Emergency Response, Evacuation and Fire Prevention and Protection

Short description

This section provides a synopsis of the individual responsibilities, notification protocols and evacuation procedures designed to protect Centennial from loss caused by emergencies, disasters and fires.

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1 Objective and area of application

The objective of this section is to facilitate and organize Centennial management and employee actions to respond to unforeseen situations and conditions that may threaten Centennial employees, subcontractors, customers, visitors, business continuity or business assets from injury or loss due to emergencies or disasters.

Emergencies may be manmade or natural and may include the following:

- Fatal incidents, mass incident (hospitalization of 3 or more affected personnel)
- Outbreak / threat of an epidemic or pandemic
- Flood
- Hurricane
- Earthquake
- Volcano
- Tsunami
- Tornado
- Severe lightning or storm
- Power outage
- Fire
- Toxic gas or chemical release
- Explosion
- Civil disturbance
- Workplace violence
- Event that interrupt business operations
- Event that cause severe environmental degradation
- Events that would generate media coverage or could negatively impact the reputation of Centennial

This section also defines the responsibilities of Centennial facilities and project sites in developing localized and site specific emergency action and evacuation plans or shelter-in-place procedures that provide response and coordination ability with local emergency response organizations. The reporting of routine and / or non-emergency incidents shall be in compliance with Section 8 (Incident and Near Miss Reporting).

This emergency response, evacuation, shelter-in-place and fire prevention and protection section applies to all Centennial:

- Construction project sites
- Permanent office facilities
- Temporary office facilities

2 Superior and additional applicable documents

1000_GP_11_01_en_6.0 Global Policy on Health, Safety, Environment/Sustainability and Quality (HSEQ)

NFPA 10- Standard for Portable Fire Extinguishers

This section of the HSEQ Manual applies to all Centennial employees and subcontractors who are performing work in Centennial facilities and project sites. There may be more stringent requirements than this section as defined by specific State, local or contact specific requirements. If there is a conflict between this section and other applicable regulations, the more stringent will apply.

3 Definitions

The following definitions of terms are important for an understanding of this section.

Term	Definition
Centennial	All Centennial employees, joint venture employees, subcontractors and business partners
Emergency incident	An emergency or serious incident which, with a high degree of probability, will lead to significant public attention or requires a direct response from the company once it becomes known
Active	Web-based HSEQ management software for reporting and recoding incidents
DOT	Department of Transportation
HSEQ	Health, Safety Environment and Quality
SSR	Senior Site Representative
PSM	Project Safety Manager
PSO	Project Safety Officer
PM	Project Manager
PASS	Pull, Aim, Squeeze, Sweep method for use of a portable fire extinguisher
ROM	Regional Operations Manager
SMS	Short Message System
HSEQ Director	Leads the HSEQ Team

4 Notification and reporting of emergencies

The process for notifying employees and others affected by an imminent or ongoing emergency shall be:

- Understood by all employees
- Is distinct and recognizable
- Is properly maintained and functional

The Centennial internal process and structure for reporting an emergency is:

1. PSO or Centennial employee learns of an emergency
2. PSO or Centennial employee evacuates if in immediate danger
3. PSO or Centennial employee notifies local emergency responders as necessary
4. PSO notifies the SSR and PSM
5. SSR notifies the ROM, PSM notifies the HSEQ Director
6. HSEQ Director notifies legal and executive management as required
7. HSEQ staff inputs the incident in Active

5 Emergency incident response to media and the public

All employees have a responsibility to protect Centennial's image and goodwill with the public as well as its affiliated parent companies. All interviews, media publications and public presentations require the approval of Centennial Executive Management prior to release in accordance with the Centennial Code of Conduct.

6 Emergency evacuation and shelter-in-place planning

Events that may require a Centennial facility or project site to be evacuated include fires, explosions, floods, earthquakes, hurricanes, tornadoes, toxic material or chemical releases, radiological & biological accidents, civil disturbances or workplace violence.

In the event of a present or ongoing emergency the following individuals may initiate an evacuation or shelter-in-place directive of a Centennial facility or project site:

- Local authorities
- Customer
- ROM or SSR
- PM or Superintendent
- PSO
- PSM
- Centennial employee
- Subcontractor employee
- HSEQ Director

When initiating an evacuation of a facility or project site due to a pending or potential emergency the evacuation decision will be coordinated through the local ROM/SSR and the PSM. These individuals will jointly make an evacuation decision based on an assessment of the situation to determine whether an actual emergency exists that requires activation of the emergency response and evacuation procedures. If the evacuation order is given, no one is permitted to return to the project site or facility until advised by the ROM/SSR or PSM.

The term, shelter-in-place, means to seek immediate shelter and remain there during an emergency rather than evacuate the area. It is always preferred to evacuate however, shelter-in-place may be used when an evacuation is not safe. Certain events may necessitate the initiation of the Centennial shelter-in-place protocol.

Events that may necessitate a shelter-in-place decision include, but are not limited to:

- Release of chemical, biological or radiological contaminants
- Violent persons or “active shooter”
- Severe weather
- Natural disaster that will not permit evacuation

Local authorities may issue a shelter-in-place notification by way of:

- Radio
- Television
- Emergency Alert System (EAS)
- “All call” telephoning (reverse 9-1-1)
- Warning signal or alarm
- Text alert

6.1 Centennial facilities

Each Centennial facility will develop a localized written emergency response, evacuation and shelter-in-place plan including the specific potential emergencies that are applicable to its geographic location. The ROM or SSR will assign a Centennial employee as the facility manager who will manage and implement the emergency response and evacuation plan.

The facility emergency response and evacuation plan will include the following minimum elements:

- Process for reporting emergencies discussed in section 4 of this procedure
- Process developed for shelter-in-place
- Emergency escape procedures and route assignments such as floor plans, workspace maps and potential safe refuge areas
- Methods for alternative communications including the SMS system
- Emergency contact information including
    - Address of the facility
    - Local emergency responders phone numbers
- Employees who have specific responsibilities in emergency response
    - Fire extinguisher operations
    - Initiating mass notification or alarms
    - Critical business operations
    - Rescue and medical duties
- Designated on or off-site location(s) for safeguarding and storing of essential records and documents

In the case of a Centennial facility closure, timely notification is very important. The SSR will make the decision on closing a facility and shall immediately notify the PSO and PEX. The SSR and PSO will communicate the closure to the office staff, and the PSO will contact the Regional HSEQ Manager. The Regional HSEQ Manager will contact the HSEQ Director and the PEX will inform Executive Management. In most cases this will occur by email and multiple steps can be accomplished simultaneously. The same process will be utilized to notify the staff and management of the facility re-opening.

6.2 Centennial project sites

Centennial project sites will develop site specific emergency response and evacuation procedures. The project superintendent is responsible for developing and managing the specific emergency response and evacuation procedures for the projects under his or her operational control. The Centennial project superintendent shall perform the applicable pre-emergency response and evacuation planning tasks before starting field activities including coordination of emergency response with onsite parties, the facility, and local emergency-service providers as appropriate.

Pre-Emergency Planning activities performed by the project superintendent include:

- Review of the facility or installation emergency and contingency plans where applicable
- Determine what onsite communication equipment is available (two-way radio, cell phones, air horn)
- Determine if offsite communication equipment is needed (in sensitive areas)
- Confirm and post the “Emergency Contact Information Posting” page (Appendix 1) with the route to the nearest hospital and occupational clinic
    - Address of the project site
    - Centennial point of contact (including phone number) for emergency response
    - Local emergency responders phone numbers
- Communicate the information to onsite personnel and keep it updated during initial project site orientations and periodically as needed
- Review changed site conditions, onsite operations, and personnel availability in relation to emergency response procedures
- Communicate emergency procedures for personnel injury, exposures, fires, explosions, releases, severe weather and other potential likely emergencies
- Rehearse the emergency response plan before site activities begin. This may include a “tabletop” exercise or an actual drill depending on the nature and complexity of the project. Drills should take place periodically but no less than once a year
- Brief new personnel on the emergency action plan as part of the new employee or newly assigned employee orientation
- Continually evaluate emergency response actions and initiate appropriate follow-up or corrective actions
- Designate assembly and refuge areas
- Utilize the visitor sign-in sheet located in the project safety binder for project site accountability
- Establish procedures developed to account for individuals associated with the project site including
    - Centennial employees
    - Subcontractors and lower tier contractors
    - Vendors
    - Customers
    - Guests or jobsite visitors

In the event of a major medical emergency the project superintendent or a person designated by the project superintendent will direct and lead arriving outside emergency responders to the emergency scene. Dependent upon the nature of the emergency, weather and/or localized site conditions roadways as designated on the posted route to the nearest hospital will be used for routes of medical evacuation.

6.3 Employee emergency response and evacuation training

Employees will be educated and trained in the emergency response and evacuation procedures upon initial hire, when the plan or procedure is changed, when new materials or equipment are introduced, if the facility layout or design is changed and whenever employees are assigned to a new facility or project site location. Training may include emergency response and/or evacuation drills and practice scenarios.

Employees will be trained in the following emergency response and evacuation topics:

- Individual roles and responsibilities
- Threats, hazards and protective actions
- Notification, warning and communication procedures
- Emergency response and escape procedures
- Evacuation, shelter and accountability procedures
- Location and use of emergency equipment
- Cardio-pulmonary resuscitation and first aid procedures
- Fire extinguisher locations and proper use

6.4 Accountability of personnel

Accounting for employees following an evacuation is essential and any delay or confusion could lead to unnecessary injury, death and /or potentially dangerous rescue attempt operations for first responders.

To eliminate this, Centennial will ensure that all facilities and project sites:

- Have designated assembly areas and rally points for employees, subcontractors and others affected to gather after evacuation
- Take a head count for accountability after the evacuation
- Identify the names and known locations of anyone not accounted for and communicate this to first responders
- Establish a method to account for non-employees such as suppliers and customers

7 Fire prevention and protection

Facilities of all types, while under construction, renovation or demolition, are more susceptible to fire and at greater risk of the effects of fire. A wide variety of ignition sources generated during and through the construction process increases the likelihood of a fire starting and rapidly spreading.

Prevention is the most effective tool against fires on Centennial project sites and within facilities. Employees and subcontractors shall be aware of common fire hazards in their respective work areas and take the appropriate steps to eliminate potential sources of ignition. The greatest potential fire hazards on Centennial project sites and facilities include smoking, hot work and open flames, portable heating devices, accumulated combustible materials and the storage and use of flammable liquids or gases.

The Centennial superintendent, PSO or PSM in conjunction with supervisors, will conduct a hazard assessment of each work area to identify potential sources of ignition and fire hazards that may expose Centennial or subcontractor employee property to injury or loss.

7.1 Fire hazard groups

Fires are classified into five groups according to their sources of fuel. These five fire classes are shown below:

- Class A: ordinary combustible materials such as wood, paper, cloth and some rubber and plastic materials
- Class B: flammable or combustible liquids, flammable gases, greases and similar materials and some rubber and plastic materials
- Class C: energized electrical equipment and power supply circuits and related materials
- Class D: combustible metals such as magnesium, titanium, zirconium, sodium, potassium and lithium
- Class K: cooking oils and greases such as animal fats and vegetable oils

7.2 Portable fire extinguishers

Portable fire extinguishers are designed to apply an extinguishing agent that will cool burning fuel, displace or remove oxygen, or prevent the necessary sustained chemical reaction needed to support a fire. Centennial employees or subcontractors shall never place themselves at risk in an attempt to combat an uncontrolled or unmanageable fire. Fire extinguishing methods should only be used if the fire is small and contained or fighting a fire is necessary for self-rescue.

Portable fire extinguishers are designed to extinguish different types of fires. The three most common types of fire extinguishers are: air pressurized water, carbon dioxide (CO2), and dry chemical.

7.2.1 Pressurized water extinguishers

These types of portable fire extinguishers are designed to extinguish Class A fires comprised of ordinary combustibles. See section 6.1 for specifics on Class A fires.

7.2.2 Carbon dioxide (CO2) extinguishers

These types of portable fire extinguishers are designed to extinguish Class B and C fires comprised of flammable liquids or energized electrical equipment. See section 6.1 for specifics on Class B and C fires

7.2.3 Multi-purpose dry chemical

These types of portable fire extinguishers are designed to extinguish Class A, B or C fires. See section 6.1 for specifics on Class A, B and C fires. These types of portable fire extinguishers are the most common type used on Centennial project sites or facilities.

7.2.4 Portable fire extinguisher inspections and maintenance

All portable fire extinguishers shall be inspected and maintained in accordance with NFPA 10-Standard for Portable Fire Extinguishers. The Centennial project superintendent shall be responsible for required inspections and maintenance of all Centennial portable fire

extinguishers on his or her project site. Centennial assigned facility managers will ensure that inspections and maintenance are completed on all portable fire extinguishers located in Centennial facilities. Subcontractors are required to maintain their fire prevention equipment as required.

7.2.5 Portable fire extinguisher training

Centennial conducts employee training on the basic elements necessary to sustain fire and the selection, use and maintenance of portable fire extinguishers.

The specifics of this training include:

- The classes of fires
- The types of portable fire extinguishers
- The basic rules for fighting a fire
- Portable fire extinguisher use (PASS)
- Required inspections for portable fire extinguishers
- Required maintanence for portable fire extinguishers

8 Flammable liquid storage and use

Only approved containers and portable tanks shall be used for storage and handling of flammable liquids. Approved safety cans or DOT approved containers equipped with a spark/flame arrestor shall be used for the handling and use of flammable liquids in quantities of 5 gallons or less, except that this shall not apply to those flammable liquid materials which are highly viscid (extremely hard to pour), which may be used and handled in original shipping containers. For quantities of one gallon or less, the original container may be used for storage, use and handling of flammable liquids.

All sources of ignition shall be prohibited in areas where flammable liquids are stored, handled, and processed. Suitable “NO SMOKING, MATCHES, or OPEN FLAME” signs shall be posted in all such areas. Flammable liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.

8.1 General requirements for flammable liquid storage and use

Below are the general requirements for the storage and use of flammable liquids on Centennial project sites:

- At least one portable 10lb ABC fire extinguisher shall be provided on all tank trucks or other vehicles used for transporting and/or dispensing flammable liquids
- Service or refueling area shall be provided with at least one 5lb ABC fire extinguisher and located so that an extinguisher shall be within 100 feet of each pump, dispenser, underground fill pipe opening, and lubrication or service area
- Category 1 or 2 flammable liquids or Category 3 flammable liquids with a flashpoint below 100°F (37.8o C) shall be kept in closed containers or tanks when not in use
- Employees and subcontractors shall guard carefully against any part of their clothing becoming contaminated with flammable fluids. They shall not be allowed to continue work if their clothing becomes contaminated, and they must remove or wet down the clothing as soon as possible

- No flammable liquid with a flash point below 100°F shall be used for cleaning purposes or to start or rekindle fires
- Ventilation adequate to prevent the accumulation of flammable vapors to hazardous levels shall be provided in all areas where flammable liquids are handled or used
- Flammable liquids in quantities greater than that required for 1 day's use shall not be stored in buildings under construction
- Unopened containers of flammable liquids, such as paints, varnishes, lacquers, thinners, and solvents, shall be kept in a well ventilated location, free of excessive heat, smoke, sparks, flame, or direct rays of the sun
- Where liquids are used or handled, provisions shall be made to promptly and safely dispose of leakage or spills
- Quantities of flammable liquid in excess of 25 gallons shall be stored in an acceptable or approved cabinet
- Storage of containers (not more than 60 gallons each) shall not exceed 1,100 gallons in any one stockpile or area. Stockpiles or groups of containers shall be separated by a 5-foot clearance. Stockpiles or groups of containers shall not be nearer than 20 feet to a building
- Lamps, lanterns, heating devices, small engines, and similar equipment shall not be filled while hot: these devices shall be filled only in well ventilated rooms free of open flames or in open air and shall not be filled in storage buildings
- Stockpiles of flammable liquids shall be kept free of weeds, build up of grasses, debris and other combustible materials not necessary to storage
- At least one portable fire extinguisher, having a rating of not less than 20-B units, shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage of more than 60 gallons of flammable liquids
- At least one portable fire extinguisher having a rating of not less than 20-B units shall be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside

9 Amendment history

Date	Version	Revised content
04.03.2014	1.0	Initial Preparation
06.20.2016	1.1	Addition of paragraph 8 and 8.1- Flammable liquid storage and use
01.01.2018	2.0	Updates to Paragraph 2 Superior Documents to add the Group Policy and Global Standards, Paragraph 3 Definitions (Centennial), Paragraph 4 Notification and reporting of emergencies (process), Paragraph 6 Emergency evacuation and shelter in place planning (initiation), Paragraph 6.2 Centennial projects sites (occupational clinic posting), Paragraph 7 Fire prevention and prevention (assessment) and Appendices 1-3 (logo)
04.01.2021	2.1	Updates to Paragraph 2 Superior Documents and Paragraph 6.1 for office closures

10 Appendix

Appendix 1: Emergency Action Plan (0206500_CP_11_18_en_A1.1)

Appendix 2: Emergency Contact Information Posting (0206500_CP_11_18_en_A2.1)

Appendix 3: Emergency Response and Evacuation Checklist (0206500_CP_11_18_en_A3.1)