Electrical Storms

1 PURPOSE

This procedure provides direction to protect the workers, equipment, and facilities from hazards created by the presence of electrical storms.

2 SCOPE

This procedure applies to all functional areas, operations, projects, Geology, Exploration, and offices, including employees, vendors, visitors and contractors within the scope of the Integrated Management System (IMS).

3 DEFINITIONS

Definitions

Approved is certified to meet the minimum standards established by the HSLP Department. All equipment used in the COMPANY operations shall meet at least the American National Standards Institute (ANSI) standards, American Society for Testing and Materials (ASTM), or other international or local standards which comply with or exceed those standards.

Electrical Storm Alert is when an electrical storm is directly over the area and within 20 miles.

Detectors are approved portable or stationary detectors which are controlled and operated by trained personnel.

Personnel on the surface are personnel working on any area or terrain.

Refuge is a grounded building or any vehicle/equipment that offers protection from electrical storms.

Acronyms

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<tr>
<td>HMR</td>
<td>Management Representative</td>
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<td>HSLP</td>
<td>Health Safety and Loss Prevention</td>
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<td>IMS</td>
<td>Integrated Management System</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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4 ROLES AND RESPONSIBILITIES

Document Owner

HMR
Responsible Roles and Position-Holders

Contracts/Vendors are businesses performing a service for the COMPANY. They are responsible for ensuring their employees working on COMPANY sites know, understand, and comply with the requirements as outlined in this procedure.

All employees in any position, whether COMPANY or contracted employees working on any COMPANY site, are responsible for complying with the requirements as outlined in this procedure.

Supervisor/Foreman or Designee can be a COMPANY employee or a contractor/vendor working or traveling on any COMPANY site. They are responsible for training, and for the enforcement of all requirements, rules, and established guidelines as outlined in this procedure.

HSLP is any COMPANY employee working under and including the COMPANY Regional Director of HSLP. They are responsible for monitoring and periodically auditing this procedure for compliance.

5 DIRECTION

All employees, vendors, contractors, and visitors traveling/working on site shall comply with and ensure personnel accountability to the following requirements of this procedure.

General

All personnel on the surface shall be trained in alert, protection and evacuation procedures.

Communication of electrical storm alerts can be done by radio or other means.

The operating areas where there are outdoor personnel on the surface will have mobile units for refuge and evacuation.

All personnel on the surface or groups of personnel must have at least one communication radio when they are carrying out field work.

Detectors shall be worn or placed in appropriate locations and monitored by personnel specifically designated and trained in their use.

Employees shall remain inside vehicles or refuges until the storm is moving away and the area is no longer considered in an electrical storm alert.

Supervisors

Supervisors shall be aware of weather conditions and when there is a possibility of pending electrical storms.

Portable detectors shall be available and used as needed.

The Supervisor or designee shall inform his/her employees when there is an electrical storm alert and ensure that proper action is taken.

The Supervisor or designee shall take readings using their approved detector when lightning strikes are identified.
**Electrical storm alert**

Personnel on the surface will keep at least 300 feet away from any metallic structures that are not grounded and be prepared to seek refuge.

The supervisor will arrange for evacuation or refuge vehicles where personnel are working.

The equipment/vehicle operators will remain working in their cabs with the windows and doors shut except for:

a. Blast hole drills shall mast over and the operator stays in the cabs with the windows and doors shut.

b. Exploration drills shall cease drilling activities and seek refuge.

NO person shall remain in the open air. They shall seek immediate refuge and maintain radio communication.

All personnel will resume their work only when the alert is lifted.

Work can continue normally inside buildings with suitable grounding.

**Blasting Operations During Electrical Storms**

In the event of a lightning storm within the 20 mile electrical storm alert requirements, the area will be cleared and blocked as if it were a scheduled blast.

Blocks will be held until the shot can be safely detonated or the storm passes.

If a storm occurs during night shift, the production foreman in charge of the area will follow the blocking procedures until the storm has passed.

**Recommendations When No Refuge is Available**

If an employee is caught in the open and cannot get to a refuge:

a. Try to get away from open places.

b. Look for depressions in the land, except for rivers or ravines.

c. Put yourself in a squatting fetal position with hands on the knees.

d. Do not stand under trees or next to wire fences, high-voltage cables, or metallic objects.

e. If listening to music, turn it off.

Warning signs of possible electrical storm hazard is a tingling or tickling sensation or his/her hair stands on end.