

ATTACHMENT 6 – Vegetation Management Job Hazard Analysis Submittal Instructions

Job Hazard Analysis Submittal Instructions

Contractors Name: _____

Master Agreement Number: _____

All Contractors will consider the Job Hazards on any projects that they compete for. Once a Contractor is selected for award, the Contractor's Job Hazard Analysis (JHA) must be submitted for BPA's review, before the Contract or Master Agreement is issued. The list below is not all-inclusive, and Contractors are solely responsible for the safety practices of its workers. Please address ALL of the following items in your JHA that apply to the type of projects and the work you will perform.

1. Compliance with all Federal and State rules and regulations
 - a. Assurance that company will comply with all Federal and State laws and regulations governing the type of work performed on the project.
2. Project Safety Meetings/Daily Safety Briefings
 - a. Job safety briefings at start of project - written documentation required.
 - b. Daily safety briefings (written documentation required) - including proper name and voltage of transmission lines, appropriate Minimum Approach Distances (MAD), and the need for Clearances or Hold Orders. When work commences on a different transmission line, another safety briefing will be conducted that covers all safety related issues including the SPECIFIC transmission line involved in the work, the proper voltage of the transmission line, and the MAD involved.
 - c. The Contractor will maintain written documentation of daily job briefings using BPA form F 6410.32e or an equivalent format approved by BPA. These reports will be made available to BPA upon request.
3. Incident/Injury/Near-Miss Reporting
 - a. The Contractor will maintain an accurate record of, and will immediately report to the Contracting Officer Technical Representative (COR) or the onsite BPA Representative in the manner prescribed by the latter, all cases of death, injury, occupational diseases, and near miss arising from, or incident to, performance of work under this contract.
 - b. For incidents that involve personal injury, illness, or property damage the Contractor will complete and file with the BPA Safety Organization through the COR, or onsite BPA Representative, BPA Form F 6410.15e, Contractor's Report of Personal Injury, Illness, or Property Damage Accident, within 5 business days of such an occurrence.
 - c. For incidents that DO NOT involve personal injury, illness, or property damage the Contractor will complete and file with the BPA Organization through the COR, or onsite BPA Representative,

BPA form F 6410.18e, Contractor's Report of Incident/Near-Miss, within 5 business days of such an occurrence.

4. Use of Personal Protective Equipment
 - a. List types of personal protective equipment appropriate for work being performed.
 - b. Qualified Line Clearance Tree Trimmers (QLCTT) will wear red hard hats. All other workers will wear white hard hats.
5. Use of Proper Fall Protection
 - a. List fall protection measures appropriate for work being performed.
6. Environmental Issues
 - a. Snake bites, bees, poison oak, heat stress, cold weather.
7. Chainsaw Safety
 - a. List all appropriate safety measures involved with chainsaw work.
8. Minimum Approach Distances (MAD)
 - a. How will Contractor ensure MADs are not violated?
 - b. Presence of overhead/nearby transmission lines.
 - c. Presence of nearby distribution lines.
 - d. Include MAD tables for QLCTT, Table G for persons other than QLCTT.
 - e. Use of Safety Watchers for bucket truck work, if necessary.
 - f. Are Clearances or Hold Orders required?
 - g. Use of laser rangefinders capable of determining heights and distances to determine height of trees.
 - h. Use of controlled felling methods – safety lines, winches, climbing and piecing out.
 - i. Describe methods used to ensure the safety of workers in the felling zone.
 - j. Only QLCTTs can work on trees that have potential to get into Zones A and B.
9. Communication
 - a. State how reliable methods of communication will be maintained between contract workers, Natural Resource Specialists (CORs), onsite BPA Representative, and BPA Transmission Line Maintenance workers. Communicating with CORs or on-site BPA Representatives is important.
 - b. QLCTTs must have fluency in the English language as well as the languages of Contractor workers under their supervision.

- c. Acknowledge that the Inspector has authority to temporarily stop work that presents a safety hazard and the Contractor is obligated to comply with that direction.
10. Qualification of Workers Used for Falling Danger Trees (QLTCC)
 - a. Assurance that properly qualified workers will be utilized when felling danger trees (QLCTT).
 - b. List the name of the QLCTTs that will be felling trees for your company. Names must be updated and resubmitted to the Contracting Officer if these names change.
 11. Hazardous Road Conditions
 - a. Steep narrow roads for vehicle and brush machine and navigation.
 - b. Condition of roads due to weather.
 12. Equipment Used on Site
 - a. List types of equipment to be used on site.
 - b. Include use of extender saws or long pole saws.
 13. Machinery Safety
 - a. The Contractor will ensure that no workers are exposed to injury from the unexpected or accidental startup or release of stored energy of equipment or machinery that is shut down for repair, maintenance or adjustment.
 14. Herbicide Application
 - a. Maneuvering on access roads, avoiding poles and guy wires.
 - b. Requirement to have Safety Data Sheets (SDSs) on site.
 - c. Assurance that herbicide applicators have the proper State permits/licenses to perform work with herbicides.
 - d. Use of respirators if required.
 - e. Spray will be directed downward, never up towards transmission line conductors.
 15. Mowers
 - a. Use of spotter/helpers.
 - b. Protection of guy wires/wood poles/tower legs.
 - c. Protection of workers from flying rocks/wood.
 - d. Protection of nearby vehicles or workers.
 16. Proper Fueling Procedures
 - a. No fueling under power lines.

- b. No fuel carried on body.
17. Fire Safety
- a. Knowledge of fire precaution levels and appropriate rules and regulations when fire precaution levels are raised.
 - b. Precautions used to prevent fires on rights-of-way.
 - c. The Contractor is responsible for carrying fire suppression tools.
18. Public Safety
- a. Explain measures that will be taken to protect the public (property owners, hikers, boaters, etc.).
 - b. Traffic control measures that will be taken to protect the public on roadways.
19. Handling Downed Conductor
- a. Contractors will never handle ungrounded downed conductors. The handling of downed conductor is to be accomplished ONLY by Qualified Electrical Employees using proper techniques. Until the conductor is properly grounded at the location where the work is to be performed and verified by a Qualified Electrical Employee, the Contractor will not handle the downed conductors.
20. Electrical Contact Protocol
- a. BPA recognizes that electrical hazards in the workplace pose a significant risk of injury or death to employees, and that the requirements in this document draw heavily from; OSHA, the National Fire Protection Association (NFPA 70E), electrical safety requirements for employee workplaces, and the National Electric Code (NEC), are necessary to provide protection from electrical hazards in the workplace.
 - b. In cooperation with the four Regional Burn Centers located in the BPA operating area, the BPA Safety Organization has established a Sulfur Hexafluoride (SF6) protocol to ensure that injured employees receive the best possible medical response to a SF6 gas incident. Under arced conditions, the gas is known to convert from its pure state into hazardous arc byproducts. These arc byproducts are toxic and corrosive and may cause chemical burns and pulmonary edema. This information is provided because the employee could have been exposed to these hazardous arc byproducts and the Safety Data Sheet (SDS) for pure SF6 gas may not address these potential exposure concerns.
 - c. Electrical contact is defined as any current flow through or across the employee's body or if any of the following is true:
 - 1. Burns or wounds;
 - 2. Interrupted or impaired breathing;
 - 3. The employee is not able to let go of a circuit or equipment;

4. Any neurological problems, including but not limited to tremors, shaking, numbness, difficulty balancing, difficulty walking, confusion, disorientation, speech difficulties, vision problems, bladder problems, or headache;
5. Pain lasting greater than 5 minutes.

d. Following any electrical contact injury immediately call 911, Emergency Medical Services (EMS) and initiate First Aid. Do not transport the injured employee, unless the accident occurred in a remote location (discussed below).

e. As it relates to Electrical Work only - Notify the BPA Dispatcher and inform them of the location [e.g., County, Latitude/Longitude – if known];

f. In case of electrical shock, the worker is advised to contact one of the Electrical Burn Centers that specialize in electrical shock accidents.

Note: Information for contacting the Poison Control Center is provided based on the health hazards associated with the use of SF-6.

g. Treating physicians are required to consult with the closest Regional Burn Center regarding treatment recommendation related to these types of incidents.

h. Legacy/Emanuel Medical Center, Portland, OR, Telephone: (888) 598-4232

i. Harborview Medical Center, Seattle, WA, Telephone: (888) 731-4791

j. Eastern Idaho Regional Medical Center, Burn Center, Idaho Falls, ID, (855) 863-9595

k. Intermountain Burn Center, Salt Lake City, UT, Telephone: (801) 581-2700

l. Poison Control Center (800) 222-1222

Immediately following your assessment, please update the BPA Safety Organization at (360) 418-2397. Hours of operation: Monday – Friday, 7 a.m. to 5 p.m. Please leave a voice message after normal business hours.

m. Remote Location Instructions. For work conducted in remote locations:

1. Supervisors will ensure that all employees are informed of procedures for summoning emergency medical services at their work locations.

2. While awaiting medical response, employees should stabilize and care for the injured (to the extent of their First Aid training). Do not attempt to move the injured person unless they are at risk of further injury from hazards at the scene or directed to do so by medical personnel.

n. Assist EMS personnel in arriving at the accident scene. If available, a crewmember may be sent to meet EMS at a main road crossing, intersection or landmark to have medical personnel follow them to the scene.