BCSSGA gravelbc.ca

Emergency Stop Systems

CRITICAL PRACTICE

Plant operations are typically spread over a large area, with workers located in various positions.

If hazardous conditions arise in any part of a plant site, immediate action must be taken to shut down the facility to a safe state.

This protects the equipment, the environment and you.

Strategies and Procedures

Emergency Stop System (ESS)

All plants using the radio activated emergency stop system follow these operating parameters.

- Everyone must be trained on the ESS system including:
  - the purpose
  - use
  - testing and
  - the Conditions of Approval stated in the letter of acceptance from AB OH&S dated March 14, 2011.
- Radios are to be worn outside of your clothing.
- Radios are to be turned on at the start of your shift, and are to remain on for the duration of your presence at the plant.
- Everyone accessing the site shall carry a radio, or be accompanied by someone with a radio.
  - There are no exceptions.
  - Visitors authorized to be on site and wanting to use the ESS must be trained or be accompanied by a trained worker with a radio at all times.
- Each radio is tested at the start of every shift.
  - The test result is recorded in the Radio Emergency Shutdown Test Log, which is kept in the control tower.
- If a radio unit malfunctions during the shift, report the malfunction to the shift supervisor, and the radio will be replaced with one another.
  - The replacement radio is tested and the test result recorded in the log.
- At each new plant location, perform a perimeter test to ensure that the radios can communicate with the receiver unit in the control tower.
- When a crew member comes to the site with a radio from another plant, he shall identify himself to the control tower operator and then test his radio.

  - The control tower operator shall record the test in the log.

Radio Shutdown

Should an emergency shutdown be initiated the following procedure applies:

- → All workers will report to the Shift Foreman or his alternate immediately.
  - Assess the situation and, if necessary, lockout the plant.
- → If a worker is injured, follow the Emergency Response Plan and Incident Reporting Procedures.
- → Once the condition has been corrected, or in the event of an injury permission for re-start has been received from Management, the ESS system may be reset and operations resumed.
- → Before re-starting the plant after an ESS shutdown, everyone retests their radios and the ESS.

This system is for emergency shutdown purposes only and is not to be used as an alternative to other required safety measures such as Lockout when performing repair or maintenance.

ESS Test Procedure

- → The tower operator moves the spring-loaded switch from the run position to the test position, and holds it in the test position.
- → The tower operator informs everyone on the plant site an ESS test is underway.
- → The tower operator shall have each worker, individually, test their radio unit.
  - You hold the button in the test position and press the E-STOP button.
- → The horn should sound for 15 seconds.
- → The tower operator will notify the worker of the test results.
  - If the results were negative, the tower operator will tell the worker to check the radio.
  - If the results were positive, the tower operator will return the switch to the run position, which will reset the switch for the next test.
- → The tower operator will then proceed to the next individual until all individuals' radios have been tested.
- → The tower operator shall enter the results in the Radio Emergency Shutdown Test Log.

If a radio malfunctions during the test, the radio must be removed from service, the malfunction reported to the shift supervisor, and the radio replaced with a spare radio.

The replacement radio must be tested and the test result recorded in the log.