



# Fire Prevention and Protection Plan

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## **PURPOSE**

The Reed College Fire Prevention and Protection Plan is a document that sets fire safety standards for practices, policies, and procedures to facilitate the college community's ability to conduct safe operations and to ensure regulatory compliance. The purpose of the Plan is to provide standards to safeguard life, health, property, and public welfare.

## **SCOPE**

This Fire Prevention and Protection Plan covers all employees, students, and visitors at Reed College. The objective of the Plan is to provide one comprehensive fire prevention and safety document for the campus community to reference in order to ensure safe practices are implemented. In some instances, more specific building and department plans are implemented. Building/department specific plans are further detailed below within the Fire Prevention portion of this plan.

## **REFERENCES**

- Occupational Safety and Health Administration (OSHA). 29 CFR 1910.38(a). Employee Emergency Response Plans and Fire Prevention Plans.
- Oregon Occupational Safety and Health Administration (OR-OSHA). Oregon Administrative Rules (OAR). 437-002-0043. Fire Prevention Plan. 2000.
- Oregon Fire Code 2014 Chapter 4. Emergency Planning and Preparedness

## **RESPONSIBILITIES**

### **A. Environmental Health and Safety (EHS)**

Environmental Health and Safety is responsible for promoting regulatory compliance with Oregon Fire Code and OSHA standards for Reed College. EHS will serve as the custodian of all documents required by the Plan and provide fire/accident investigation, hazard mitigation, general safety, and consultations and technical support for the Reed Community.

### **B. Facilities Services**

Facilities Services monitors the fire protection testing and maintenance programs and assists in fire/accident investigation.

### **C. Deans, Directors, VPs**

Chairs, Directors, and VPs are responsible for ensuring that a fire and safety policy and evacuation plan is established for their organization. The fire Prevention and Protection plan should be specific to their operation to ensure compliance with this plan and all applicable codes, as well as ensuring all staff receives adequate fire and safety training.

#### **D. Managers and Supervisors**

Managers and supervisors are responsible for ensuring all Reed and department fire prevention and protection plans are implemented, and all staff is aware and trained on the policies and evacuation.

#### **E. Employees**

Employees are responsible for understanding the hazards involved in their occupation. They must be familiar with all safety precautions, location and use of fire protection and safety equipment, and know the fire prevention and protection for their area.

### **RESPONDING TO A FIRE**

**First, call 911.**

**Then, call Community Safety:**

**On campus at ext 6666**

**Off campus at 503-788-6666**

When making telephone calls to report an emergency, do so from a safe location. Give the following information to local emergency responders.

- Your name.
- Company name (*Reed College*).
- Type of emergency (*chemical release, fire, medical, etc.*).
- Address of the facility (*3203 SE Woodstock Blvd.*).
- Cross street (*depending on your location this could be Botsford Drive, 28th, Reed College Place, etc.*).
- The exact location of the emergency (*Building name, room number, specific address*).
- Number of injured.
- Severity of the emergency.
- Call back phone number (*either the main switchboard 503-771-1112 or the phone number you are calling from*).

You must relay this information to Community Safety immediately as well so that they can meet the emergency responders and direct them to the appropriate location.

Do not hang up until you are sure no further information is required, unless there is an immediate threat to your safety. Other important numbers follow in the separate emergency procedures guide.

#### **A. Escape Procedures and Escape Route Assignments**

Each building on campus has evacuation maps/assembly point instructions posted in conspicuous locations. Every employee receives a copy of the *Reed College Emergency Procedures* located in the Reed College Faculty and Staff Directory. These procedures explain the expected steps to follow in case of building evacuation.

All employees shall:

- Review the building evacuation map for their work area.
- Know the location of the nearest exits.
- Know the designated assembly point for each building they frequent.

When a fire alarm sounds, everyone must evacuate immediately and go directly to the designated assembly area.

Reed College Emergency Procedures provide the following instructions for evacuees:

- Evacuate when the alarm sounds.
- Follow the evacuation plan posted in their building.
- Assist those with disabilities.
- Last one out shuts the door.
- Do not use elevators.
- Move at least 300 feet from building to designated assembly point.
- Do not re-enter the building until instructed by Community Safety.

Supervisors should make sure all personnel in their work area have left before exiting the work area.

## **B. Mobility Impaired**

During an emergency evacuation, it is preferable for someone to remain with and assist a non-ambulatory person if they can do so without endangering their own life. If means to evacuate are not available, shelter in place within a stairway or fire protection corridor and await rescue.

## **C. Procedures for Critical Plant Operations**

Only designated individuals thoroughly trained in the emergency shut down procedures of critical equipment or processes will remain behind during an evacuation of the facility. All other employees will evacuate immediately.

Individuals who shut down critical equipment or processes will only do so if they can do the shutdown safely. If the critical equipment or process is involved in the emergency or is in the hazard area, **everyone** must evacuate the area immediately. This includes those designated to remain behind during an evacuation of the facility and operate the critical equipment or processes.

Individuals designated to shut down critical equipment or processes will receive

additional training from their immediate supervisor.

#### **D. Procedures to Account for All Employees after Evacuation**

Once everyone has safely evacuated the building and personnel have assembled at the designated area, each work area supervisor will account for their personnel. If an employee is missing, and thought to have been in the building, the supervisor will report the possible location of the missing employee to Community Safety or local emergency responders.

Because of the nature of activities at a college, it is not always possible to account for all building occupants. In light of this, if it can be done safely, local emergency responders will sweep through the building to determine whether all occupants have evacuated.

#### **E. Rescue and Medical Duties**

Employees **will not** attempt any rescue, unless they have appropriate training, have the proper equipment, and the rescue effort does not place them in danger. Employees who have current basic first aid certification may render basic first aid within their capabilities and training.

All employees will notify Community Safety (**ext. 6666 or "0"**) of any events that are or could be considered an emergency. If Community Safety cannot be contacted immediately, call the local emergency response agencies by dialing **#9-1-1** and then attempt to contact Community Safety.

#### **F. Emergency Coordinator Responsibilities**

- Carries out the emergency response until relieved by another emergency coordinator.
- Knows procedures for contacting public and private agencies available in the event of an emergency.
- Can commit full College resources to mitigate the incident.
- Facilitates information exchange between College officials and outside agencies.

If no other emergency coordinator is available, the Community Safety Officer on duty will assume the role.

## FIRE PREVENTION

### A. Common fire hazards and prevention strategies

Fire Hazards/ Potential Ignition Sources	Prevention Strategy
Arson	<ul style="list-style-type: none"> <li>• Security systems (building entry devices, cameras, 24-hour surveillance)</li> <li>• Emergency phone system</li> </ul>
Cooking	<ul style="list-style-type: none"> <li>• Limited to kitchen areas in apartments</li> <li>• Routine inspection and maintenance of cooking appliances</li> </ul>
Smoking materials	<ul style="list-style-type: none"> <li>• No smoking policy in all buildings</li> </ul>
Open flame (e.g., candles/incense)	<ul style="list-style-type: none"> <li>• Open flame policy as per Residence Life</li> </ul>
Electrical (e.g., wiring, appliances, and equipment)	<ul style="list-style-type: none"> <li>• Routine inspection and maintenance program</li> <li>• Use of UL approved equipment</li> <li>• Temporary extension cord usage, no multi-plug adapters</li> <li>• Turn off equipment when not in use</li> </ul>
Accumulation of combustible materials	<ul style="list-style-type: none"> <li>• Routine inspection of campus facilities</li> <li>• Minimize storage of combustibles</li> <li>• Maintain clear egress and clearance to electrical/heat sources</li> </ul>
Improper handling and storage of combustible/flammable liquids	<ul style="list-style-type: none"> <li>• Approved flammable liquid storage cabinets/rooms</li> <li>• Hazardous waste disposal program (40 CFR 260-273)</li> <li>• Bonding and grounding</li> </ul>
Halogen lamps	<ul style="list-style-type: none"> <li>• Use discouraged</li> </ul>
Space heaters	<ul style="list-style-type: none"> <li>• Use discouraged</li> <li>• Only heaters with UL approval, tip-prevent feature</li> <li>• Keep at least a 3-foot clearance from combustibles</li> </ul>
Hot work hazards (e.g., cutting, welding)	<ul style="list-style-type: none"> <li>• Hot work permit policy (OSHA 29 CFR 1910.252)</li> </ul>
Residential furnishings	<ul style="list-style-type: none"> <li>• Fire retardant purchasing policy (as per Resident Life)</li> </ul>

### B. All Buildings

All buildings on campus with the exception of Eliot Hall, Physical Plant, and the North and West Warehouses have automatic sprinkler systems. Every building has fire extinguishers and emergency lights when required. Facilities Services and the Environmental Health and Safety office provide for the proper maintenance of this equipment.

#### General housekeeping requirements

- Keep all exit doors unlocked during business hours.
- Keep stairwells, exits, and passageways free of obstructions at all times.
- Keep access to fire protection equipment (pull stations, fire alarm boxes, fire hoses, fire standpipes, fire sprinkler heads, fire/smoke detectors, or any other fire protection equipment) unobstructed.
- Maintain all exit signs to ensure clearly marked exits.
- Store flammable and combustible liquids in approved storage containers and cabinets. Separate incompatible materials.
- Keep storage 18 inches away from sprinkler deflectors and 24 inches from the ceiling in non-sprinkler buildings.
- Do not obstruct or block open fire doors. Repair fire doors to their self-closing and latching condition.
- Discontinue use of extension cords and multi-plug adapters. Power strips with circuit breakers are acceptable and available at the bookstore.
- Maintain a 3-foot clearance around electrical boxes.
- Regularly empty wastebaskets and recycle containers.
- Follow proper handling and storage procedures for hazardous materials.
- Segregate combustible materials from flammable and oxidizing materials.

#### C. Buildings with hazardous materials

The buildings that house significant amounts of hazardous materials/waste have the following:

##### **Hazardous Waste Storage Building:**

This building is of metal construction and is located at the far east side of campus, on the loading dock of the Chemistry building. A dry chemical fire extinguisher is attached to the wall inside this building. Environmental Health and Safety has fire prevention responsibility for this building.

##### **Chemistry Building:**

This building has sprinklers throughout, has dry chemical fire extinguishers located within each laboratory, in the hallways, and other critical areas. It has a few carbon dioxide extinguishers.

If the fire detection system in the Chemistry Building is activated, Reed College Community Safety Dispatch receives the alarm. The Community Safety Officer on duty immediately checks on the situation and instructs Dispatch to call the Portland Fire Bureau if necessary.

The Chemistry Building alarms can be activated by heat, smoke, discharge of sprinkler system, or by manually pulling the alarms located at exits to the building. A

control pad located at the front entrance to the building has a display indicating the building zone in which an alarm has been activated. The alarm system can be reset at the panel located in room C201.

The department chair oversees fire prevention for this building.

**Biology Building:**

This building is fully sprinklered and has dry chemical fire extinguishers. The extinguishers are located within each laboratory, in the stairwells, and hallways.

The Biology Building alarms can be activated by heat, smoke, discharge of sprinkler system, or by manually pulling the alarms located at exits to the building. A control pad, located in the vestibule at the main south door to the building, has a display indicating the building zone in which an alarm has been activated.

The department chair oversees fire prevention for this building.

**Studio Arts Building**

This building has sprinklers throughout, has dry chemical fire extinguishers located within each studio in the building, as well as in the hallways.

The Studio Arts Building alarms can be activated by heat, smoke, discharge of sprinkler system, or by manually pulling the alarms located at exits to the building. A control pad located at the front entrance to the building has a display indicating the building zone in which an alarm has been activated.

The department chair and faculty oversee fire prevention for this building.

**Physical Plant:**

Dry chemical fire extinguishers are located near the exits of this building. The Assistant Director of Facilities oversees fire prevention for this building.

**Commons Servery**

Part of Gray Campus Center, the Commons has sprinklers throughout, has dry chemical and Class K fire extinguishers where needed. The general manager has fire prevention responsibilities for this area.

**D. Building/Department specific fire prevention and protection plans**

**Growing Seeds**

Reed College's childcare center, Growing Seeds, Emergency Procedures Handbook resides within the Director's office located in 2808 SE Steele St. Copies are also available within EHS.

## **E. Fire Extinguishers**

An accessible travel distance to an appropriate fire extinguisher is required for all areas of operation (Maximum travel distance depends on the nature of the occupancy). Hazardous occupancies must have an accessible fire extinguisher within 30 or 50 feet (based on the occupancy/hazard). Non-hazardous areas must have an accessible fire extinguisher within 75 feet. (Travel distance cannot include locked doors or changes in elevation.)

The following are five classes of fires that any person should be aware of in order to select the proper fire extinguisher for capability of extinguishment.

- Class A: Wood, Paper, Plastic (Ordinary combustibles)
- Class B: Combustible and Flammable Liquids
- Class C: Energized Electrical Equipment (Usually a Class A or B once electrical equipment is de-energized)
- Class D: Combustible and Flammable Metals
- Class K: Kitchen Hood Suppression Systems and Fire Extinguishers Using K Products

To minimize the confusion of selecting the appropriate fire extinguisher on campus, the college has installed multipurpose dry chemical (ABC rated) fire extinguishers in all areas requiring a fire extinguisher with the exception of the following areas:

- Special hazard areas requiring a Class D fire extinguisher (quantity of hazard dictates the need of a class D fire extinguisher)
- Kitchens with commercial hoods require Class BC rated dry chemical fire extinguishers or Class K (depending on the type of hood system)
- Equipment, Mechanical, and Electrical Rooms require Class BC rated dry chemical fire extinguishers

The college is required by OSHA to offer fire extinguisher training classes to all employees. Training information is available on the EHS website.

## **F. Fire & Emergency Evacuation Drills**

Fire and emergency evacuation drills will be conducted at least quarterly for all student residential dormitories. Fire and emergency evacuation drills for academic and administrative buildings will be conducted at least annually. Fire and emergency evacuation drills for the childcare center are conducted monthly. All new employees are trained on emergency and evacuation procedures upon hire.

## **G. Communication Systems**

The emergency coordinator and the Community Safety Officers can communicate with each other, dispatch, and the switchboard via two-way radios. Cellular phones are also available. Telephone communication is available in all buildings on campus.

## H. Spill Control Equipment

The Community Safety Department has access to materials to absorb oil. This equipment includes absorbent booms and pillows for oil spills. Clay absorbent, spill pillows, and booms are also stored in the Physical Plant warehouse building, the Grounds Department garage, and the Hazardous Waste Storage building. Disposable protective coveralls, disposable rubber booties and gloves are stored in the Hazardous Waste Building, the Community Safety department, the Physical Plant, and west of Grey Campus Center by Bon Appetite. Gloves and goggles are stored in the Chemistry Stockroom.

## GENERAL PROCEDURES

### A. Fire Response

#### **If you see the flames**

- Sound the alarm by pulling the closest fire alarm pull station.
- Immediately evacuate the building.
- Call 911 and report the fire, giving information as requested by the dispatcher. Stay on the line until released by the dispatcher.
- Notify Community Safety (extension 6666).
- Once outside, move at least 300 feet from the building.
- Avoid blocking sidewalks, hydrants, streets, and fire lanes. Emergency vehicles must have clear access.
- Do not reenter the building unless told to do so by a CSO.

#### **If you hear a fire alarm**

- Evacuate the building immediately.
- If smoke is present, keep low to the floor.
- Before opening a door, feel the upper portion of the door or the doorknob with the back of your hand. If it is hot, do not open the door.
- If you cannot leave the room, keep the door closed and open windows to let out smoke and heat. Seal the crack around the door if possible. Hang an object out the window to attract attention. Stay low to the floor.
- After the last person leaves a room, close the door to slow the spread of smoke and fire.
- Do not use elevators.

#### **If you smell smoke or have any other indication of fire**

- Immediately call extension 6666. Describe what you have observed and give your name and exact location.
- Alert other building occupants in the immediate area to prepare for evacuation.
- Evacuate the building if the situation gets worse or if directed by a

Community Safety Officer or the Portland Fire Bureau.

- Follow the building evacuation procedures outlined above.
- Fire extinguisher training is available through Environmental Health and Safety, extension 7788.

## **B. Post Incident Actions**

### 1. Government Notifications

- OR-OSHA at 1-800-922-2689
  - Report within 8 hours of the death of any employee (including heart attack) or a catastrophe where 3 or more employees are admitted to hospital. Do not move equipment involved in the accident.
  - Report deaths only if they occur within 30 days of the accident.
  - Report overnight hospitalizations of any employee within 24 hours after occurrence or employer knowledge. Hospitalization for observation is not reportable, nor is emergency room treatment.
- Oregon Emergency Response System at 1-800-452-0311
  - Report within 24 hours following a release, fire, or explosion, which has (or could have) threatened the environment. Send completed copies of this report to the Environmental Health and Safety office.
- DEQ and the Regional Administrator of the EPA
  - May require written reports depending on the type of incident. The emergency coordinator will determine if these reports are required. The report must include:
    - Name, address, and telephone number of the facility.
    - Date, time, and type of incident.
    - Name and quantity of material(s) involved.
    - Extent of injuries, if any.
    - Assessment of actual or potential hazards to human health or the environment, if applicable.
    - Estimated quantity and disposition of recovered material that resulting from the incident.

### 2. Protective Equipment

Clean, repair or replace all emergency and personal protective equipment as soon as possible after the incident.

### 3. Casualty Information and Plan Modification

The emergency coordinator needs to prepare a written report, as soon as possible, on the actions taken following an incident involving casualties. The report will include: names of the casualties, their disposition, and an analysis of types of injuries. Send this report to the Community Safety Office.

### 4. Additional actions

- Conduct a "debriefing" of personnel involved in the activation of the emergency plan.
- Analyze plan failures and deficiencies.
- Modify the emergency plan accordingly.
- Rehearse modified emergency plan.

## **ARRANGEMENTS WITH EMERGENCY RESPONDERS**

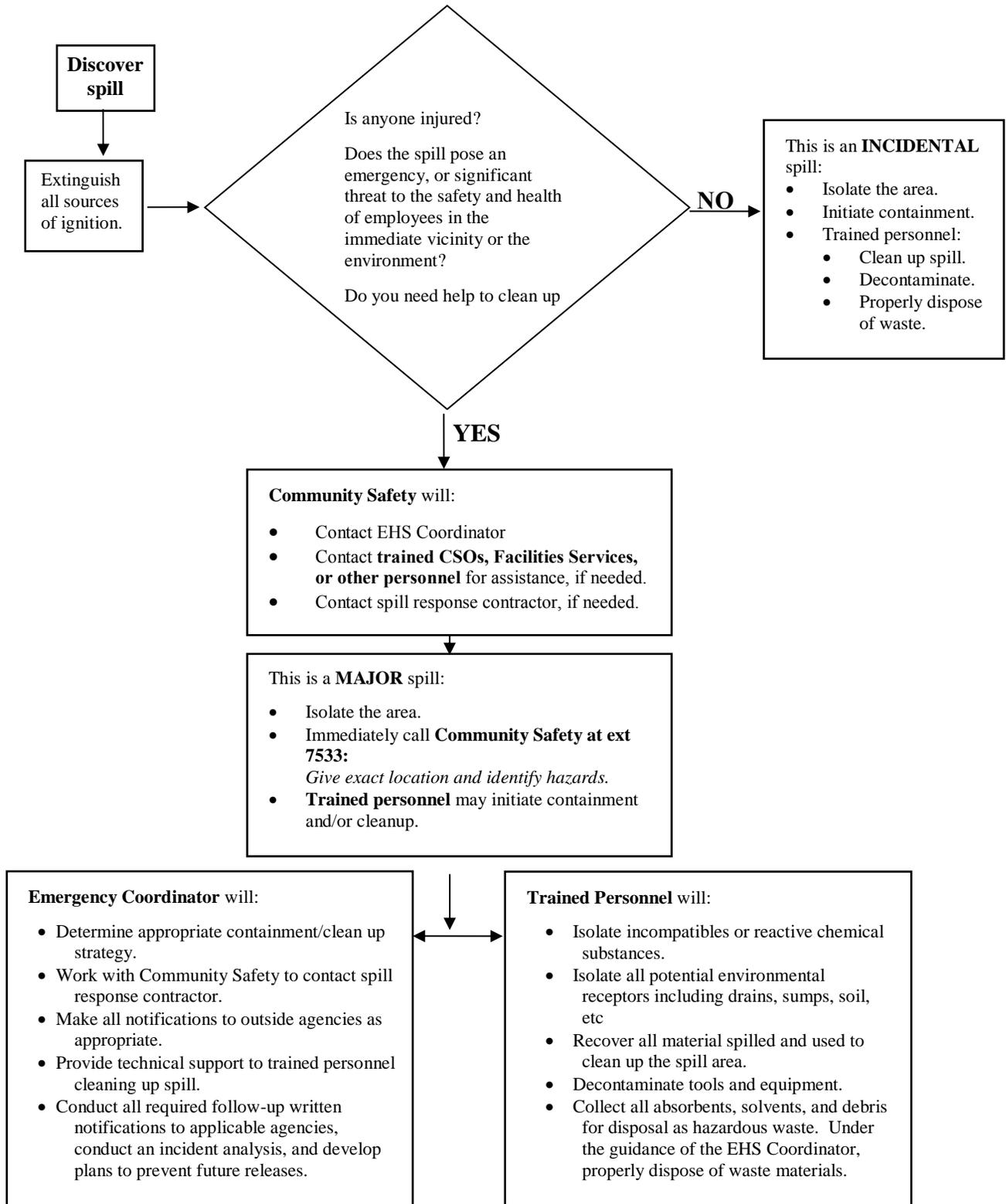
The Portland Fire Bureau is familiar with the layout of Reed College including storage of hazardous materials, and hazardous waste. All responding companies tour our hazardous waste storage facility, Chemistry Stockroom (areas which store most of the hazardous materials on campus), and the Reed Reactor Facility on a yearly basis. Furthermore, the Environmental Safety Director has provided a survey to the State Fire Marshal's Office with maps of the College indicating the location of hazardous materials on campus. This information is available to our local responders through the State Fire Marshal's Office.

## APPENDIX A: EMERGENCY SPILL PROCEDURES

### A. Reed College Emergency Telephone Numbers

Reed Community Safety Dispatch	503-788-6666	
Fire/Police	(From Campus) #-911	
NRC Environmental Services (Spill-Clean-Up Contractors)	1-800-337-7455 or 503-283-1150	
Chemtrec (Specialty Chemical Responders)	1-800-424-9200	
Poison Control	1-800-222-1222	
Safety & Supply Co. (Supplies and Equipment)	503-283-9500	
National Response Center	1-800-424-8802	
Oregon State Emergency Response System	1-800-452-0311	
Oregon OSHA	1-800-922-2689	
Primary Contact	April Sams EHS Director	Reed: 503-777-7788 Cell: 971-284-4534
Alternate #1	Townsend Angell Director, Facilities Operations	Reed: 503-777-7763 or 503-777-7283 Home: 503-284-4509 Cell: 503-793-3378
Alternate #2:	Director, Community Safety	Reed: 503-777-7379, 0 Cell: 503-849-6889

## B. Response Flowchart



**APPENDIX B: EMERGENCY SPILL RESPONSE CHECK LIST**

First on Scene \_\_\_\_\_ Name

Arrived on Scene \_\_\_\_\_ Date \_\_\_\_\_ Time

Type of Incident \_\_\_\_\_

Time Incident Occurred \_\_\_\_\_

Call List: Assess Situation and Call Appropriate People from the list below.

Community Safety (503-788-6666) \_\_\_\_\_ Time

Fire, Police (#-911) \_\_\_\_\_ Time

Poison Control (1-800-222-1222) \_\_\_\_\_ Time

April Sams - Reed EHS (Office 503-777-7788; Pager 971-284-4534) \_\_\_\_\_ Time

NRC Environmental Services (1-800-337-7455) \_\_\_\_\_ Time

Chemtrec (1-800-424-9200) \_\_\_\_\_ Time

OERS (1-800-452-0311) \_\_\_\_\_ Time

National Response Center (1-800-424-8802) \_\_\_\_\_ Time

OR-OSHA (1-800-922-2689) \_\_\_\_\_ Time

Townsend Angell - Facilities Operations (Cell 503-793-3378) \_\_\_\_\_ Time

Lorraine Arvin -VP/Treasurer (503-777-7506) \_\_\_\_\_ Time

Community Safety Director (503-777-7379) \_\_\_\_\_ Time

Reed Reactor Facility (See List at Dispatch) \_\_\_\_\_ Time

Other Emergency On-Call Personnel (See List At Dispatch) \_\_\_\_\_ Time

Names \_\_\_\_\_ Time

\_\_\_\_\_ Time

\_\_\_\_\_ Time