employees and subcontractors may require (i.e., respirators, harnesses, etc.).
- Contractor shall be responsible for providing a confined space rescue team in compliance with all applicable OSHA standards for work conducted within a Permit Required Confined Space.

#### 1.5.2 CONFINED SPACE PLAN

Contractor must have in place a Permit Required Confined Space Program for the protection of Contractor employees and subcontractors from the hazards associated with the entry into confined spaces. Contractor requirements include:

Contractor's proposal shall include a specific plan as to how Work inside the confined space will be performed with respect to the confined space regulations. Contractor's plan shall include provisions to admit Purchaser Representative into the confined space for inspection of Contractor's Work.

## **1.6 FIRE PROTECTION**

#### **1.6.1 CONTRACTOR RESPONSIBILITY**

Contractor shall provide and maintain portable fire protection equipment for protection of all buildings, material, and equipment within the area. Where the possibility of serious fire might result, Contractor must inform Purchaser Representative and plant management before commencing Work and provide proper standby firefighting equipment.

Contractor shall furnish and maintain adequate fire protection for all temporary facilities on-site, including but not limited to, change houses, offices, tool trailers, shops construction equipment, trucks, etc.

Contractor employees and subcontractors engaged in flame cutting, welding, grinding, or any other hot work operation shall furnish and have available at all times during the performance of such operations, sufficient fire extinguishers, water hoses, fireproof blankets, etc. Contractor shall erect screens to protect any passersby from weld flash. All hot work shall be performed in accordance with all codes and regulations, including but not limited to, site requirements for permits for burning, welding and grinding. The Contractor is prohibited from welding, burning, cutting, brazing or performing other "hot work" without prior authorization (i.e., Hot Work permit) from the Purchaser Representative.

#### 1.6.2 FLAMMABLE STORAGE

Flammable and combustible liquids shall be stored in approved labeled containers meeting OSHA requirements. All use and storage must meet applicable governmental regulations and Purchaser safety regulations. Secondary containment shall be provided in accordance with best management practices. Purchaser Representative shall authorize locations and plans for all storage areas.

#### 1.6.3 OPEN FIRES

Open fires are prohibited. This includes, but is not limited to, the burning of trash and debris or other materials.

## **1.7 POTENTIALLY HAZARDOUS MATERIALS**

#### **1.7.1 AIR MONITORING AND SAMPLE ANALYSIS**

Contractor shall conduct the necessary on-site air monitoring either by third party, or qualified Contractor employees and subcontractors. Laboratory test analysis shall be performed by an independent third party company for Hazardous Materials when required to comply with site safety/health practices or applicable laws, rules, and regulations. Contractor, on a daily basis, shall post the results of all third party air monitoring. The results shall be posted at a minimum of three (3) locations: 1) the craft personnel site entrance; 2) change trailer; and 3) Hazardous Material Work area. The results shall be posted under the letterhead of the third party air monitoring company.

For off-site laboratory testing, the laboratory shall be accredited under the Laboratory Accreditation Program of the American Industrial Hygiene Association (AIHA) and as applicable; be licensed by the West Virginia Bureau of Public Health as an Asbestos Analytical Laboratory (if analyzing asbestos samples from West Virginia) and participate in the National Institute of Standards and Technology (NIST); National Voluntary Laboratory Accreditation Program (NVLAP) for Bulk Laboratories; or the AIHA's Bulk Asbestos Proficiency Analytical Testing Program. Evidence of said accreditation shall be provided prior to performing said monitoring. All third party air monitoring companies performing on-site analysis for fibers shall utilize sampling and analytical methods specified in Appendix A of 29 CFR1926.1101. A copy of all bulk and air (area and personal) sampling results shall be forwarded to Purchaser Representative upon request.

#### **1.7.2 WORK AREA INSPECTION**

After successful completion of Hazardous Material abatement (asbestos, lead, etc.) and any applicable clean air sampling, all involved Contractors, and their on-site craft labor union stewards shall inspect the Work area, before additional Work activities are permitted to begin in that area. Purchaser Representative shall attend this inspection.

Purchaser may provide an on-site independent Hazardous Material project industrial hygienist to audit Contractor compliance with this specification and the appropriate Hazardous Material regulations.

An insulation contractor shall have a Competent Person, as defined in the applicable OSHA regulations, on-site during asbestos removal projects. Contractor shall provide Purchaser with a certificate of Competent Persons training prior to the start of the Work.

For asbestos and lead enclosure work, Contractor shall install and maintain an adequate amount of observation windows to allow for inspection from the enclosure exterior.

#### **1.7.3 HAZARDOUS MATERIALS BROUGHT ONSITE BY CONTRACTOR**

Before being brought on-site, Contractor shall label all Hazardous Materials in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and shall provide Purchaser's Representative with two (2) copies of the following information for Hazardous Materials:

- 1. Complete list of all such materials;
- 2. Safety Data Sheet for each material

# 1.7.4 HAZARDOUS MATERIALS EXISTING IN WORK AREA

#### 1.7.4.1 Identifying the Presence of Hazardous Materials

Contractor shall determine whether, prior to or during the course of performing the Work, the presence of any suspected Hazardous Material exists in the Work areas. Contractor shall immediately notify Purchaser verbally and by letter to Purchaser upon discovering the suspected Hazardous Material stating such presence. Contractor, including any of Contractor's employees or subcontractors, shall not perform any sampling or testing of a suspected Hazardous Material without the prior knowledge and approval of Purchaser. Any testing performed shall be done by qualified personnel in accordance with all applicable laws, rules, regulations, and procedures. If the tests of the suspected Hazardous Material reveal that the material is indeed hazardous in its present condition, then Contractor will develop a program to address the manner in which these Hazardous Materials are to be handled, and shall review such program with Purchaser prior to implementation. This procedure shall in no way relieve Contractor of any responsibility regarding the use of, or the methods employed in handling any Hazardous Material. Contractor shall have sole responsibility for any Contractor employee and subcontractor record keeping including medical surveillance, and personal or area monitoring.

#### 1.7.4.2 Inorganic Arsenic

Contractor shall be aware that the potential for short-term occupational exposure to inorganic arsenic that exceeds the OSHA permissible exposure limit may exist in certain areas of Purchaser's property. These areas include boilers, gas ducts, stacks, and the entire fly ash system.

Activities that create this potential for exposure include, but are not limited to:

- a. Working in areas of high airborne dust and/or fly ash, and
- b. Grinding, welding, wire brushing, or grit blasting on surfaces in contact with flue gas.

Contractor shall be responsible for complying with all applicable federal, state, local and OSHA laws, rules, and regulations on this subject, and shall provide adequate protection for Contractor employees and subcontractors who are working within these areas.

Contractor shall submit a detailed procedure outlining their program for working in areas with the potential for short-term occupational exposure suspect of inorganic arsenic contamination.

Contractor shall limit exposure of Contractor employees and subcontractors to inorganic arsenic concentrations that exceed the OSHA permissible exposure limit, through safe practices. At a minimum, Contractor shall take the following precautions when performing Work where the possibility for overexposure exists.

- a. Isolate the Work area from all personnel.
- b. Post warning signs at all approaches to the Work area. These signs shall meet OSHA requirements.
- c. Clean fly ash accumulations from the Work areas as much as practical. Vacuuming and water washing are recommended means for cleaning. Shoveling or brushing may only be used where the recommended means are not practical or effective. The use of air blowing is strictly prohibited.
- d. Require Contractor employees and subcontractors to wear proper respiratory, skin, and eye protection at all times.
- e. Require Contractor employees and subcontractors to practice good hygiene.
- f. Review all aspects of the Work with Purchaser's Representative assigned to the job and notify Purchaser's Representative before each phase of the Work begins.

These precautions are not intended to diminish Contractor's responsibility to comply with all applicable federal, state, local and OSHA laws, rules, and regulations and those precautions outlined in their Work procedures.

#### 1.7.4.3 Lead

Contractor shall be aware that the potential for occupational exposure to inorganic lead exists while performing Work activities at the Purchaser's property.

Activities that create the potential for exposure include, but are not limited to:

- a. Manual demolition of structures, manual scraping, manual sanding, heat gun applications, and power tool cleaning without dust collection systems.
- b. Rivet busting, power tool cleaning without dust collection systems, clean-up activities when dry expendable abrasives are used, and abrasive blasting enclosure movement and removal where lead-containing coating or paint is present.
- c. Abrasive blasting, welding, cutting, and torch burning on structures where lead-containing coating or paint is present.

Contractor shall be responsible for complying with all applicable federal, state and local, laws, rules, and regulations concerning inorganic lead, and shall provide adequate protection for Contractor employees and subcontractors who may be exposed to lead.

When requested, Contractor shall submit a detailed written compliance plan addressing all elements specified in applicable OSHA regulations prior to disturbing any lead-containing material, unless a written negative initial determination is provided indicating that no Contractor employees and subcontractors will be exposed at or above the action level.

Contractor shall limit exposure of Contractor employees and subcontractors to inorganic lead concentrations through good work practices. Said practices should include, but not be limited to, local exhaust ventilation and power tool cleaning with dust collection systems.

#### 1.7.4.4 Chromium (Hexavalent)

Potential occupational exposures to chromium (hexavalent) may occur depending upon Work being performed by Contractor and include, but are not limited to, welding/cutting on chromium alloy steel or chromate painted steel, abrasive paint removal or other surface preparation on chromate painted surfaces, spray painting with chromate paints, boiler refractory removal, and Work tasks disturbing large amounts of fly ash.

- a. Contractor is responsible for conducting exposure assessments for Contractor employees and subcontractors.
- b. Contractor's work practices must comply with applicable OSHA hexavalent chromium standards, as well as any applicable environmental laws, rules, and regulations.
- c. Contractor shall provide, and require the use of, appropriate Personal Protective Equipment (including respirators) when necessary.
- d. All air monitoring and sampling analysis shall be conducted following approved methods. Said methods of monitoring and analysis must measure chromium (VI) to within an accuracy of plus or minus twenty-five percent (+/- 25%), and can produce accurate measurements to within a statistical confidence level of ninety-five percent (95%) for airborne concentration at or above OSHA's action level. OSHA ID-215 sampling method and analytical meets this requirement.

#### 1.7.4.5 Flue Gas Emissions

Typical flue gas from the combustion of fossil fuels will contain various components, including, but not limited to, carbon dioxide, methane, nitrous oxide, ammonia, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrochloric acid, hydrofluoric acid, sulfuric acid, particulate matter and volatile organic compounds. Contractor's personnel may encounter said flue gas when in the vicinity of boiler/ductwork leaks. Where appropriate, Contractor's employees and subcontractors shall be made aware of this possibility and be instructed on the hazards of flue gas. Additionally, respiratory protection shall be worn by Contractor employees and subcontractors when exposures can reasonably be expected to exceed OSHA and/or American Conference of Governmental Industrial Hygienists (ACGIH) limits/guidelines.

#### 1.7.4.6 Combustible Dusts

Combustible dusts are fine particles that could present an explosion hazard when suspended in air in certain conditions. A dust explosion can be catastrophic. Contractors must determine if the Work being performed will create a combustible dust hazard. Contractors must take action to prevent potential combustible dust hazards in the Work area.

If the Work being performed may create a combustible dust hazard, Contractors must contact the designated Purchaser Representative and reach an agreement on how the hazardous condition can be abated before Work can proceed. In areas where Work will be performed and the combustible dust hazard cannot be eliminated, the following must be followed:

- Any electrical equipment used in these areas must be Class II, Division II rated.
- Use only approved cleaning methods.
- Static electricity must be controlled through grounding and/or bonding of all equipment.
- Hot work permits must be strictly followed.
- Clean dust accumulations from the Work areas as much as practical. Vacuuming and water washing are
  recommended means for cleaning. Shoveling or brushing may only be used where the recommended means are
  not practical or effective. The use of air blowing is strictly prohibited.

#### 1.7.4.7 Coal Dust / Fly ash

Coal dust and fly ash may contain crystalline silica. Contractor is responsible for determining whether there is a potential for Contractor employees and subcontractors to be potentially exposed to crystalline silica above the OSHA permissible exposure limit and for supplying the appropriate respiratory protection. When feasible, engineering and administrative controls shall be implemented to reduce exposure.

• Clean fly ash accumulations from the Work areas as much as practical. Vacuuming and water washing are recommended means for cleaning. Shoveling or brushing may only be used where the recommended means are not practical or effective. The use of air blowing is strictly prohibited.

#### 1.7.4.8 Asbestos

Asbestos containing material may be encountered in many different forms throughout FirstEnergy Regulated Generation Facilities. Solid forms may include, but are not limited to, thermal system insulation (applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components), gaskets, packing, wiring, sprayed on surfacing materials, and roofing and flooring materials.

The location and quantity of some of this material may not be evident until it is discovered while performing the Work. Work activities in the vicinity of unknown, suspected materials shall be halted immediately. Contractor shall immediately notify Purchaser Representative. Work shall not continue until the material has been properly identified in regards to asbestos content. If the solid material contains asbestos, a FirstEnergy approved licensed asbestos contractor shall perform any necessary abatement and ensure the area is safe to work. FirstEnergy Regulated Generation Facilities considers it a serious violation of its work practices for unauthorized persons to handle asbestos. Such violations could be cause for immediate termination.

#### 1.7.4.9 Respirable Crystalline Silica

Contractor's work practices must comply with applicable OSHA respirable crystalline silica standards, as well as any applicable environmental laws, rules, and regulations.

Contractor shall submit a detailed written crystalline silica exposure control plan that identifies the sampling plan and implementation for the Work being performed on Purchaser's property. Contractor shall designate a Competent Person to implement the written exposure control plan and train Contractor employees and subcontractors on Work operations that may result in crystalline silica exposure and ways to limit such exposure.

Contractor shall limit exposure of Contractor employees and subcontractors to crystalline silica concentrations through good work practices including, but limited to, local exhaust ventilation and power tool cleaning with dust collection systems.

A copy of all bulk and air (area and personal) sampling results and communications shall be forwarded to Purchaser Representative.

#### 1.7.4.10 Limestone Safety

Crystalline silica containing respirable dust particles may be generated by handling limestone. Inhaling respirable dust and/or crystalline silica may aggravate existing respiratory system disease(s) and/or dysfunctions. Spilled materials,

where dust can be generated, may overexpose Contractor employees and subcontractors to respirable quartz-containing dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Do not dry sweep spilled material.

## 2.0 CONTRACTOR SUBSTANCE ABUSE COMPLIANCE POLICY

Controlled substances, alcohol, and associated paraphernalia are prohibited from the workplace and Purchaser's property. Contractor employee or subcontractor use, possession, or sale of controlled substances, alcohol, or associated paraphernalia while on Purchaser's property is prohibited, and will result in immediate removal from Purchaser's property.

Contractor agrees to comply with the current FirstEnergy Regulated Generation Contractor Substance Abuse Compliance Policy.

#### **3.0 CONTRACTOR SAFETY STANDARDS**

Contractor is advised that Purchaser requires Contractor to maintain a certain level of safety standards to remain an approved contractor for performing work at Purchaser's facilities. Unless otherwise modified by Purchaser, and in addition to Purchaser's other requirements, Contractor must demonstrate the following:

ltem	CRITERIA
Total Recordable Incident Rate(TRIR)	TRIR <= 3.0 and less than, or equal to, their published NAICS code TRIR
Documented Safety and	Contractor has a documented Safety and Health Program that meets OSHA
Health Program	Requirements
Substance Abuse Program	Contractor has a documented program meeting criteria of FirstEnergy
	Regulated Generator Contractor Substance Abuse Compliance Policy
OSHA citations	No repeat, willful, or criminal citations within past three years.
EMR	Experience Modification Rate <= 1.0