

# FRANKLIN COUNTY COLUMBIA GENERATING STATION EMERGENCY PREPAREDNESS PLAN



Rev 7.0

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1			
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## Record of Changes

DATE	CHANGE FROM (PAGE/CONTENT)	CHANGE TO	PERSON MAKING CHANGE
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## Chapter 1 – Introduction

Nuclear power plants produce about 20% of America’s power (2020, USEIA). Almost 3 million Americans live within 10 miles of an operating nuclear power plant. Franklin County has communities within the 10-mile emergency planning zone (EPZ) of Energy Northwest’s Columbia Generating Station. The Columbia Generating Station is a boiling-water reactor located 10 miles north of Richland, Washington on a 1,089-acre site that borders the Columbia River.

Radiological emergencies at nuclear power plants can be postulated as ranging from a minor emergency with no offsite effects to a major emergency that may result in an offsite release of radioactive materials. State and local government officials have the overall responsibility of deciding and implementing the appropriate protective actions for the public during a nuclear power plant radiological emergency. They are responsible for notifying the public to take protective actions such as evacuation or sheltering. State and local officials base their decisions on the protective action recommendations by the nuclear power plant facility and their own radiological public health organizations.

The overall objective of radiological emergency preparedness and response planning is to minimize the potential radiation exposure from a spectrum of emergencies that could produce offsite radiation doses which exceed the protective action guidelines established by the Environmental Protection Agency (EPA, 2017). For communities surrounding commercial nuclear power plants, [44 CFR§350](#) directs FEMA’s Radiological Emergency Preparedness Program to review and approve state, local, and tribal radiological emergency plans, and preparedness to ensure that they “provide reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency” (RPM, 2019, pg.6)

This document is prepared as a tool for Franklin County to utilize in preparing their plans for response to an incident at Energy Northwest’s Columbia Generating Station. This plan is a “stand alone plan” and is referenced as such within the Franklin County Comprehensive Emergency Management Plan (CEMP).

Included are those components/regulations that are required by [NUREG 0654](#), [FEMA REP-1, Rev. 2](#) [Radiological Emergency Preparedness \(REP\) Program Manual](#), and [44 CFR§350](#).

### 1.1 Mission, Purpose, and Scope

This document comprises the Franklin County emergency preparedness plan for emergencies originating at the Columbia Generating Station operated by Energy Northwest that create off site impacts to Franklin County. As such, its scope is limited to that portion of the overall response for which Franklin County and its municipalities are primarily responsible and will only attempt to document those portions of the response for which it is primarily responsible. Other response organizations that function under separate command and control authorities maintain their plans and procedures separately.

The National Incident Management System (NIMS) is part of the National Response Framework (NRF) that establishes a standardized incident response. NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents.

Franklin County Emergency Management’s (FCEM) response for emergencies originating at the Columbia Generating Station will be conducted in accordance with concepts and procedures recognized by the NIMS model and the Incident Command System (ICS).



## 1.2 Radiological Emergency Classifications (D.1.b.i)

Emergencies can change in classification – up or down, but not necessarily in sequence – as the situation may be fluid. Each of the above classification requires action by Franklin County Emergency responders including alerting, mobilizing, analyzing the situation, and making emergency response decisions.

### Unusual Event

An Unusual Event is characterized by events that have occurred or are in progress which involve a protentional degradation of the level of safety at CGS. This classification is not expected to include any release of radioactive material and as such does not require offsite response or monitoring. FCEM personnel will be notified and will monitor the situation. The Emergency Operations Center (EOC) will not be activated.

### Alert

An Alert is characterized by events which have occurred or are in progress and which involve an actual or potential substantial reduction in the level of safety at the facility. There may be small releases of radioactive material that may require onsite and offsite radiation monitoring and dose projections.

An Alert requires the activation of CGS's emergency response organization and the notification of pre-designated federal, state, and county authorities. Franklin County Command Staff personnel may be notified and/or activated as appropriate for the situation. The Franklin County EOC is activated at notification of an Alert. CGS may request assistance from offsite organizations. State and/or CGS personnel may perform radiation monitoring and dose projections. There are no Protective Action Decisions (PADs) made for the public at this classification level.

### Site Area Emergency

A Site Area Emergency is characterized by events that have occurred or are in progress which involve actual or potential major failures of plant functions needed for reactor stabilization or control. There may be substantial releases of radioactive material, but releases are not expected to exceed Washington State protective action guidelines at or beyond the facility's site boundary. Neither is a core melt situation indicated by existing information.

A Site Area Emergency requires activation of the Franklin County Command Staff personnel and notification of pre-designated federal, state, county, and local agencies. Monitoring, ingestion pathway control, and possible evacuation or sheltering of some of the public may be required.

The public within an affected EPZ(s) will be notified of a Site Area Emergency. The portion of the Columbia River in the Plume Emergency Planning Zone (EPZ) will be evacuated, and Access Control Points (ACPs) will be established to prevent launching of craft into the Columbia River and entry into the Plume EPZ. Recreational areas including the Wahluke Hunting Area and Ringold Fishing Area will be

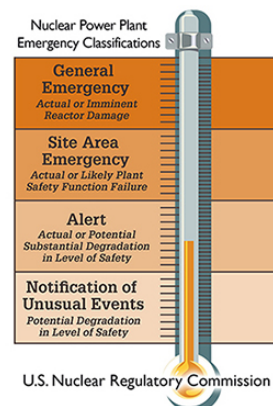


Figure 1: Emergency Classification Levels

evacuated. Three Franklin County area schools; 1) Edwin Markham Elementary School, 2) Big River Country School and, 3) Country Christian Center School, will also be evacuated as a Protective Action Decision (PAD) as appropriate for the time of year and day.

### General Emergency

A General Emergency is characterized by events that have occurred or are in progress which involve actual or imminent substantial core degradation or melting with potential or actual radioactive materials releases. Releases of radioactive material are expected to exceed Washington State protective action guidelines at or beyond the facility's site boundary.

A General Emergency requires activation of the Franklin County Command Staff personnel and notification of pre-designated federal, state, county, and local agencies. Monitoring and ingestion pathway control are required. PADs for the public are required and may include sheltering-in-place (going indoors, listening to an EAS radio or television station, closing all windows and doors, closing exterior vents, and turning off heating and air conditioning equipment using outside air) and/or evacuation.

The public within the affected EPZ(s) will be notified of a General Emergency. The portion of the Columbia River in the Plume Emergency Planning Zone (EPZ) will be evacuated, and Access Control Points (ACPs) will be established to prevent launching of boats or other watercraft into the Columbia River and entry into the Plume EPZ. Recreational areas including the Wahluke Hunting Area and Ringold Fishing Area will be evacuated. Three Franklin County area schools; 1) Edwin Markham Elementary School, 2) Big River Country School and, 3) Country Christian Center School, will also be evacuated as a Protective Action Decision (PAD). Additional schools near the Plume EPZ may be evacuated, closed, or cancelled as appropriate for the time of year and day.

### Hostile Action-Based Emergency

A Hostile Action-Based (HAB) Emergency will be classified within one of the four classification types/levels. These event types are dynamic and require individual assessment at the time of the incident/event by the on-scene Incident Commander and EOC. HAB events may deviate from standard operating procedures, they may not allow for predetermined actions based on the nature of those types of events. Incident Commanders and responders may need to utilize professional judgment and utilize methods not yet established as standards/procedures. Protective Action Decisions, for the general public, will be coordinated with the Incident Commander(s)/Incident Command Post(s).

Emergencies at CGS requiring response actions by Franklin County Emergency Management for protection of its citizens are classified as one of the following, with General Emergency being the most severe:

- Alert
- Site Area Emergency
- General Emergency
- \*Hostile Action-Based Emergency

\* In the event Franklin County Sheriff's Office is mobilized in response to a hostile action directed against the Columbia Generating Station, Franklin County Sheriff's Office would assign an Incident Commander and Franklin County Emergency Management would assume a supporting role in the EOC.

## 1.3 Radiological Incident Phases

### Early Phase

The beginning of a radiological incident for which immediate decisions for effective use of protective actions are required and must therefore be based primarily on the status of the radiological incident and the prognosis for worsening conditions. When available, predictions of radiological conditions in the environment based on the condition of the source or actual environmental measurements may be used. Protective actions based on the PAGs may be preceded by precautionary actions during the period. This phase may last from hours to days.

### Intermediate Phase

The period beginning after the source and releases have been brought under control (has not necessarily stopped but is no longer growing) and reliable environmental measurements are available for use as a basis for decisions on protective actions and extending until these additional protective actions are no longer needed. This phase may overlap the early phase and late phase and may last from weeks to months.

### Late Phase

The period beginning when recovery actions designed to reduce radiation levels in the environment to acceptable levels are commenced and ending when all recovery actions have been completed. This phase may extend from months to years. A PAG level, or dose to avoid, is not appropriate for long-term cleanup.

The phases cannot be represented by precise periods of time – and may even overlap – but to view them in terms of activities, rather than time spans, can provide a useful framework for emergency preparedness and response planning. In the early phase, sheltering-in-place and evacuation are the principal protective actions. These actions are meant to avoid inhalation of gases or particulates in an atmospheric plume and to minimize external radiation exposures. Administration of prophylactic drugs may be employed to only emergency workers depending on the specific radionuclides released; in particular, potassium iodide, also known as “KI,” may be administered as a supplementary protective action in incidents involving the release of significant quantities of radioactive iodine, such as nuclear power plant (NPP) incidents. Some protective actions may begin prior to the release of radioactive material when there is advance notice. Planning considerations for reentry and relocation are suggested and basic planning guidance for late phase cleanup is provided in the [EPA PAG Manual in Chapters 4 and 5](#). (United States Environmental Protection Agency, 2017)

## 1.4 Planning Assumptions

1. Energy Northwest, as the licensee of the Columbia Generating Station, must notify Benton and Franklin County within 15 minutes of emergency declaration at the plant and the NRC within 60 minutes, according to Evaluation Criterion E.1.b of the [2019 Radiological Emergency Preparedness Program Manual](#). (FEMA, 2019)
2. FCEM will coordinate emergency planning and preparedness activities with Benton County Emergency Management (BCEM) for a CGS Emergency.
3. Principal organizations will identify the resources and personnel available. They will also provide needed staffing at the Franklin County EOC, or incident command post.
4. Governmental officials within the county recognize their responsibilities regarding the safety and well-being of the public and they will assume their responsibilities when this plan is activated.
5. Emergency responders might be exposed to the plume or contaminated areas while performing their respective duties. However, it is recognized by FCEM that any response, into possibly contaminated areas, by responders, is voluntary and/or in compliance with respective agency guidelines or procedures.
6. Some emergency response resources (Law/Fire) may already be committed to the emergency response at CGS, prior to Franklin County's EOC activation.
7. Releases of radioactive or non-radioactive hazardous materials from the CGS site can occur and could affect the health of the public, the environment, property, and economy of Washington State.
8. Actions taken under this plan are intended to be protective in nature for people within Franklin County.
9. People within Franklin County may be asked to take protective actions based on either immediate or anticipated hazards.
10. It is expected that some portion of the affected population will disregard or delay executing officially recommended protective actions.
11. It is expected that some portion of the population will most likely take actions in the absence of any officially recommended protective action.
12. Contamination of an affected area will disrupt normal activities and will most likely require that the entry into contaminated areas be prohibited for an unknown period.
13. Animal and agricultural products, including food and dairy, within a 50-mile radius of CGS may be subject to interdiction by the Washington Department of Agriculture. This would depend on the nature of the emergency.
14. Energy Northwest will be responsible for mitigating the event at CGS.
15. When Franklin County resources are insufficient to accomplish the initial response to the emergency, additional resources will be coordinated through mutual aid agreements or through the Washington State Emergency Operations Center (SEOC).
16. It is expected that each individual or household will develop a family disaster plan and maintain the essential supplies to be self-sufficient for a minimum of 72 hours, but preferably for 2 weeks.
17. People who may require assistance with transportation, during an emergency, should arrange for assistance from family, friends, or neighbors, prior to an emergency.

## 1.5 Overview

Franklin County, Washington has an estimated population of 96,749 for 2020 (United State Census Bureau, 2021). EPZ 1 has an estimated population of 1,003 and EPZ 2 (including EPZ 2A) has an estimated population of 1,505 according to 2020 [U.S. Census Bureau](#). Transient for EPZ 1 is 4,517 and EPZ 2 has 2,106. Access and Functional Needs population for EPZ1 is zero (0), and EPZ 2 is 460.

The Columbia Generating Station is in Benton County, Washington. It encompasses approximately 1,089 acres of shrub-steppe desert. It is 20 miles NNW of the city of Pasco.

Energy Northwest operates a General Electric boiling water nuclear reactor, known as the Columbia Generating Station (CGS). Columbia Generating Station is the northwest's only commercial nuclear energy facility and is the third largest electricity generator in Washington state, behind Grand Coulee and Chief Joseph dams. Fuel for this reactor consists of slightly enriched uranium dioxide pellets sealed in zirconium alloy. The principal structures located on the plant site are:

- a. Reactor Building
- b. Radwaste and Control Building
- c. Turbine Building
- d. Cooling Towers
- e. Circulating Water Pumphouse
- f. Spray Ponds
- g. Service Building
- h. Plant Support Facility
- i. Plant Engineering Center

Several types of incidents could result in an emergency at CGS that could produce off-site impacts. These events include, but are not limited to, criticality events, explosions, malevolent acts, fires, aircraft crashes, seismic events, high winds or tornados and transportation accidents involving non-radiological hazardous materials.

The effects of radiological and non-radiological hazardous materials from such events will vary according to the mechanism of release, the material released and meteorological data and location where the release occurred. A release of these materials could impact the lives, health and economy, both short and long term.

## 1.6 Emergency Planning Zones (EPZs)

Franklin County's radiological preparedness program encompasses two (2) Emergency Planning Zones (EPZs) around the Columbia Generating Station's nuclear power plant with specified protective actions applied:

- The 10-mile Plume Exposure EPZ and,
- The 50-mile Ingestion EPZ

## The Columbia Generating Station Plume Exposure EPZ

The area where the principal danger is from whole-body external exposure to gamma radiation resulting from the decay of radioactive materials in a plume or from internal exposure resulting from inhaling radioactive iodine from a plume released during a facility emergency. Franklin County, whose jurisdiction falls within the Plume Exposure EPZ of the Columbia Generating Station reactor, is responsible for developing procedures for making protective action decisions, and for implementing appropriate response measures to protect the citizens of Franklin County who live within the Columbia Generating Station Plume Exposure EPZ. The Washington State role in the Plume Exposure EPZ is to assist Franklin County by assessing the scope of the incident, making recommendations for protective actions, making provisions for radiological monitoring and providing other emergency response assistance upon request by the county.

The Plume Exposure EPZ for the Energy Northwest Columbia Generating Station reactor is roughly 10 miles in radius and is centered at Columbia Generating Station's only operating nuclear power plant. The 10-mile Plume Emergency Planning Zones in Franklin County, for which Franklin County Emergency Management develops plans for, are sections 1 and 2. ([ENW 2022 calendar, pg. 12 and 13 for English and pg. 22 and 23 for Spanish](#)).

Factors within the 10-mile Plume EPZ that are considered in developing emergency plans for Franklin County are: residential areas, schools, and recreational areas. Principal roads and highways in Franklin County are Road 170, State Route 17, US 395, Glade North Road, Eltopia West Road, and Selph Landing Road.

There are no aging care facilities or correctional facilities within the Franklin County portion of the Columbia Generating Station plume emergency planning zone. Franklin County Emergency Management coordinates with supporting agencies who maintain a database of residents who have self-identified as being potentially without transportation or may otherwise need assistance during an evacuation of the plume emergency planning zone.

## Description of the Columbia Generating Station Plume Exposure EPZ Sections

Benton and Franklin County have pre-defined, geographic areas that have been determined through analysis to require emergency planning. This pre-planning ensures that emergency management officials can make prompt and effective decisions to protect public health and safety. Benton County, along with Franklin County, in consultation with the Department of Energy and Energy Northwest have created Emergency Planning Zone Sections for those organizations' facilities located on the Hanford Site.

**Section 1:** That portion of Franklin County; (1) North of Eltopia West Road, West of Glade North Road, South of West Klamath Road, and East of the Columbia River, (2) North of West Klamath Road, West of Fair Way Road, South of Basin Hill Road, and East of the Columbia River, (3) North of Basin Hill Road, West of Wahluke Road, South of Hollingsworth Road, and East of the Columbia River. NOTE: A portion of Section 1 is on the Hanford Site and has no permanent population.

**Section 2:** That portion of Franklin County; (1) North of West Sagemoor Road, West of Glade North Road, South of Eltopia West Road, and East of the Columbia River, (2) North of Alder Road, West of

Dayton Road, South of West Sagemoor Road, and East of the Columbia River, (3) North of Selph Landing Road, West of Taylor Flats Road, South of Alder Road, and East of the Columbia River and is inclusive of DOE Zone 2A. b. NOTE: A portion of Section 2 is on the Hanford Site has no permanent Population.

**Section 3A:** This is entirely on the Hanford Site and is southwest of the Columbia Generating Station.

**Section 3B:** That portion of Benton County described as: South of SR 240, west of Kingsgate Way and north of West Richland and east of SR 225. It includes the Horn Rapids Master Planned Community and those homes and businesses that are accessed from Harrington Road, Yakima River Drive, Snively Road, Twin Bridges Road and Weidle Road. It also includes the Rattlesnake Mountain Shooting Facility and the Horn Rapids Park.

**Section 3C:** That portion of Benton County described as: South of the Hanford Site and North of Battelle Boulevard between Stevens Drive and the Columbia River. It also includes the area west of Stevens Drive between SR 240 and the Hanford Site. It includes the Horn Rapids Off-road Vehicle Park and the Richland Landfill. It does not include businesses or parks accessed from Logston Boulevard, Sullivan Boulevard and Robertson Drive or businesses on the west side of Stevens Drive south of Curie Street.

**Section 3D:** That portion of Benton County described as being: The area North of First Street and South of Battelle Boulevard, between Stevens Drive and the Columbia River.

**Section 4:** This Section is solely on the Hanford Site and is under the jurisdiction of the United States Department of Energy.

Three schools exist within the Franklin County portion of the Columbia Generating Station plume emergency planning zone; however, no aging care facilities or correctional facilities exist. Washington State Department of Social and Health Services maintains a database of residents who have self-identified as being potentially without transportation or may otherwise need assistance during an evacuation of the plume emergency planning zone.

Franklin County Sheriff's office has jurisdiction for the Franklin County Portion of the Columbia River. Should sections of the Columbia River also need be closed, the river could be closed at various locations, ranging from the Vernita Bridge to White Bluffs Ferry Landing to Leslie Groves Park. The US Coast Guard may also be requested to issue a notice to mariners, regarding closures of the Columbia River.

Calendars depicting information about the Emergency Planning Zones, and actions that the public may be requested to take, are mailed out to addresses in the Emergency Planning Zones annually. Evacuation routes are also included in the plan (see Figure 2) and also in the [ENW 2022 calendar, pg. 12 and 13 for English and pg. 22 and 23 for Spanish](#).



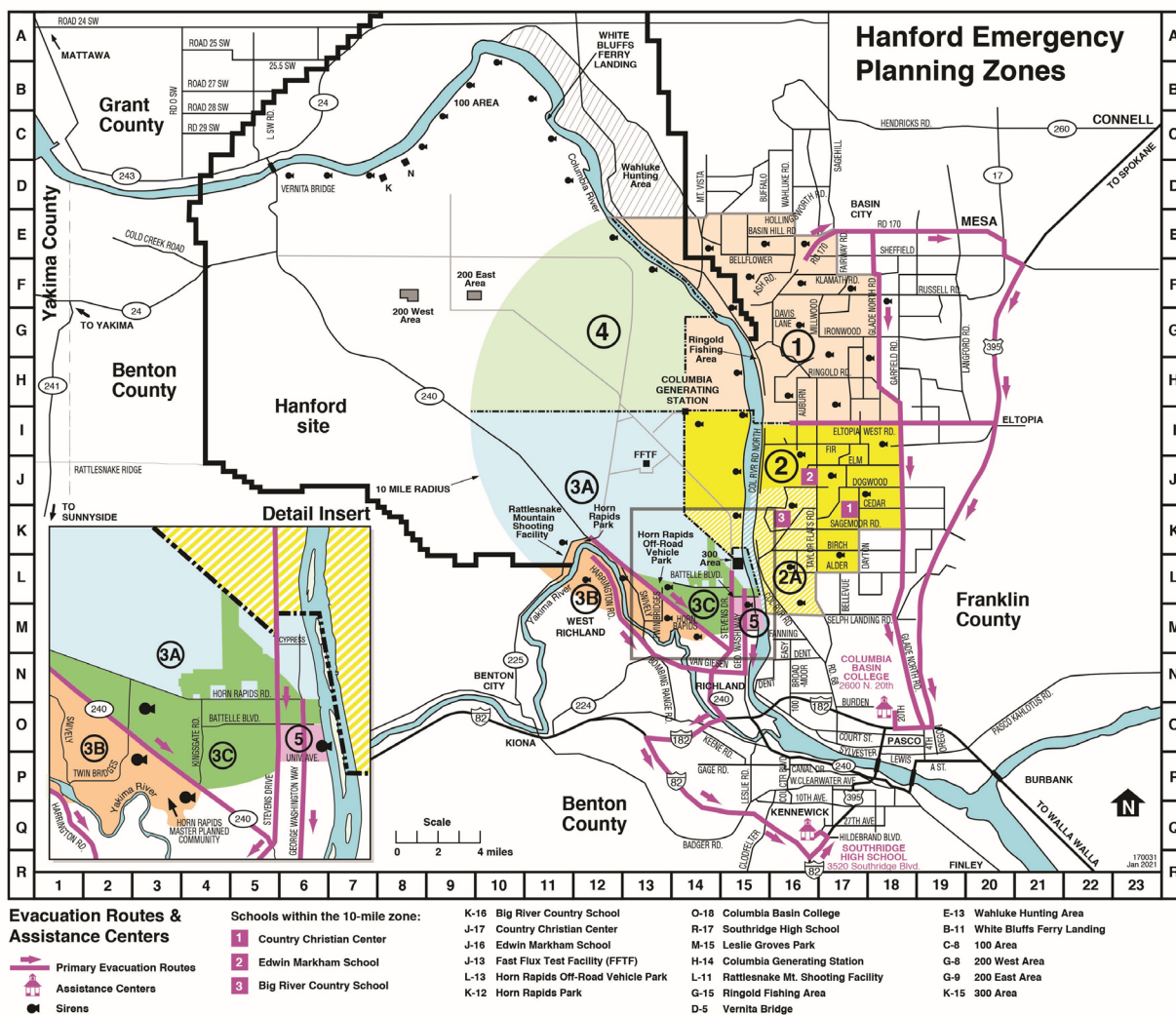


Figure 2: 10-Mile Plume Emergency Planning Zones and Evacuation Routes

## Ingestion EPZ (Planning Standard J.12)

The principal danger to human and animal life to be avoided in the Ingestion EPZ is the incorporation of radioactive isotopes into the tissues of humans and animals through the consumption of food products contaminated by radioactive materials released during an emergency at the Columbia Generating Station. Washington State has the responsibility to implement protective measures and to develop a nuclear emergency preparedness plan and procedures for the Washington State Ingestion EPZ. Franklin County has no Ingestion EPZ responsibilities outside the county boundaries but may be requested to assist the State in the implementation of protective actions. The Ingestion EPZ is roughly 50 miles in radius and is centered at Columbia Generating Station (Figure 3).

## Description of the Columbia Generating Station Ingestion EPZ

The ingestion EPZ incorporates the entirety of both Plume Exposure counties, Benton and Franklin, and extends out to portions of neighboring counties: Adams, Grant, Kittitas, Klickitat, Yakima and Walla



Walla. The Ingestion EPZ also crosses the southern Washington State border into the State of Oregon's Morrow and Umatilla Counties as seen in figure 3.



Figure 3: 50-Mile Ingestion Emergency Planning Zone

## Chapter 2 - Concept of Operations (NUREG-0654/FEMA-REP-1, Rev 2 Planning Standard A)

### 2.1 Overview

*Note: The Planning Standards references are from [NUREG-0654/FEMA-REP-1, Rev 2](#). Moving forward within this plan we will only reference the Planning Standards and not the entire program manual title.*

Necessary response activities will depend on how the emergency is classified. SECOMM will be responsible for initial notification to fire agencies, law enforcement agencies, emergency management and the county commissioners.

Emergency Operations Center (EOC): The Franklin County EOC will function as the operations and coordination center for response to a radiological emergency that affects Franklin County. Any coordination with governmental entities outside those of Franklin County will be conducted through the EOC. The response to any emergency situation requiring the activation of the EOC will be directed by the Emergency Chairperson, or other Franklin County elected officials as described in Franklin County Resolution 2021-253. Fire, EMS and Law Enforcement Incident Commanders will retain control of all operations in their respective jurisdictions and coordinate through the EOC, with the understanding that the primary protective action for residents and first responders in/near the 10-mile EPZ is evacuation.

Public Notification: If evacuation, shelter-in-place or monitor and prepare is advisable, the public will be notified under the direction of the Franklin County Emergency Management (FCEM) EOC Emergency Chairperson or designee.

Those residents within the 10-Mile Plume EPZ will be notified using Sirens, Mass Alert and Notification Software System, the Emergency Alert System and specially designated populations by Tone Alert Radios of what action to take. These systems comprise the “Public Alert and Warning Notification” system for an emergency at the Columbia Generating Station. The River Sirens and other sirens located throughout the 10-mile EPZ are designed to notify people using the Columbia River and residents that live within the 10-mile EPZ. Directions to clear the river and tune to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) for more information are communicated via the sirens. These messages are pre-recorded in both English and Spanish and are tailored for each specific combination of sections that are to evacuate, shelter-in-place or monitor and prepare based on the type of emergency and wind direction. If a release of radioactive material occurs, the primary protective action for residents and first response agencies will be to evacuate the plume portion of the 10-mile EPZ.

In the event of an emergency progressing in a predictable manner, beginning with an Unusual Event or Alert level of classification, the Franklin County Emergency Operations Center (EOC) Director would coordinate/communicate the Protective Action Decisions (PAD) for Franklin County with the Benton County EOC Manager. With the concurrence of both County Emergency Chairpersons, use of the Electronic Telephone Notification System, Emergency Alert System (EAS) and EPZ Sirens would be coordinated and scheduled.

Use of the Mass Alert and Notification Software System, EAS system and EPZ Sirens are predicated on which county is downwind from the Columbia Generating Station plume. The wind direction is the key factor in determining which county will activate the system. In the event that Protective Action Decisions need to be made prior to the availability of any county authority, SECOMM will initiate the recommended Protective Actions from the nuclear plant.

Emergency Worker Assistance Centers: The primary Emergency Worker Assistance Center for both Benton and Franklin County is **Columbia Basin College** located at **2600 North 20<sup>th</sup> Ave. Pasco WA**. The secondary or alternate is **Southridge High School** located at **3520 Southridge Blvd, Kennewick, WA**.

The Washington State Department of Health, Office of Radiation Protection (DOH-ORP) will ensure that radiation monitoring of any necessary decontamination is accomplished. Emergency worker vehicles will be monitored and decontaminated as appropriate, and evacuee vehicles may be parked and decontaminated as necessary. The decontamination of emergency worker vehicles and evacuees will be the responsibility of DOH-ORP. The American Red Cross (ARC) will provide evacuee registration, first aid, potential snack food. Any shelter will likely be at the same location as the assistance center. The person appointed as the EWAC Coordinator will oversee the entire operation and will coordinate between all agencies present at the center.

Evacuation and Other Protective Measures: After a release of radiological material from the Columbia Generating Station, the State EOC will collaborate with local jurisdictions to designate Relocation and/or Food Control Areas, if appropriate. Franklin County shall establish, in collaboration with State Departments, the geopolitical boundaries of the Relocation Area, to include Access Control Points (ACPs), as well as the boundaries of the Food Control Area, to include Food Control Points (FCP).

The Franklin County Sheriff's Office will have the primary responsibility for establishing Plume Phase ACPs. The Law Enforcement Coordinator within the Franklin County EOC will coordinate and monitor the establishment of the ACPs in Franklin County. Any response back into an evacuated area, will need to be assessed by the Incident Commander (IC), on a case-by-case basis. Areas where a plume is not projected will be instructed to go indoors to Shelter-in-Place or Monitor and Prepare and listen to the local media for further information/instructions. The Franklin County Sheriff's Office may be assisted by municipal law enforcement agencies, fire departments, public works/engineering departments, the Washington State Patrol and the Washington National Guard if requested and/or available.

The United States Coast Guard (USCG) will broadcast river closure Notices to Mariners on marine band channels to alert people using the Columbia River and areas adjacent to the river to evacuate the river. Sirens with public address capabilities will also be used to alert individuals using the Recreational Areas and the Columbia River within the Plume Exposure Pathway Emergency Planning Zone (EPZ). The Benton/Franklin County Sheriff's Office and the United States Coast Guard share primary responsibility for establishing Access Control Points on the Columbia River: The Marine Deputies of the Benton/Franklin/Grant County Sheriff's Office will provide relief for initial Columbia River picket's staff based upon incident details. ***Notification of the USCG is primarily a Benton County function; Franklin County will alert the USCG in the event that the Benton County EOC is not activated or operational.***

Public Information: All formal news releases will be made by a designated Public Information Officer (PIO) or spokesperson. The content of all news releases issued at the county level will have the approval of the IC. During a HAB/security event, this process is explained in Annex E. News releases will be coordinated between Franklin, Benton, and other adjacent counties, the State of Washington and Energy Northwest.

## 2.2 Incident Initialization and Mobilization (Planning Standards A.1, A.5)

The following individuals, or their representatives, in Table 1 will normally report to and work from the Franklin County EOC during sustained operations. The individuals either listed here by title or the most senior representatives from each agency at the EOC are responsible for identifying and assigning personnel to staff these positions during the following shifts to ensure continuous staffing. Staffing periods will consist of 12-hour shifts. Upon shift change the outgoing position will brief the incoming position on the status of the response activities for that position. These same individuals are responsible for assigning personnel to staff 24-hour-per-day emergency worker field operations positions assigned to their agencies. The Director of Franklin County Emergency Management is responsible for maintaining the Franklin County EOC roster and providing overall coordination for the EOC. Reference Annex F for any Hostile Base Action incident information. (A.1.i)

Franklin County EOC Group/Position Organization	
<b>Decision Group</b>	Emergency Chairperson: Selected from Franklin County elected officials. Reference Franklin County Resolution 2021-253
	District Health Officer or Designated Representative: Benton-Franklin Health District
	Emergency Operation/Coordination Center Public Information Officer: Appointed by the Franklin County Emergency Management (FCEM) Director
	Franklin County Emergency Management Director
	Franklin County Sheriff or Designated Representative
	Legal Advisor: Franklin County Prosecutors Office
<b>Operations Group</b>	Operations Coordinator: Appointed by the IC or FCEM Director
	Fire Coordinator: Staffed according to Franklin County Fire Protection Districts and Pasco Fire Department based on Duty Roster/availability
	Law Enforcement Coordinator: Representatives from Franklin County Sheriff's Office and Pasco Police Department. Will act as the liaison to the Incident Command Post during a Hostile Action Based/security event. HAB/security response is detailed in Annex E.
	Public Works Coordinator: Franklin County or City of Pasco Public Works Department
	Transportation Coordinator: Pasco School District, Ben Franklin Transit (BFT), Washington State Department of Transportation (WSDOT)
<b>EOC Support Staff</b>	American Red Cross (ARC) Representative
	Energy Northwest (Columbia Generating Station) Facility Liaison Officer
	Geographic Information System (GIS) Specialist
	Message Controller: Appointed by FCEM Director. This position is in coordination with the Ops Coordinator and is responsible for maintaining the EOC roster and messaging
	Radio Operators: 3 Rivers Auxiliary Communications (AUXCOMM)
	Security: Benton Franklin Sheriff's Mounted Posse and/or local law enforcement
	Washington National Guard Liaison Officer (Based on Situation)
	Washington State Department of Agriculture Liaison Officer. (Will initially respond to Benton County EOC during the Plume Phase of the emergency)
	Washington State Department of Health Liaison Officer. (Based on Availability)
	Washington State Emergency Management Liaison Officer
	Washington State Patrol (WSP)
	WSDOT

Table 1: Franklin County EOC Group/Position Organization (A.1.ii)

Franklin County Emergency Management will have primary responsibility for preparedness planning and for coordinating response activities for the offsite impacts in Franklin County that may occur because of an emergency at CGS.

Energy Northwest's Emergency Operations Shift Office will make offsite notifications within 15 minutes of an emergency. Franklin County Emergency Management will be notified within 15 minutes through notification from SECOMM of an emerging or emergency situation declared at CGS, which can be classified as an Unusual Event, Alert, Site Area Emergency, or General Emergency. For Franklin County, SECOMM is the 24-hour notification point, for such notifications.

Energy Northwest (ENW) will also develop associated Protective Action Recommendations (PARs) to provide to SECOMM or the Franklin County EOC (FCEOC), when activated, for the early phase of an emergency.

The initial notification should consist of a phone call from the ENW Shift office via the "ENW Crash" phone line, and a fax of the Columbia Generating Station Classification Notification Form (CNF) via the dedicated fax line. SECOMM will notify the appropriate personnel and agencies of the emergency, following their appropriate CGS procedure, based on the event classification.

Initial protective actions have been pre-planned for Site Area or General Emergency incidents for sections 1 and 2 as well as for parts of the Columbia River. Pre-recorded Emergency Alert System (EAS) messages are also maintained.

Either SECOMM or Emergency Management personnel, at both Benton and Franklin County, can activate systems to communicate protective actions, which involve activating sirens for the Emergency Planning Zones (EPZs), delivering a message over the electronic voice module for the sirens and sending out messages via the EAS. Messages will also be sent out via CodeRED, which an Emergency Telephone Notification System (ETNS). CodeRED is a mass notification tool which people can register for and receive phone messages, text messages and e-mail messages in case of emergency. The system is TTY/TDD compatible.

If emergency management is going to activate the public warning systems, the messages and actions are discussed and coordinated between Benton and Franklin County EOCs, as the sirens and EAS messages are controlled and impact both counties. If emergency management personnel are not immediately available, SECOMM will activate the sirens and EAS messages, if needed, based on their procedures.

### 2.3. Direction and Control (Planning Standard A.1.c)

The Franklin County Emergency Director, or their designee, will provide initial direction and control of the emergency response activities for a CGS Emergency that has off-site impacts until the position and responsibilities are delegated to the Incident Commander, the emergency terminates or until replaced at the direction of the Franklin County Multi-Agency Coordination (MAC) Group. The MAC Group will consist of representatives from stakeholder municipalities and agencies. It will generally consist of



agency administrators, Franklin County executives or their designees who are authorized to represent and commit agency resources and funds.

## 2.4 Coordination (Planning Standards A.1.a)

Franklin County Emergency Management staff provide the means for coordinating capabilities, resources and assets. Franklin County Emergency Management (FCEM) helps coordinate state, and local resources to support the local response, including access to WebEOC, telephone, fax, and radio communications.

Franklin County recognizes several types of organizational responsibility within the scope of its Columbia Generating Station preparedness plan. These categories are pre-defined in the [FEMA REP-1, Rev. 2 Radiological Emergency Preparedness \(REP\) Program Manual](#).

- **Principal Agencies/Organizations:** the nuclear utility (licensee) and any Federal, state, local, and tribal government agency, department, or executive office having a major or lead role in emergency planning and preparedness.
- **Supporting Agencies/Organizations:** any organization, such as an agency, department, office, or local jurisdiction, having a supportive role to the principal or lead organization(s) in emergency planning and preparedness.
- **Cooperating Agencies/Organizations:** an organization supplying assistance other than direct operational or support functions or resources to the incident management effort.

Refer to Chapter 2.7 within this plan for further details.

## 2.5 EOC Mobilization and Operation (Planning Standards A.1.b, H.6.vi)

The Franklin County Emergency Operations Center (FCEOC) is in the Franklin County Emergency Management (FCEM) facility at 1011 E. Ainsworth St., Pasco, Washington. It is the initial location for direction and control activities for non-hostile action related emergency response to a Columbia Generating Station emergency. The FCEOC will activate for an Alert, Site Area or General Emergency. The activation may or may not remain in place for an extended time, depending on the nature of the emergency.

Access to the FCEOC is limited to FCEM personnel and personnel from coordinating and supporting agencies participating in command-and-control activities as part of the Incident Command organization or Multi-Agency Coordination (MAC) Group. Others may be admitted on an ad hoc basis. Controlling access to the facility rarely requires armed law enforcement personnel, but armed access control for the facility will be established if needed. An FCEOC organizational chart is depicted in Figure 4 below. The FCEOC facility consists of three groups of multiple workstations with telephones. Wi-Fi internet access is also available for personnel bringing Wi-Fi capable equipment. A fax machine is available within

the building that is linked to the Energy Northwest dedicated fax line. Information from designated computer monitors can be displayed on several large screens in the room.

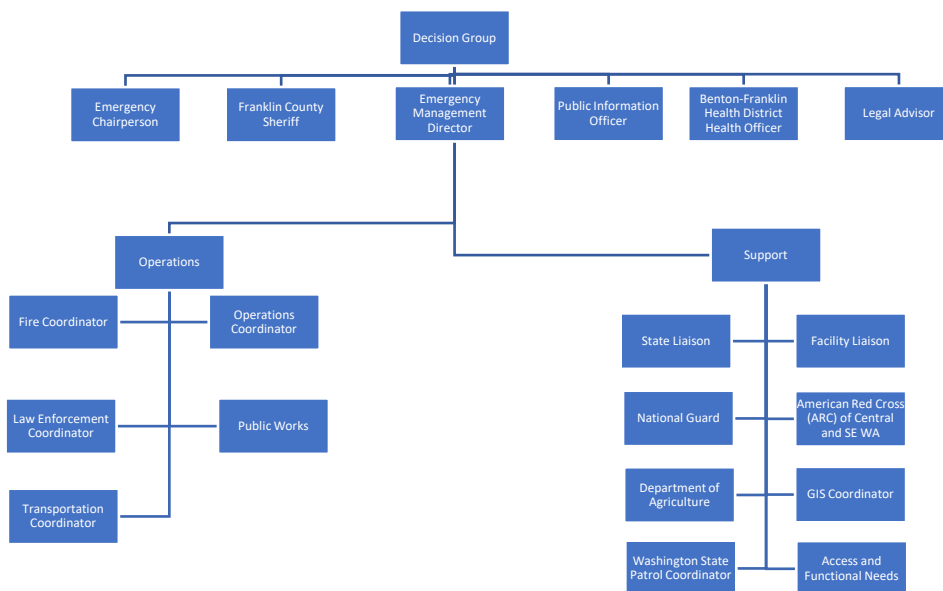


Figure 4: FCEM EOC Organizational Chart (A.1.b.i)

The Director of Franklin County Emergency Management, or designee, is responsible for monitoring and providing for the maintenance and readiness of the Franklin County Emergency Operations Center. The Benton County Emergency Management building at 651 Truman Ave., in Richland, is the pre-identified alternate emergency operations center for Franklin County Emergency Management. If both Franklin and Benton County Emergency Management’s buildings are not safe or accessible, a 2<sup>nd</sup> alternate facility is designated in the Franklin County Sheriff’s Office Training Room at 1016 N. 4<sup>th</sup> Ave., Pasco, WA. (H.6.vi)

### Declaring EOC Operational

Upon notification of a CGS Emergency, Franklin County Emergency Management will elevate the EOC operations level based upon the Emergency Classification Level. When Franklin County Emergency Management has an Emergency Management Director, an Operations Section Chief, a Public Information Officer and Safety Officer present in the EOC and has transitioned the notification point from SECOMM to the EOC, the EOC is considered operational. Usually, the EOC is activated at an ALERT emergency classification level and declared operational shortly thereafter.

Franklin County EOC Activation Levels	
Monitoring	Routine activation level in which Franklin County Emergency Management personnel conduct their daily emergency management responsibilities. SECOMM retains and monitors the dedicated “ENW Crash” phone line, and the dedicated fax line. Upon notification of an UNUSUAL EVENT, SECOMM will conduct the notifications via CAD page or by phone. A detailed description of SECOMM’s CGS notification procedures is published separately.
Activated	When an emergency at CGS reaches a level at or above ALERT and the notification point is transferred from SECOMM to the EOC, the Franklin County Emergency Director, or their designee, will activate into the role of Incident Commander and additional Command and General Staff positions may also be activated. Additional support and coordinating agency representatives may also be notified. At an Alert or higher-level emergency, SECOMM will conduct the notifications specified in their procedures via CAD page or by phone, requesting support staff report to the EOC. A detailed description of SECOMM’s CGS notification procedures is published separately.
Operational	When Franklin County Emergency Management has an Incident Commander, an Operations Section Chief, a Public Information Officer and Safety Officer present in the EOC and has transitioned the notification point from SECOMM to the EOC, the EOC is considered operational. Additional support and coordinating agency representatives will have been notified and requested to respond depending on the incident details.

Table 2: Franklin County EOC Activation Levels

## 2.6 Legal Authorities and Emergency Proclamations (Planning Standards (A.2, A.4))

### Authorities

[RCW 38.52.070](#)/ [WAC 118-30-060](#) directs each political subdivision of Washington State to establish a local organization for emergency management according to the State emergency management plan and program. Franklin County Emergency Management is established through an Interlocal Cooperative Agreement between Franklin County, the Cities of Pasco, Connell, Mesa, and Kahlotus, as authorized by [RCW 38.52](#).

### Local Political Subdivision Emergency Proclamation Process

In a CGS incident, the Incident Commander is empowered during the first 24 hours to proclaim the existence or threatened existence of a local emergency when offsite areas of Franklin County are affected or likely to be affected by an emergency at Columbia Generating Station. Alternatively, the Franklin County MAC Group could also make a proclamation of emergency. Once an emergency has been proclaimed, the Franklin County Board of County Commissioners (or their designee) can issue a resolution declaring an emergency, in accordance with their local codes, resolutions, or ordinances, when it appears that resources from outside the jurisdiction may be necessary. A signed



copy of the local resolution declaring an emergency from Franklin County would then be submitted to the Washington State Department of Emergency Management. (A.2)

The purpose of a local Proclamation of Emergency:

- a. Authorizes the undertaking of extraordinary police powers.
- b. Provides limited immunity for emergency actions of public employees and governing bodies.
- c. Authorizes the issuance of orders and regulations to protect life and property (e.g., evacuations, agricultural embargos).
- d. Activates pre-established local emergency provisions such as special purchasing and contracting.
- e. Prerequisite for requesting a Governor's Proclamation of a State of Emergency and/or a Presidential Declaration of an Emergency or Major Disaster.

### Authority to Proclaim a State of Emergency

The Governor's authority to proclaim a state of emergency is identified in [RCW 43.06.010\(12\)](#) and RCW38.08. A declaration of emergency must be made by Franklin County Commissioners and City Councils to request state or federal assistance. The Governor is empowered with this responsibility at the state level.

A Governor's proclamation of emergency allows the state and local governments to mobilize their communities for impending or existing disasters and emergencies and facilitates response activities. For example, proclamations are enacted to meet a variety of response and recovery needs, such as:

- a. deploying response assets;
- b. activating the National Guard in the event of a public disaster;
- c. prohibiting activities to help preserve and maintain life, health, property or the public peace;
- d. waiving or suspending certain state laws and regulations, including procurement restrictions, to facilitate response and recovery operations;
- e. expanding social services;
- f. providing assistance to disaster survivors, and
- g. managing elections disrupted by the emergency.

## 2.7 Key Roles and Functional Areas (A.1, A.1.a.i, A.3, A.4.i, C.2.b.ii, C.3.i,ii, K.4)

Franklin County recognizes several types of organizational responsibility within the scope of its Columbia Generating Station preparedness plan. These categories are pre-defined in the [FEMA REP-1, Rev. 2 Radiological Emergency Preparedness \(REP\) Program Manual](#).

- **Principal Agencies/Organizations:** the nuclear utility (licensee) and any Federal, state, local, and tribal government agency, department, or executive office having a major or lead role in emergency planning and preparedness.
- **Supporting Agencies/Organizations:** any organization, such as an agency, department, office, or local jurisdiction, having a supportive role to the principal or lead organization(s) in emergency planning and preparedness.
- **Cooperating Agencies/Organizations:** an organization supplying assistance other than direct operational or support functions or resources to the incident management effort.

### Principal Agencies/Organizations (A.3, A.4.i, C.3.i,ii)

Agencies listed below will provide a representative, or their designee, to the FC EOC. These agencies have a major role in emergency planning, preparedness as well as direct operational and support include the following:

#### Access and Functional Needs (AFN)

##### *Senior Life Resources (SLR)*

**Responsibilities:** Provide an additional source of information concerning individuals with AFN within the Franklin County portion of the Columbia Generating Station EPZ.

**Authority:** RCW [38.52.440](#), Franklin County [Comprehensive Emergency Management Plan \(CEMP\)](#)

**Duties:** Maintain a database of any transportation-dependent people within the Franklin County portion of the CGS EPZ.

##### *Southeast Washington State Department of Social and Human Services (DSHS) Aging and Long-Term Care (ALTC)*

**Responsibilities:** Provide the main source of information concerning individuals with AFN within the Franklin County portion of the Columbia Generating Station (CGS) Emergency Planning Zone (EPZ).

**Authority:** The Older Americans Act, Section 306 and the State of Washington's Aging and Long Term Support Administration (ALTSa) require all Area on Aging (AAA) to have a coordinated emergency plan in place for their Planning and Service Area (PSA).

RCW [38.52.440](#), Franklin County [Comprehensive Emergency Management Plan \(CEMP\)](#)

**Duties:**

- a. Maintain a registry of any transportation-dependent clients within the Franklin County portion of the CGS EPZ.
- b. In the event of an emergency, designated SEWA ALTC staff can access the registry. Contact registry individuals and/or their designated emergency contacts to determine if any support and assistance is needed to maintain their safety and health in the emergency.

*Washington Department of Children, and Families (DCYF)*

**Responsibilities:** Provide an additional source of information concerning licensed child care facilities, family homes and school age programs within the Franklin County portion of the Columbia Generating Station (CGS) Emergency Planning Zone (EPZ).

**Authority:** RCW [38.52.440](#), Franklin County [Comprehensive Emergency Management Plan \(CEMP\)](#)

**Duties:** Maintain a database of any childcare facilities that may need transportation assistance out of the Franklin County portion of the CGS EPZ.

### Benton County Emergency Services Staff

Benton County Emergency Services Staff is responsible for assuming, or designating, various roles in the EOC during a CGS emergency. Those roles include the following:

#### Benton County Emergency Manager

**Responsibilities:** Responsible for coordinating activation of the Alternate EOC with FCEM and assuming, or designating, the Incident Commander role in the EOC during a CGS emergency.

**Authority:** [RCW 38.52.030](#), [RCW 38.52.070](#) and [RCW 38.52.110](#) authorize Benton County Emergency Manager to assume the responsibilities.

**Duties:** The duties of the Benton County Emergency Management Manager include, but not limited to the following:

- a. The BCEM Manager is responsible to the executive heads of government for carrying out the emergency management program for the county.
- b. Emergency Coordination: Maintain facility and necessary equipment. Ensure that staff is prepared to fulfill EOC or Field duties. Ensure resources are available for 24-hour per day operations.
- c. Exercises and Drills: Provide input and/or develop scenario for drills and exercises. Prepare for drills and exercises (Mail Outs, readying the EOC, etc.). Participate in drills, exercises, and prepare critiques.

- d. Public Information: Develop public information materials. Respond to the questions and concerns of Benton County residents. Conduct public meetings as necessary.
- e. Maintain CodeRED system and special population database records. Activate sirens, EAS and CodeRED systems.

## Benton County Fire Protection and Rescue Organizations Supporting EWACs

### *Benton County Fire District #1*

**Responsibilities:** Provide personnel and support to the EWAC.

**Authority:** RCW's [38.52.070](#), [43.43.960\(5\)](#), [52.12.111](#), [52.12.121](#), [52.12.131](#), [52.12.140](#) authorize County Fire Districts to assume and execute fire response responsibilities.

**Duties:** During a CGS emergency, Benton County Fire District #1 will support the EWAC.

### *City of Kennewick Fire Department*

**Responsibilities:** Provide personnel and support to the EWAC.

**Authority:** RCW's [38.52.070](#), [43.43.960\(5\)](#), [52.12.111](#), [52.12.121](#), [52.12.131](#), [52.12.140](#) authorize to assume and execute fire response responsibilities.

**Duties:** During a CGS emergency, City of Kennewick Fire Department will support the EWAC.

## Benton-Franklin Health District

**Responsibilities:** The Benton-Franklin District Health Officer is responsible for public health in Franklin County. The Health Officer will advise Incident Command and may provide a BFHD staff member to assume the Safety Officer role.

**Authority:** [RCW 70.05.060](#) and [70.05.070](#) authorize the Benton-Franklin District Health Officer to assume and execute these responsibilities. RCW [43.70.130](#) covers general power and duties of WA Secretary Health. [WAC 246-100-070](#) authorizes the application and enforcement of lawful rules adopted by the state board of health in accordance with [RCW 43.20.050](#).

**Duties:** If serving the role of IC and/or Safety Officer:

- a. Authority to make Protective Action Decisions for the impacted public and emergency workers. Assist in the development of a Protective Action Strategy Plan (PASP) authorizing SECOMM to automatically implement predetermined protective actions for a HAB or fast-breaking incident.
- b. Authorizing Emergency Workers in a potential radiation hazard exposure area to use their dosimeters. Upon receiving authorization from the Washington State Health Officer, direct Emergency Workers to take potassium iodide (KI).

- c. Assisting (ALL Emergency Workers) fire and law responders on a case-by-case basis for re-entry into evacuated areas, providing health effects and radiation.
- d. Assist with decision making for any Access or Functional Needs population.
- e. Coordinating emergency medical assistance.
- f. Reviewing county Emergency Worker radiological exposures and recommending that county Emergency Workers leave hazardous areas based on radiological data.
- g. Requesting guidance on radiological related problems from the affected facility health physics personnel or Washington State Department of Health Representative.

### The Central and Southeastern Washington Chapter of the American Red Cross

**Responsibilities:** The Central and Southeastern Washington Chapter of the American Red Cross work to serve communities in nine counties including Benton and Franklin County. In both Benton and Franklin County, in the event of an emergency at Energy Northwest, the EWAC may serve as the Emergency Worker Assistance Center and Red Cross Shelter.

The operation of the shelter is tied in with functioning and administration of the Assistance Center part of the EWAC. Provides a location where food, lodging, and First Aid is available. Shelters are operated by the ARC, and provide the following services to citizens who have been evacuated:

**Authority:** Charter from the Congress of the United States, Act of January 5, 1905, as amended, 36 U.S.C. authorizes the ARC to assume and execute these responsibilities.

#### **Duties:**

- a. Information Exchange Point:
  - i. The ARC Representative at the Shelter Information Desk gathers information concerning the type of emergency, nature of the hazard imposed by the emergency, and what emergency response measures are underway. The ARC Representative will refer citizen and media inquiries to the Public Concern Phone Team at the Energy Northwest JIC whenever possible.
  - ii. Evacuees can inform the Shelter Staff of conditions or situations within the evacuated area that require attention.
- b. Temporary food and lodging.
- c. First aid.
- d. Counseling.
- e. Arrangements for handling service animals.

### Cherry Creek Media (KONA FM Radio) & Townsquare Media (KORD FM Radio)

**Responsibilities:** Cherry Creek Media, which owns and operates KONA 105.3 FM / KONA 610 AM and Townsquare Media, which owns and operates KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) will relay public information and warning notification services. KORD FM is a back-up station to KONA that is capable of broadcasting tones that will activate distributed tone alert radio.

**Authority:** KONA & KORD Radio Stations participate in the “Local Emergency Alert System Operational Area Plan”. Authority for Townsquare Media and Cherry Creek Radio to participate in this plan is provided by the FCC under [CFR :: 47 CFR Part 11- - Emergency Alert System](#).

**Duties:**

- a. Broadcast initial Emergency Alert System (EAS) messages initiated from either Franklin or Benton County Emergency Management offices.
- b. Broadcast follow-on emergency information providing additional instruction and guidance to portions of the public impacted by a Columbia Generating Station emergency.

### Franklin County Board of Commissioners/Elected Officials

**Responsibilities:** The Franklin County Board of Commissioners are responsible for overall emergency planning and activities in Franklin County. To execute this responsibility, they have designated the first Commissioner contacted by SECOMM as the Franklin County Emergency Chairperson, to serve as the primary decision maker during emergency operations. Should all Commissioners be absent, the following Franklin County Officials, as available in the order specified, may stand in for the County Commissioners:

- a. County Administrator
- b. County Prosecutor
- c. County Sheriff
- d. County Treasurer
- e. County Auditor

**Authority:** [RCW 38.52.030](#), [RCW 38.52.070](#) and [RCW 38.52.110](#) and Franklin County Resolution 2021-253 authorize the County Commissioners to assume and execute these responsibilities.

**Duties:** The duties of the Franklin County Elected Officials Emergency Chairperson include, but are not limited to, the following:

- a. Declaring the EOC activated upon arrival of the necessary staff and decision makers.
- b. Assist in the decision-making process to protect residents and overseeing the county operations in response to an emergency. During a Hostile Action Based event, Protective Action Decisions will be coordinated with the Law Enforcement Incident Command Post/Commander via an EOC Law Enforcement liaison and/or the affected county's EOC.
- c. Participate in the Multi-Agency Coordination Group (MAC) or provide a designee.

- d. During a rapidly escalating incident, to include a Hostile Action Based event (Annex E), when neither EOC is operational, SECOMM may automatically implement the Protective Action Recommendation from the Columbia Generating Station. This will be in accordance with a Delegation of Authority from the BFHD Board of Health.
- e. Providing oversight and guidance to the Emergency Management Director, Sheriff and other county officials as appropriate.
- f. Designating a representative to go to the affected facility JIC to coordinate between agencies represented there and act as spokesperson for Franklin County.
- g. Designating a representative to serve as a member of the Washington Restoration Framework and the [Washington Recovery Group](#).

## Franklin County Emergency Management

Franklin County Emergency Management Staff is responsible for assuming, or designating, various roles in the EOC during a CGS emergency (e.g., Operations Section Chief and Public Information Officer).

### *Franklin County Emergency Management Director*

**Responsibilities:** The Franklin County Emergency Management Director is prepared to deal with any radiological disaster or emergency by administering the Radiological Emergency Preparedness Program within Franklin County and is also responsible for activating the EOC.

**Authority:** [RCW 38.52.030](#), [RCW 38.52.070](#) and [RCW 38.52.110](#) authorize Franklin County Emergency Director to assume the responsibilities.

**Duties:** The duties of the Franklin County Emergency Management Director include, but not limited to the following:

- a. Plan and Procedures: Coordinate, develop and/or revise the plan and procedures contained in the Franklin County Columbia Generating Station Emergency Preparedness Plan. Maintain distribution records and distribute new revisions to all plan holders via <https://franklinem.org>.
- b. Training: Develop training programs. Train Franklin County emergency workers, state, and local organizations, EOC representatives and staff.
- c. Exercises and Drills: Provide input and/or develop scenario for drills and exercises. Prepare for drills and exercises. Participate in drills, exercises, and prepare After-Action Reports (AARs).
- d. Emergency Coordination for planning, training, preparedness, response, and recovery to any emergency initiating from CGS.
- e. Maintain EOC facility and necessary equipment. Ensure that staff is prepared to

fulfill EOC or Field duties. Ensure resources are available for 24-hour per day operations.

- f. Public Information: Develop public information materials. Respond to the questions and concerns of Franklin County residents. Conduct public meetings as necessary.
- g. Maintain CodeRED system and special population database records. Activate sirens, EAS and CodeRED systems.
- h. Maintain records for Franklin County Emergency Worker Kits and equipment for all state and local agencies that have EW kits pre-positioned in Franklin County.

### *Franklin County Emergency Management (FCEM) Staff*

**Responsibilities:** The staff coordinates, updates and reviews radiological emergency plans, maintains dosimetry equipment, and facilitates trainings for Principal, Supporting, and Coordinating Agencies/Organizations who have the potential to respond to a disaster or emergency at CGS impacting Franklin County. The FCEM Staff are also responsible for assuming, or designating, the Operations Section Chief, FCEM EOC PIO role or the JIC PIO role at Energy Northwest during a CGS emergency.

**Duties:** The duties of the Franklin County Emergency Management Staff include, but are not limited to the following:

- a. Develop, coordinate, and/or revise the plan and procedures contained within the Franklin County Columbia Generating Station Radiological Emergency Preparedness Plan. Maintain distribution records and distribute new revisions to all plan and procedure holders.
- b. Develop training programs. Train Franklin County emergency workers, federal, state, and Benton-Franklin County organizations, EOC representatives and staff.
- c. Provide input and/or develop scenario for drills and exercises. Prepare for drills and exercises (Mail Outs, maintain EOC functionality, etc.). Participate in drills, exercises, and prepare appropriate reviews/critiques.
- d. Maintain facility and necessary equipment. Ensure that staff is prepared to fulfill EOC or Field duties. Ensure resources are available for 24-hour per day operations.
- e. Develop public information materials. Respond to the questions and concerns of Franklin County residents. Conduct public meetings as necessary.
- f. Maintain, and activate as necessary, Public Alert and Warning Systems and database records.



- g. Maintain Emergency Worker Kits and detection equipment, and records for all local, state, and federal agencies that have radiological equipment pre-positioned in support of Franklin County.

## Franklin County-Area Fire, EMS, and Rescue Service Organizations

### **Responsibilities:**

Franklin County Fire District #3 (FCFD3) and City of Pasco Fire Department (PFD) provide fire and emergency medical services within Franklin County.

FCFD3 jurisdictional authority encompasses approximately less than one quarter of the south end of the EPZ. FCFD3 is responsible for fire protection services within its jurisdictional boundary and will operate in accordance with their standard operating procedures/protocols and capabilities. Understanding that the primary protective action for residents and responders in the EPZ are to evacuate, and only under very specific circumstances undertake missions to re-enter an evacuated area in accordance with FCFD3 standard operating procedures and WA state law. These agencies' Incident Commander(s) will retain all authority and responsibility of their responders. Franklin County Fire District #3 will assist in opening of the CBC Emergency Worker/Community Response Center (EWAC) as resource availability permits.

City of Pasco Fire Department (PFD) will assist in the opening of the CBC EWAC depending on staffing availability. Provide emergency medical transportation for radiological contaminated victims requiring Basic or Advanced Life Support ambulance service from locations within the Franklin County portion of the Energy Northwest EPZ in accordance with PFD standard operating procedures and WA state law.

**Authority:** RCW's [35.103.030](#), [38.52.070](#), [43.43.960\(5\)](#), [52.12.111](#), [52.12.121](#), [52.12.131](#), [52.12.140](#) authorize the Franklin County Fire Protection Districts #3 and/or the fire department of the City of Pasco to assume and execute these responsibilities.

**Duties (FCFD3):** The duties include but are not limited to the following:

- a. Provide fire suppression, rescue, and EMS response per each agencies mission statement and standard operating procedures/protocols to their respective jurisdictions.
- b. Relocating firefighting and EMS equipment from any area recommended for evacuation.
- c. Provide fire protection/fire suppression and EMS services, as available, to other areas within the 10-mile EPZ, in accordance with FCFD3 standard operating procedures and WA state law.
- d. Per each agencies mission statement and standard operating procedures/protocols and agreements, provide emergency medical transportation for victims requiring Basic or Advanced Life Support ambulance service from locations within the Franklin County portion of the Energy Northwest EPZ. City of Pasco Fire Department will provide emergency medical transportation for radiological contaminated victims requiring Basic or Advanced Life Support ambulance service from locations within the Franklin County portion of the Energy Northwest EPZ.
- e. If requested and as available, assist law enforcement agencies in establishing temporary

roadblocks at designated locations.

- f. Coordinate with FCEM and PFD to arrange for the opening of the Columbia Basin College EWAC as resources allow.

**Duties (PFD):** The duties include but are not limited to the following:

- a. Provide emergency medical transportation for victims requiring ambulance service from locations within the Franklin County portion of the CGS 10-mile EPZ in accordance with PFD standard operating procedures and WA state law.
- b. If requested and as available, assist law enforcement agencies in establishing temporary roadblocks at designated locations.
- c. Coordinate with FCEM and FCFD3 to arrange for the opening of the Columbia Basin College EWAC as resources allow.

### Franklin County Sheriff's Office

**Responsibilities:** The Sheriff of Franklin County and his/her representatives are responsible implementation of the primary protective action of evacuation and participating in the Protective Action Decision making process. Additionally, they are responsible for carrying out other protective actions, establishing access/traffic control and conducting possible rescue missions for stranded residents, in that part of Franklin County within the 10-mile EPZ in accordance with FCSO standard operating procedures and WA state law.

**Authority:** [RCW 36.28.010](#), [RCW 36.28.020](#), [RCW 38.52.070](#), [RCW 38.52.400](#) and Franklin County Resolution 2021-253 authorize the Sheriff to assume and execute his/her responsibilities.

**Duties:** The duties of the Sheriff and his/her representatives for Franklin County:

- a. Providing for the protection of life, health, and property of the residents and Emergency Workers in Franklin County, Washington.
- b. Act as the Emergency Chairperson prior to the assumption of those duties and responsibilities by a Franklin County Commissioner. (Ref: Emergency Chair Duties)
- c. If acting as the Emergency Chairperson, participate in decision-making processes and selecting appropriate protective measures (evacuate or shelter-in-place), based on the recommendations provided by the licensee, and direct the warning notification.
- d. Provide for access and traffic control for implementation of evacuation orders.
- e. Assist the United States Coast Guard (USCG) as required to close that portion of the Columbia River within the EPZ.
- f. Provide command and control for Search and Rescue (SAR) missions to pick up stranded

residents.

- g. Provide security for evacuated areas.
- h. Provide access & traffic control and security at Control Points and Food Control Points.
- i. The Sheriff or his staff may act as the FCEOC liaison to the Law Enforcement Incident Command Post/Commander in order to coordinate Protective Action Recommendations/Decisions during a Hostile Action Based/security event. This is detailed in Annex E.

## Franklin County Public Works and Engineering

### **Responsibilities:**

The Franklin County Public Works and Engineering Department and the Public Works Department of the City of Pasco, are responsible for assisting the Sheriff's office and the Pasco Police Department in performing area access control upon request. Additionally, the Franklin County Public Works Department is also responsible for the establishment of unmanned barricades for the purpose of access control at those points within the 10-mile EPZ as set forth in their Implementing Procedure.

### **Authority:**

RCW [38.52.070](#) authorizes the county and city Public Works and Engineering Departments to assume and execute these responsibilities.

### **Duties:**

The duties of the Public Works/Engineering departments include the providing of road barricades and traffic control devices, assisting law enforcement personnel in maintaining road blocks.

## Franklin County Public Hospital District #1 (Emergency Medical Service)

**Responsibilities:** Franklin County Hospital District #1 is responsible for emergency medical services and transport for their respective jurisdiction. Response actions will be conducted in accordance with their standard operating procedures and WA state law.

### **Authority:** [RCW 70.44](#)

**Duties:** The duties include, but are not limited to the following:

- a. Provide emergency medical transportation for residents requiring ambulance service within their jurisdiction within the Energy Northwest EPZ. Response actions will be conducted per their agency in accordance with their standard operating procedures and WA state law.
- b. Checking EMS personnel and patients for radiological contamination. Monitoring and/or protecting the EMS equipment and personnel from radiological contamination.

## Washington State Department of Health

**Responsibilities:** The secretary of health shall be director of the state radiation control agency, who shall appoint a state radiological control officer, and in accordance with the laws of the state, fix his or her compensation and prescribe his or her powers and duties.

**Authority:**

RCW [43.70.130](#) – Power and Duties of Secretary [of Health] – General

The Washington State Secretary of Health shall have the same authority as local health officers, except that the secretary shall not exercise such authority unless the local health officer fails or is unable to do so, or when in an emergency the safety of the public health demands it, or by agreement with the local health officer or local board of health.

- a. The secretary of health shall be director of the state radiation control agency, hereinafter referred to as the secretary, who shall perform the functions vested in the agency

**Duties:**

- a. Set up food control measures in coordination with other state and local agencies.
- b. Provide technical basis for establishing and reducing food control and relocation areas.
- c. Conduct Health portion of Emergency Workers Assistance Center/Congregate Care Center (EWAC) operations when requested by a county.
- d. Specify action levels of determining the need for decontamination (K.4).
- e. Provide technical consultation on radiological issues to other agencies: federal, state, local, and facilities.
- f. Certify food as “safe for human consumption” for subsequent release by WSDA.
- g. Assist with determining levels of contamination in air, soil, water, and crops.
- h. The Director, Office of Radiation Protection, in coordination with the SEOC Executive Section, is responsible for requesting specialized monitoring and assessment support.
- i. Prepare and maintain response procedures for radiological emergencies.
- j. Function as a principal radiological response organization.

## *Washington State Department of Health, Office of Radiation Protection*

**Responsibilities:** Assess and minimize the impact to Public Health from the effects of radiological emergencies by providing health physics and technical support for the Franklin County response.

**Authority:** [RCW 70A.388.040](#). The department of health is designated as the state radiation control agency and is the state agency having sole responsibility for administration of the regulatory, licensing, and radiation control.

**Duties:** Duties include the following:

- a. Provide technical expertise.
  - i. Dose projection and assessment
  - ii. Assess data and recommend protective actions for public safety
  - iii. Track individual exposure limits to emergency workers
  - iv. Track, decontaminate, and register general public processed through the EWAC
  - v. Hazard mitigation
  - vi. Monitoring
  - vii. Take environmental samples
- b. Sample agricultural products
- c. Review and develop protective actions recommendation on the basis of Protective Action Guides, EPA-400, and FDA derived intervention levels to minimize the impact on Public Health from a radiological emergency.
- d. Calculate Derived Intervention Levels (DILs) that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs.
- e. Develop the means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products.
- f. Coordination in development of map(s) in the Washington Information Sharing Environment (WISE) showing the recommended agriculture advisory area to the affected counties.
- g. Responsible for assessing radiological data, the central point for compiling and analyzing all field monitoring data, methods used by Field Monitoring Teams to relay information to the central point, and the means by which it is processed.
- h. Coordination and analysis of sample media and describe methods for transporting samples, including identification of: (1) laboratories involved, (2) predetermined transfer points, if used, and (3) responsible for deciding which samples are sent to which laboratory.
- i. Methods for analyzing the data and transferring the data from the laboratory to the central point.

### Supporting Agencies/Organizations (A.4.i)

Agencies listed below will provide a representative, or their designee, to the FC EOC. These agencies and organizations other than Franklin County Emergency Management staff, with a major role in emergency planning, preparedness as well as direct operational and support include the following:

### 3Rivers AUXCCOMM (Amateur Radio Operators)

**Responsibilities:** A group of Amateur Radio operators that acts as the ARES group within Benton and Franklin Counties, Washington

**Authority:** [RCW 79.13.510](#)

- a. [47 CFR §97.111\(a\)\(2\)](#) – Essential communication needs and to facilitate relief actions;
- b. [47 CFR §97.111\(a\)\(3\)](#) – With another FCC-regulated service;
- c. [47 CFR §97.407\(d\)\(1\)](#) – Public safety or national defense or security:
- d. [47 CFR §97.407\(d\)\(2\)](#) – Immediate life safety, protection of property, law and order, human suffering/need, combatting of armed attack or sabotage; and
- e. [47 CFR §97.407\(d\)\(3\)](#) – Public information or instructions in civil defense and relief

**Duties:**

- a. Provide alternative communication services to assist with the coordination of personnel and resource movement as needed.
- b. Conduct voice message traffic when passing message traffic via digital means is not available.
- c. Data communications through Winlink® in the form of email and document attachments. Examples include but are not limited to: situation reports (SITREPs), staffing schedules, requests for resources (ICS-213RR), general message traffic (ICS-231 General Message), ICS forms/ documents and ISNAP reports. Templates of these forms can be found in the Winlink® program.
- d. Redundant communications, giving Benton County Emergency Management an alternate and additional form of communication when systems are overtaxed or impaired.

### Ben Franklin Transit (BFT)

**Responsibilities:** Provide busses and drivers for emergency transportation in the event of an emergency at the Columbia Generating Station.

**Authority:** RCW [81.112.070](#) (General powers)

**Duties:**

- a. Provides public transportation services within Benton and Franklin Counties.
- b. During an emergency, this agency may provide emergency transportation services.

### Benton-Franklin Posse (BF Posse)

**Responsibilities:**

The Benton-Franklin Posse provides security and access control to the Franklin County Emergency Management facility to include the Franklin County EOC during an emergency activation.

**Authority:** RCW [36.28.020](#)

**Duties:**

- a. Provide a security post at the EOC and EWAC entrance.
- b. Provide traffic control for facilities.
- c. Periodically check all building access points are secure and signage is intact.
- d. Ensure all authorized personnel sign in/out of the facilities.

### City of Pasco Police Department (PPD)

**Responsibilities:** Responsible for emergency response law enforcement, area access, and traffic control in support of the Franklin County Sheriff's Office. Pasco Police has members on the Tri-City Regional SWAT team that may respond to the Columbia Generating Station during a Hostile Action Based incident. This is detailed in Rev. 7.0 Annex E.

**Authority:** RCW [38.52.070](#) authorizes city police departments to assume and execute these responsibilities.

**Duties:** The duties of the Pasco Police Department include, but are not limited to:

- a. Notify the senior city officials of the emergency.
- b. Provide law enforcement duties
- c. Provide traffic control
- d. Control access into designated areas and facilities
- e. The Chief, or his staff, may act as the law enforcement liaison in the FCEOC
- f. The Chief, or his staff, may act as the FCEOC liaison to the Law Enforcement Incident Command Post/Commander in order to coordinate Protective Action Recommendations/Decisions during a Hostile Action Based/security type event. This is detailed in Rev. 7.0 Annex E.

### Columbia Basin College (CBC)

**Responsibilities:** Provide facilities for use as an Emergency Worker Assistance Center (EWAC) in the event of an emergency at the Columbia Generating Station.

**Authority:** RCW Chapters [38.52](#) and [39.34.230](#)

**Duties:** Columbia Basin College duties include but are not limited to:

- a. Provide on-campus building space and facilities to include showers, lavatories, and space for a Red Cross Shelter for the evacuees, service animals and emergency workers in the Columbia Basin College Gymnasium.
- c. Provide facility management and a 24-hr point of contact for CBC to interface with the EWAC Coordinator.

### Franklin County Geographic Information Services (FCGIS)

**Responsibilities:** Provide and update mapping and GIS graphics boards within the EOC. The Information Services office is responsible for providing information technology support to the Franklin County EOC.

**Authority:** [WAC 118-30-060](#) Emergency Plan

**Duties:** Maintain open communication with Operations and FC Public Works Coordinators within the EOC to display the most current and accurate digital maps of the impacted areas that might be affected by a radiological emergency incident.

### Franklin County Information Services (FCIS)

**Responsibilities:** The Information Services office is responsible for information technology support to the Franklin County EOC. Support includes, but is not limited to: telephone, desktop/server, network infrastructure (wired/wireless), telecommunications, internet, and email.

**Authority:** [WAC 118-30-060](#) Emergency Plan

**Duties:** Maintain all information technology equipment and services to support the EOC.

### Franklin County Prosecuting Attorney's Office (FCPA)

**Responsibilities:** The Legal Advisor is responsible for providing interpretation of legal matters to the Franklin County Board of Commissioners or other Emergency Chairperson according to Franklin County Continuity of Government Resolution #2021-253 and other EOC staff members.

**Authority:** RCW [36.27.020](#) and Franklin County Resolution #2021-253 authorizes the Legal Advisor to assume and execute these responsibilities.

**Duties:** The duties of the Legal Advisor include interpreting the law and advising the Franklin County Board of Commissioners, Franklin County Emergency Management Director, and other members of the Emergency Response Organization in the legal aspects of the decision-making process.

### Franklin County Fire Protection Districts

**Responsibilities:**

The Franklin County Fire Districts #4 provide fire protection services in portions of the Franklin County EPZ Sections 1 and 2.



Franklin County Fire District # 4 (FCFD4) has jurisdictional authority for portions of the Franklin County EPZ Section 1. FCFD4 is a volunteer fire district and may not have volunteers available to respond during an emergency involving CGS. They will be notified of an emergency at CGS and take actions according to their current plans/policies/SOPs.

Franklin County Fire District #5 (FCFD5) – In an official correspondence dated 07/26/2012, FCFD5 stated “as of September 1<sup>st</sup>, 2012 Franklin County has no obligation to honor the current REP Plan ESF 10C and will abstain from the Franklin County REP Plan until an agreement can be reached that enables Franklin County Fire Protection District #5 to meet basic standards and guidance expectations.”

**Authority:** RCW’s [38.52.070](#), [43.43.960\(5\)](#), [52.12.111](#), [52.12.121](#), [52.12.131](#), [52.12.140](#) authorize Franklin County Fire Protection Districts #4 to assume and execute these responsibilities.

**Duties:** The duties include but are not limited to the following:

- a. Provide fire suppression per their agency’s SOPs/protocols to their respective jurisdiction.
- b. Relocating firefighting equipment from any area recommended for evacuation.
- c. If requested and as available, assist law enforcement agencies in establishing temporary roadblocks at designated locations.

#### School Districts (North Franklin District & Pasco School District)

**Responsibilities:** Provide busses and drivers for emergency transportation in the event of an emergency at the Columbia Generating Station or another Hanford Site facility.

**Authority:** RCW Chapters [28A.160.080](#), [28A.160.120](#), [38.52](#) and [39.34.230](#)

**Duties:** The duties of the school districts include, but are not limited to:

- a. Notifying potentially affected public schools.
- b. Providing transportation for the relocation of school personnel, students, and public from the Energy Northwest EPZ if required.
- c. Notification of students at schools outside of EPZ who reside within the EPZ, students shall be contacted and redirected to relocation centers or host schools.
- d. Provide a means to “capture”/notify students in transit who either go to a school in the 10-mile EPZ, or live in the 10-mile EPZ and go to school outside the 10-mile EPZ.
- e. Provide a point of contact to interface with the EWAC Coordinator at Franklin County EOC to organize emergency transportation and personnel.

### School – Private (Big River Country School & Country Christian Center)

**Responsibilities:** Provide any transportation and drivers for emergency transportation in the event of an emergency at the Columbia Generating Station or another Hanford Site facility.

**Authority:** RCW Chapters [28A.160.080](#), [28A.160.120](#), [38.52](#) and [39.34.230](#)

**Duties:** The duties of the schools include, but are not limited to:

- a. Notifying potentially affected public schools that they may be transporting students to public school facilities.
- b. Providing transportation (if capable) for the relocation of school personnel, students, and public from the Energy Northwest EPZ if required.
- c. Notification of students at schools outside of EPZ who reside within the EPZ, students shall be contacted and redirected to relocation centers or host schools.
- d. Provide a means to “capture”/notify students in transit who either go to a school in the 10-mile EPZ, or live in the 10-mile EPZ and go to the Pasco School District designated evacuation school location outside the 10-mile EPZ or the EWAC.
- e. Provide a point of contact to interface with the EWAC Coordinator at Franklin County EOC to organize emergency transportation and personnel.

### Southeast Communications (SECOMM) - Dispatch

**Responsibilities:**

- a. Serve as the Public Safety Answering Point (PSAP) for people within Benton and Franklin counties and dispatch service to all local law enforcement, fire/EMS, and emergency response agencies within both counties along within the 10-mile Plume Emergency Planning Zone.
- b. SECOMM is responsible for activating a communication link between the Columbia Generating Station and providing 24-hour staffing. The dispatch center is collocated with the Benton County Emergency Operations Center.

**Authority:** SECOMM operates under the authority of [RCW 38.52.070](#) and [WAC 118-66-030\(65\)](#). The Dispatch Director is responsible for coordinating response activities.

**Duties:** The duties of SECOMM Dispatch include, but are not limited to:

- a. SECOMM will be the primary/initial answering point for all notifications.

- b. SECOMM will notify the appropriate personnel and agencies of the emergency, following their procedures, based on the event classification.
- c. Maintaining radio communications with Franklin County first responders and other communications nodes as directed throughout the emergency event.
- d. SECOMM *may* also provide a representative to serve in the EOC during a CGS emergency.
- e. The Dispatch Manager maintains a roster of personnel to operate on 24 hours a day basis.

### Tri-City Regional Special Weapons and Tactics Team (SWAT)

**Responsibilities:** Tri-City Regional Special Weapons and Tactics Team provides specialized law enforcement services.

**Authority:** RCW [39.34](#), and the Washington Mutual Aid Peace Officers Powers Act, Ch. [10.93 RCW](#), authorizes for law enforcement agency to contract with any other law enforcement agency to provide mutual law enforcement assistance.

**Duties:** Should a response to a hostile action directed against the Columbia Generating Station occur, SWAT policies/SOPs will apply.

### Tri-Cities Medical Facilities (Lourdes Health Network, Kadlec Regional Medical Center, & Trios Health Southridge Hospital)

**Responsibilities:**

Lourdes Medical Center [Lourdes Health Network (LHN)] is a Level IV trauma designated hospital in Pasco.

**Authority:** [RCW 70.41](#) Hospital Licensing and Regulation

**Duties:** During a CGS emergency, Lourdes Health Network can provide emergency medical services for the contaminated injured from within the 10-mile Emergency Planning Zone.

Additionally, Kadlec Medical Center, Trios Health Southridge Hospital in Benton County and Lourdes Hospital in Franklin County along with their service providers could coordinate efforts in accordance with the Tri-County Mass Casualty Incident Plan and the Disaster Medical Coordination Center Hospital Plan to ensure that casualty loads are distributed in a suitable manner.

Ben-Franklin Health District (BFHD) and REDi Coalition can advise and assist EOC personnel in managing medical resources as conditions require.

### Washington Emergency Management Division

**Responsibilities:** Serve as the state coordinating agency for the development and implementation of the state Radiological Emergency Preparedness (REP) Program. Review and analyze this plan against national criteria to ensure compliance with goals, procedures, and benchmarks. Advise and assist other

state agencies and local governments in the development of their REP plans and programs which are in compliance with applicable state and/or federal laws, rules, regulations and executive orders.

**Authority:** State Emergency Management Act, [RCW 38.52](#)

**Duties:**

- a. Prepare and maintain plan and procedures to address radiological incidents from fixed nuclear facilities.
- b. Train staff responsible for the planning effort and those that would respond to the State EOC during an incident.
- c. Provide support by sending a liaison to the FCEOC.
- d. Manages and maintains the State Emergency Operations Center.
- e. Coordinates state resources to support local jurisdictions in need of supplemental emergency or disaster assistance.
- f. Receives and processes requests from local jurisdictions for disaster-related resources and services.
- g. Prepares state disaster proclamations and the Presidential disaster requests for the Governor's signature.
- h. Provides liability coverage and indemnification to registered emergency workers of local jurisdictions operating in a good faith attempt to protect lives, property, and the environment in accordance with [RCW 38.52.180](#).

### Washington State Department of Transportation (WSDOT)

**Responsibilities:** The Washington State Department of Transportation (WSDOT) is a state agency that constructs, maintains, and regulates the use of transportation infrastructure in Washington State. Additionally, WSDOT can respond to traffic impediments to assist the state and local response.

**Authority:** [RCW 47.32.130\(1\)](#), [47.48.020](#), [47.48.031](#), authorizes WSDOT to execute these responsibilities.

**Duties:** The duties of the WSDOT during a CGS incident include but are not limited to:

- a. Assist with the establishment and manning temporary roadblocks at predetermined locations on state highways within Franklin County.
- b. Position electronic reader board signage as requested/needed.

- c. If requested, support WSP or any other traffic mitigation agency in the execution of their duties.
- d. WSDOT may also provide a representative to the Operations Section in the EOC during a CGS emergency.

## Cooperating Agencies/Organizations (A.2.i)

Agencies listed below will provide a representative, or their designee, to the FC EOC. These agencies provide support and assistance, but do not have roles or responsibilities as part of the Franklin County emergency response within the Franklin County portion of the Plume Emergency Planning Zone.

### City of Connell Police Department

**Responsibilities:** City of Connell Police Department provides law enforcement services for the response through mutual aid request.

**Authority:** RCW [38.52.070](#) authorizes the City of Connell Police Department to assume and execute these responsibilities.

**Duties:** The duties of the Police department include providing law enforcement services through mutual aid request.

### City of Pasco Public Works

**Responsibilities:** The City of Pasco Public Works Department is responsible for assisting the Sheriff's office and the City of Pasco Police Department in performing area access control upon request.

**Authority:** RCW [38.52.070](#) authorizes the City of Pasco Public Works Department to assume and execute these responsibilities.

**Duties:** The duties of the Public Works department include providing of road barricades and traffic control devices, and assisting law enforcement personnel in maintaining road blocks.

### Energy Northwest (ENW)

**Responsibilities:**

- a. Meet preparedness requirements of their site certification agreement.
- b. Develop and maintains emergency plans, procedures, and maps to provide for the safety of the public and onsite personnel.
- c. Assess the nature and extent of the incident or emergency at the affected Energy Northwest facility and make appropriate emergency classifications and notifications of counties and states.

- d. Solicits and includes information from Benton County Emergency Management for the annual Columbia Generating Station calendar which includes EPZ information, evacuation direction and map.
- e. Maintain MOUs with federal, state, and local response organizations.

**Authority:** The NRC Region IV Office is responsible for carrying out the agency's duties within Washington State in regards to the Columbia Generating Station's operating license.

**Duties:** The duties of Energy Northwest include, but are not limited to:

- a. Conducts the "Crash Call" and provides the CGS Notification Form to SECOMM and Franklin County EOC.
- b. Provides FCEOC with Protective Action Recommendations (PARS).
- c. ENW may also provide a representative to serve in the EOC as a facility liaison during a CGS emergency.
- d. Energy Northwest will activate the CGS Joint Information Center (JIC) at either the primary location, the Energy Northwest Multipurpose Facility at 3000 George Washington Way, in Richland, Washington, or a secondary location. This activation would occur at Alert, Site Area Emergency or General Emergency.

## Federal Emergency Management Agency, Radiological Emergency Preparedness Program (REPP)

**Responsibilities:** The primary mission of the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) is helping people before, during, and after disasters. In support of the primary mission of DHS/FEMA, the Technological Hazards Division (THD) Radiological Emergency Preparedness (REP) Program:

- a. Ensures that state, local, and tribal governments can adequately protect the health and safety of the public living in the vicinity of the commercial Nuclear Power Plants (NPP)s, as defined by [Public Law 96-295](#), in the event of an incident at an NPP;
- b. Informs and educates the public about radiological emergency preparedness; and
- c. Supports and provides guidance to state, local, and tribal governments' emergency planning and preparedness activities that take place offsite, or beyond the boundaries of the owner-controlled area around the NPP.

The Program assists state, local, and tribal governments in the development and conduct of offsite radiological emergency preparedness activities within the emergency planning zones (EPZs) of Nuclear Regulatory Commission (NRC)-licensed commercial nuclear power facilities.

The REP Program's historical success lies in its ability to integrate and enhance Federal, state, local, and tribal governments' preparedness planning and response and recovery capabilities for all types of radiological emergencies.

**Authority:** Federal regulations in [44 Code of Federal Regulations \(CFR\) Part 350](#) address FEMA's role in conducting assessments and issuing findings regarding offsite emergency plans/ procedures for responding to radiological emergencies at commercial NPPs.

**Duties:**

**Significant plan changes:** After FEMA's initial determination of reasonable assurance, it continues to monitor preparedness at each site. FEMA must receive any significant change to previously approved plans/procedures for review and approval.

**Periodic requirements:** In addition to approving significant changes, FEMA employs an assessment strategy to ensure maintenance of reasonable assurance. This strategy includes biennial evaluation of specified exercises and drills, SAVs, the annual plan review, and the ALC from the state to FEMA certifying the completion of other elements necessitated by [NUREG-0654/FEMA-REP-1, Rev. 2](#). These other elements include things such as training and the updating of public emergency information.

**Ongoing assessment:** FEMA supplements these "snapshot" assessments with the evaluation and observation of ongoing activities including full-scale, functional, and tabletop exercises (TTXs); other types of drills; seminars; training activities; interviews; and responses to real-world incidents. In addition, FEMA employs a dedicated Site Specialist for each NPP whose responsibilities include maintaining an ongoing assessment record that reflects the status of offsite preparedness and training. This approach allows FEMA to maintain a more up-to-the-minute assessment of reasonable assurance throughout the year and provide increased integration with other Federal, state, local, and tribal government preparedness activities.

### United States Coast Guard (USCG)

**Responsibilities:** The United States Coast Guard (USCG), Captain of the Port, Portland is responsible for enforcing maritime laws, river access, river traffic control, river evacuation, and river evacuation verification on the Columbia River.

**Authority:** The Safety Zone provides authority for USCG and Sheriff's Office patrol craft to control river access within the EPZ. [33 CFR Part 165 Subpart C](#), CFR 33, Part 6, and USCG Regulations authorize the USCG-Kennewick Station, to assume and execute these responsibilities.

**Duties:** The duties of the USCG-Kennewick Station include, but are not limited to:

- a. Overall direction and control of river traffic on the Columbia River.
- b. Evacuation of river areas in conjunction with the Benton County Sheriffs Office.
- c. Preventing boaters from floating into the evacuated portions of the Columbia River.
- d. Verifying evacuation on and along the Columbia River.

- e. Performing public notification on and along the Columbia River.
- f. Providing search and rescue services on and along the Columbia River, and requesting assistance from local law enforcement, search and rescue, fire, and EMS entities if necessary. The USCG maintains a facility on Clover Island in Benton County. Franklin County facilities available for USCG use, if requested, are Tri-Cities Airport, Port of Pasco Moorage, and communications assistance through SECOMM and the Franklin County EOC.

### Walla Walla County Fire Protection District #5 (WWFD5)

**Responsibilities:** Walla Walla County Fire District #5 (WWFD5) jurisdictional authority is not within the 10-mile EPZ and will not be responding into any evacuated portion the EPZ in the event of a radiological emergency and will be utilizing the services of the WSP for this response. WWFD5 will provide support to PFD and FCFD3 should they respond to a radiological event.

**Authority:** RCW's [38.52.070](#), [43.43.960\(5\)](#), [52.12.111](#), [52.12.121](#), [52.12.131](#), [52.12.140](#) authorize Walla Walla County Fire Protection District #5 to assume and execute these responsibilities.

**Duties:** The duties include but are not limited to the following:

- a. Provide fire suppression, rescue, and EMS response per each agency's standard operating procedures/protocols to their respective jurisdictions.
- b. Per agency standard operating procedures/protocols and agreements, provide emergency medical transportation for victims requiring ambulance service from locations within the Franklin County portion of the Energy Northwest EPZ.
- c. If requested and as available, assist law enforcement agencies in establishing temporary roadblocks at designated locations.

### Washington State National Guard (WANG) [Combat Support Team (CST), CRBRN Enhanced Response Force Package (CERFP), or Homeland Response Force (HRF)]

**Responsibilities:** Assist during a radiological emergency by deploying Mission Ready Packages (MRP) with personnel and equipment to participate and/or provide subject matter expertise in the radiological decontamination process as part of the Emergency Worker Assistance Center (EWAC). If appropriate, WANG may also assist where needed with personnel. Decisions or recommended actions will be based on a variety of factors.

**Authority:** [RCW 38.14](#) Washington State Guard, [HRF Engagement, Planning and Assistance Team \(HEPAT\) Outreach Book](#), [US Code Title 10](#)

**Duties:**

- a. Provide support by sending liaisons to the Franklin County EOC who will deploy in advance of additional National Guard Assets, and integrate with the existing response infrastructure to support communication with WA EMD area coordinators and local county managers; maintain communication between MRPs and the IC/AC; advise/assist OEM with integration of military



resources at the local and area level; assist the IC/AC in determining damage and response needs within the area of operations

- b. Deploys in advance of additional National Guard Assets, and integrates with the existing response infrastructure.
- c. The CST supports local civilian authorities in identifying potential hazards or threats of CBRNE agents and substances. They provide assessment of current and projected consequences and advise civilian responders on appropriate actions through on-site testing and expert consultation using communication “Reach Back” capabilities.
- d. Coordinates with IC structure to provide transportation of supplies and personnel to affected area, and to conduct decontamination of afflicted casualties and responders. Able to identify and analyze potential hazards; trained in decontamination procedures for ambulatory/non-ambulatory casualties, technicians, and equipment. Capable of processing casualties at an average rate of 40 (ambulatory) and 20 (non-ambulatory) per hour in permitting environmental conditions.
- e. Integrate with IC and other Military forces as required, to provide hazardous materials response; coordinates CERFP tactical employment, accountability and communication.

## Washington State Department of Agriculture

**Responsibilities:** To notify the agricultural community quickly during a radiological emergency by distributing emergency information through agricultural advisories, news releases, media briefings, agency social media, and contact points such as granges, food and dairy processing plants, and outreach and education partners including WSU Extension Offices. If appropriate, WSDA will work with Washington Department of Health (DOH) to recommend actions to reduce contamination of animal feed and water and public consumption of adulterated food and milk. Decisions or recommended actions will be based on a variety of factors.

**Authority:** The authority for Washington State Department of Agriculture is based on two mandates. [RCW 69.04](#) establishes the Department of Agriculture as the agency responsible for safeguarding the public from injury due to adulterated or misbranded food. [RCW 15.36](#) establishes legislation to safeguard the public from milk products that are unsafe for consumption. Food and Safety Act, [RCW 15.130](#). WSDA’s authority to safeguard the public from unsafe milk consumption is codified in [WAC 16-101](#).

### Duties:

- a. Responsible for preventing adulterated food from coming into the food supply chain through oversight of commercial sales and movement of agricultural commodities.
- b. Provide representatives to operate Food Control Points at key transport intersections on the food control boundary with appropriate law enforcement.

- c. Target the specific crops, dairy, and food products proven to be unacceptable for consumption, as the contamination profile is further defined through field samples and laboratory analysis.
- d. Identify and monitor the activities of licensed commercial dairies, farms, processing plants, and wholesale distributors, within the ingestion pathway EPZ.
- e. Notify the agricultural community of Protective Action Decisions (PADs).
- f. Provide current information on farms, food crops, food processors and distributors, and other agricultural data under WSDA's authority.
- g. Contribute to the identification of the geopolitical boundaries of the relocation area(s) and food control area(s), and the locations for FCPs.
- h. Issue interdiction orders as required under RCW, coordinate with DOH on testing of embargoed food, and monitor the proper disposition of adulterated food.

#### Washington State Department of Fish and Wildlife (WDFW)

**Responsibilities:** The Washington State Department of Wildlife Districts #10 and #12 are responsible for evacuation of personnel from state-controlled lands to support the Franklin County Sheriff's Office in evacuation operations.

**Authority:** RCW [38.52.070](#) and RCW [77.15.075](#) authorize the Washington State Department of Fish and Wildlife to assume and execute these responsibilities.

**Duties:** The duties of the Wildlife Agents of Districts #10 and #12, include, but are not limited to:

- a. Evacuate personnel from Department of Fish and Wildlife controlled lands at Ringold and Wahluke Recreational Areas within Franklin County, in support of the Franklin County Sheriff's Office.
- b. Verify evacuation of personnel and report status to FCEOC.

#### Washington State Patrol (WSP)

**Responsibilities:** The WSP is responsible for establishing and manning temporary roadblocks on state highways and supporting the Franklin County Sheriff's Office operations.

**Authority:** RCW [43.43.030](#) and RCW [70.136.030](#) authorizes the WSP to assume and execute these responsibilities.

**Duties:** The duties of the WSP personnel include but are not limited to:

- a. Establishing and manning temporary roadblocks at predetermined locations on state highways within Franklin County.
- b. If requested, support the Franklin County Sheriff's Office in the execution of their duties.

## Chapter 3 – Response Organizations and Assignment of Responsibility (Planning Standard A)

### 3.1 Agency Functional Responsibility Matrix (A.3)

In the event of a CGS emergency, Energy Northwest, principal response agencies, a state EMD liaison, and support agencies/organizations should expect to send representatives to the Franklin County EOC to assist in coordinating the response to the emergency. These representatives will have access to communications information infrastructure, including telephone, conference lines, WebEOC, email, printer, and internet. Franklin County EOC can accommodate one representative from each of the agencies/organizations.

P – PRINCIPLE S – SUPPORTING C – COOPERATING		ORGANIZATIONS / AGENCIES																																
INCIDENT COMMAND SYSTEM FUNCTIONAL AREA AND FUNCTION		BENTON COUNTY EMERGENCY MANAGEMENT	BENTON FRANKLIN HEATH DISTRICT	BEN FRANKLIN TRANSIT	FRANKLIN CO. AMATEUR RADIO (3RIVER)	FRANKLIN CO. EMERGENCY MANAGEMENT	FRANKLIN CO. BOARD OF COMMISSIONERS / ELECTED OFFICIALS	FRANKLIN COUNTY SHERIFFS’ OFFICE	FRANKLIN COUNTY PUBLIC WORKS	FRANKLIN COUNTY FIRE DISTRICT 3	FRANKLIN COUNTY FIRE DISTRICT 4	WALLA WALLA COUNTY FIRE DISTRICT 5	FRANKLIN CO. INFORMATION SERVICES	FRANKLIN COUNTY GIS	FRANKLIN CO. PROSECUTING ATTORNEY	FRANKLIN CO. PUBLIC HOSPITAL DISTRICT 1	CITY OF CONNELL POLICE	CITY OF PASCO FIRE	CITY OF PASCO POLICE	CENTRAL AND S.E. WA CHAPTER OF ARC	COLUMBIA BASIN COLLEGE	LOUDRES HEALTH NETWORK (LMC)	MEDIA - CHERRY CREEK MEDIA (KONA)	MEDIA - TOWNSQUARE MEDIA (KORD)	SECOMM	NORTH FRANKLIN SCHOOL DISTRICT	PASCO SCHOOL DISTRICT	WA STATE PATROL, DISTRICT 3	WA STATE DEPT OF HEALTH, OFFICE OF RADIATION PROTECTION (ORP)	WA STATE DEPT. OF AGRICULTURE	WA STATE EMERGENCY MANAGEMENT DIVISION (WEMD)	WA STATE DEPT OF TRANSPORTATION (WSDOT)	US COAST GUARD – CLOVER ISLAND	
COMMAND AND CONTROL	COMMAND AND CONTROL	P	P			P	P	P	P	P	S	S			P	S	C	P	S	S		S			S	S	S	S	S	S	P			
	ALERT & WARNING NOTIFICATION	P				P	S	S	S				C				C						P	S	P		S			S		C		
	COMMUNICATIONS	P			S	P							S										C	C	P						P			
	PROTECTIVE RESPONSE	P	P			P	C	S	P						C														P	S	P			
	PUBLIC INFORMATION	P	P	C		P	C							C									S	S					S	S	S	C		
OPERATIONS	FIRE AND RESCUE	S	S			S		P		P	P	S				S		P	S															
	TRAFFIC CONTROL	S	S			S		P	S	S	S			S			S		P									P		S		C	S	
	EMERGENCY MEDICAL SERVICE	S	S			S				P	P	S				P		P				P												
	RAD ACCIDENT ASSESSMENT	S	P			S	C		S	C	C	C				C						C							P	S	S			
	LAW ENFORCEMENT	S	S			S		P							C		S		S									S					S	
	PUBLIC HEALTH	S	P			S										C		S		S		S							P	P	S			
SUPPORT	SANITATION	S				S			P																					P	S			
	SOCIAL SERVICES	S	S	S		S	C										S		S	P							P	P					S	
	TRANSPORTATION	S	S	P		S				S	S	S				C		S									P	P					S	
	MASS CARE FACILITY	S				S														P	P	S					S	S				C		
	EVACUATION	P	P	S		P	S	P	S					S			S		S	S	S		C	C			S	S	P			C	S	
	PREVENTION & PREPAREDNESS	P	P		S	P	S	S	S	S	S	S	S	S	S	S	S	S	S	S	C	S	S	S	S		S	S	S	S	S	S	S	
	PROTECTIVE RESPONSE TRAINING	P	C		S	P	S	S	S	S	S	S		S	S	S	S	S	S	S	S	C	S	S	S	S	S	S	S	S	S	S		

Table 3: Functional Response Responsibilities Matrix

## 3.2 Offsite Response Organizations and Responsibilities (A.1, A.1.a)

Offsite response organization representatives are responsible for identifying and assigning personnel to staff EOC positions. The Franklin County Emergency Director, or their designee, will provide initial direction and control of the emergency response activities for an emergency that has off-site impacts in compliance with RCW 38.52 Benton Franklin Health District Board delegation of authority. The position and responsibilities will be relinquished to the Incident Commander until the emergency terminates or until delegated. The Incident Commander will coordinate with the MAC Group. The MAC Group will consist of representatives from stakeholder municipalities and agencies. It will generally consist of agency administrators, Franklin County executives or their designees who are authorized to represent and commit agency resources and funds.

Franklin County recognizes several types of organizational responsibility within the scope of its Columbia Generating Station preparedness plan. These categories are pre-defined in the [FEMA REP-1, Rev. 2 Radiological Emergency Preparedness \(REP\) Program Manual](#).

- **Principal Agencies/Organizations:** the nuclear utility (licensee) and any Federal, state, local, and tribal government agency, department, or executive office having a major or lead role in emergency planning and preparedness.
- **Supporting Agencies/Organizations:** any organization, such as an agency, department, office, or local jurisdiction, having a supportive role to the principal or lead organization(s) in emergency planning and preparedness.
- **Cooperating Agencies/Organizations:** an organization supplying assistance other than direct operational or support functions or resources to the incident management effort.

Refer to Chapter 2.7 within this plan for further details.

The Franklin County Emergency Operations Center (FCEOC) is in the Franklin County Emergency Management (FCEM) facility at 1011 E. Ainsworth St., Pasco, Washington. It is the initial/primary location for activities related to non-hostile action related emergency response to a Columbia Generating Station emergency.

## 3.3 Written Agreements with Support Organizations (A.4, A.5)

Under [RCW 38.52.180\(2\)](#), the state accepts all legal liability for damage to property or injury or death to persons caused by actions taken under the authority of chapter [38.52 RCW](#). [RCW 38.52.180\(6\)](#) suspends the requirement for a license to practice any “professional, mechanical or other skill” for any authorized emergency worker, who, in the course of providing emergency care, practices the professional, mechanical or other skill.

The Emergency Management Act defines an “emergency worker” as “any person who is registered with a local emergency management organization or the department and holds an identification card issued by the local emergency management director or the department for the purpose of engaging in

authorized emergency management activities or is an employee of the state of Washington or any political subdivision thereof who is called upon to perform emergency management activities.” RCW [38.52.010\(8\)](#).

Franklin County Radiological Emergency Response: Energy Northwest along with its Implementing Procedures (IP’s), describe the actions to be taken by local and state government agencies within the borders of Franklin County. (A.4.i)

Response agencies that have signed a MOU agree to respond to a radiological emergency in accordance with their operating procedures, training levels, certifications/capabilities, with the understanding that services and response capabilities will have to be assessed at the time of the emergency to consider response to everyday/normal operations.

All Memorandums of Understanding or Agreements in Table 2 will be reviewed annually to verify their validity. FCEM maintains records/copies of all MOU’s. (A.4.ii-v)

Memorandums of Understanding or Agreement List	
Organization/Agency	Function
Ben Franklin Transit	Master Mutual Aid Agreement
Benton County Emergency Services	Alert and Notification Process
Benton Franklin Health District	Master Mutual Aid Agreement, Participation in the REP Program
City of Connell	Participation in the REP Program
City of Pasco	Participation in the REP Program
City of Pasco PW	Participation in the REP Program
Columbia Basin College	Emergency Worker Assistance Center
DOE-RL	Alert and Notification Systems
Energy Northwest	Facility Liaison/JIC Use and Access
Lourdes Health Network (Medical Center)	Participation in the REP Program
Franklin County Fire Protection District #3	Participation in the REP Program
Franklin County Fire Protection District #4	Participation in the REP Program
Franklin County Public Hospital District #1	Participation in the REP Program
Franklin County Public Works	Participation in the REP Program
Franklin County IS/ GIS	Participation in the REP Program
Franklin County Sheriff’s Office	Participation in the REP Program
North Franklin School District	Participation in the REP Program
Pasco School District	Participation in the REP Program
Walla Walla County Fire Protection District #5	Participation in the REP Program
Washington State DFW	Participation in the REP Program
Washington State Dept of Child, Youth and Families (DCYF)	Access and Functional Needs
Washington State DSHS-Adult Long Term Care (ALTC)	Access and Functional Needs

Washington State DOT	Participation in the REP Program
Franklin County All Hazards Master Mutual Aid Agreement	Covers all hazards and multiple jurisdictions

Table 4: Memorandums of Understand or Agreement List

### Franklin County Master Mutual Aid Agreement (A.4.i)

A Master Mutual Aid Agreement exists that encompasses many local response organizations that would be involved in a Franklin County Columbia Generating Station emergency response.

### Law Enforcement Mutual Aid (A.4.i)

The State of Washington created legal authority for a law enforcement mobilization plan, [RCW 43.43.972](#).

Access to the Columbia Generating Station site is under the control of Energy Northwest, therefore Energy Northwest is responsible for establishing site access policies and procedures for law enforcement and other first responders who are expected to access the nuclear power plant site in the event of a hostile action-based incident involving the Columbia Generating Station.

### Medical Services Agreement (A.4.i, v)

The decontamination plan and procedures are prepared by Franklin County Emergency Management and are reviewed by Energy Northwest, Washington Emergency Management, Washington Office of Radiation Protection, and Lourdes Health Network. The hospital is the final arbiter of approval of the hospital plans and procedures for the evaluation and treatment of radiologically contaminated injured patients.

### Medical Facilities: (A.4.i)

The following medical facilities in Franklin and Benton Counties are willing to accept and have adequately trained personnel and facilities to provide care for injured, exposed, or contaminated patients:

Medical Facility Radiologically Contaminated Patient Capacity		
Medical Facility	Address	Radiologically Contaminated Patient Capacity
<b>Lourdes Health Network</b>	520 N. 4 <sup>th</sup> , Pasco	5
<b>Kadlec Regional Medical Ctr</b>	888 Swift Blvd, Richland	10-12
<b>Trios Health Southridge Hospital</b>	3810 Plaza Way, Kennewick	5

Table 5: Medical Facility Radiologically Contaminated Patient Capacity

## Franklin County Continuous Operations Capability – Plume Phase (A.5)

### Section Overview:

This section describes the authority, responsibilities and duties of local governmental organizations for performing the major functions of emergency planning and response. The referenced legal authorities are the statutory basis for these organizations to assume and execute their responsibilities and duties. Each organization has the capability of continuous operation during an emergency and can send personnel to the Franklin County Emergency Operations Center (FCEOC) and other emergency response facilities in a timely manner. The most senior representative of each agency who responds to the EOC is responsible for assigning agency personnel to staff agency manned emergency functions on a 24-hour-per-day basis. The major functions to be performed by these organizations include the following: Command and Control, Warning, Notification, Communications, Public Information, Accident Assessment, Fire and Rescue, Emergency Medical Services, Law Enforcement, Traffic Control, Security, Transportation, Protective Response, Radiological Exposure Control, Evacuee Registration, and Food and Lodging Assistance. Non-Governmental organizations and individuals relied upon to provide emergency assistance are also identified.

***Emergency Operations Center Staff:***

The following individuals, or their representatives, will normally report to and work from the FCEOC during sustained operations. The individuals listed here by title or the most senior representatives from each agency at the EOC are responsible for identifying and assigning personnel to staff these positions during the following shifts to ensure continuous staffing. Staffing periods may consist of 12-hour shifts. Those individuals are responsible for maintaining their rosters per their internal procedures. Upon shift change the outgoing position will brief the incoming position on the status of the response activities for that position. These same individuals are responsible for assigning personnel to staff 24-hour-per-day emergency worker field operations positions assigned to their agencies. (A.5)

**Multi-Agency Coordinating Group**

The Franklin County Multiagency Coordination (MAC) Group is an ad hoc group comprised of community leaders. MAC is responsible for ensuring continuity of resources making strategic and policy decisions in support of 24-hour operations.

**Decision Group**

- a. Emergency Chairperson: Selected from the Franklin County Board of Commissioners or in accordance with Resolution #2021-253
- b. Franklin County Sheriff or Designated Representative
- c. Franklin County Emergency Management Director
- d. Emergency Operations Center Public Information Officer



- e. District Health Officer or Designated Representative: Benton-Franklin Health District.
- f. Legal Advisor: Franklin County Prosecutors Office.

### **Operations Group**

- a. Operations Coordinator
- b. Communications Coordinator: SECOMM Dispatch Supervisor or Designated Representative
- c. Fire Coordinator: Staffed according to Franklin County Fire Protection Districts and Pasco Fire Department based on Duty Roster/availability
- d. Public Works Coordinator: Franklin County Public Works Department
- e. Law Enforcement Coordinator: Liaisons from Franklin County Sheriff's Office and Pasco Police Department. Will act as the liaison the Incident Command Post during a Hostile Action Based/security event. HAB/security response is detailed in Annex E.
- f. Transportation Coordinator: Representative from Pasco School District, Ben Franklin Transit, Washington State Department of Transportation (WSDOT)
- g. Washington State Patrol (WSP) Liaison in either Benton or Franklin County EOCs. (Will initially respond to Benton County EOC during the Plume Phase of the emergency.)

### **EOC Support Staff**

- a. Message Controller: This position in coordination with the Operations Coordinator is responsible for maintaining the EOC roster.
- b. American Red Cross (ARC) Liaison
- c. Washington State Department of Agriculture Liaison Officer. (Will initially respond to Benton County EOC during the Plume Phase of the emergency.)
- d. Washington State Emergency Management Liaison Officer
- e. Energy Northwest (Columbia Generating Station) Facility Liaison Officer
- f. Washington National Guard Liaison Officer
- g. Washington State Department of Health Liaison Officer

- h. Access and Functional Needs Liaison/Hospital Liaison
- i. Geographic Information System (GIS) Specialist
- j. Amateur Radio Operators
- k. Messengers
- l. Security

## Chapter 4 – Response Planning (PLANNING STANDARD C)

### 4.1 Support to Licensee (C.1, C.2.c, C.2.d)

In accordance with the principles of the National Incident Management System, Franklin County, if personnel are available and can safely travel to the facility, may send a trained Franklin County representative to be the liaison at the EOF, or a single representative may be jointly used by Benton and Franklin Counties. (C.2.c.i, ii) This position will communicate actions taken by FCEM to EOF staff, as well as communicating actions taken by the CGS EOF to FCEM (C.1.ii). This assignment will be made if the emergency conditions justify that action and response resources (EW Kits) will be utilized by the FCEM liaison to the CGS EOF. No other resources will be provided by FCEM to the licensee's EOF. (C.1.iii)

### 4.2 Requests for Emergency Response Support (C.2)

Franklin County requests for state assistance shall be processed through the Washington State Emergency Operations Center (SEOC), except as otherwise agreed between Franklin County, Washington State, and except as may be common practice by law enforcement agencies. (C.2.a) Franklin County requests for emergency response support and resources will be approved by either the Chairperson, the FCEM EOC Manager or the Operations Coordinator. (C.2.a.i)

Response agencies that have signed a Memorandum of Understanding (MOU) agree to respond to a radiological emergency in accordance with their operating procedures, training levels, certifications/capabilities, with the understanding that services and response capabilities will have to be assessed at the time of the emergency to consider response to everyday/normal operations. Organizations that have an MOU with FCEM are listed on Table 4 under within Chapter 3.3 of this plan. (C.2.b.i)

The organizations from which emergency response support and/or resources may be requested during a radiological emergency involving Columbia Generating Station includes, but not limited to, the Priority, Support, and Cooperating Organizations included within Chapter 2.7 or the list of "Written Agreements with Support Organizations" within Chapter 3.2 of this plan. Support and/or resources may also be requested from neighboring counties. (C.2.b.ii, iii)

If, during an emergency response, the Franklin County EOC becomes aware of staffing shortfalls during the first operational period of the response, personnel filling staffing requests shall be assigned within the response organization as to best remedy any staffing shortfalls. The FC EOC, the Franklin County

Multi-Agency Coordination (MAC) Group, IC, or designee may authorize a request, using predetermined communication channels (WebEOC) through Washington State, for state assistance once all local resources are exhausted. Any unmet needs will be communicated via normal internal policies to the FC EOC and those requests will be forwarded to the State of Washington. In order to supplement response resources during a Hostile Action-Based (HAB) incident, reference Annex E of this plan. (C.2.b.iv, C.2.c, C.2.d)

Chapter 2.7 refers to categories of capabilities and/or resources expected to be provided. The following facilities are potentially available for use by those federal agencies responding to an emergency. (C.2.b.v)

- a. The HAPO Center
- b. Tri-Cities Airport
- c. Port of Pasco Facilities
- d. Local hotels

The amount of time expected for emergency response support and/or resources to be available once requested depends on resource status of mutual aid members and the State's ability to process requests. (C.2.b.vi) Incoming response organizations have established resources based on daily needs and operations level; all agencies operate as well with plans in place for emergency operations that would include requesting assistance thru mutual aid or other established directives. Incoming personnel will receive needed safety equipment and just-in-time training based on the event. (C.2.b.vii)

Hanford Fire, Hanford Patrol, and established mutual aid partners, in coordination with Energy Northwest and CGS, have plans and procedures established to allow ORO organizations and support access to CGS. (C.2.c.i, C.2.d) Provisions for coordination between in-bound response resources and evacuation efforts are covered in the Hostile Action-Based incident Annex E of this plan (C.2.c.iii)

### 4.3 Principal Organizations Emergency Response Support (C.3)

The Franklin County Emergency Operations Center (EOC) will function as the operations/coordination center for response to a radiological emergency that affects Franklin County. Any coordination with governmental entities outside those of Franklin County will be conducted through the EOC. The response to any emergency situation requiring the activation of the EOC will be directed by the Emergency Chairperson, or other Franklin County officials as earlier described. (C.3.iii-iv)

The Hostile Action Based (HAB) response Incident Commander may process requests for state or federal assistance to supplement resources through established law enforcement resource request procedures. Reference Annex E regarding a HAB response. (C.3.iv)

### 4.4. Laboratories (C.4)

#### Radiological Laboratories

Franklin County has no direct contracts or agreements with radiological laboratories and will not attempt to list them or track them in this plan. Listing and tracking radiological laboratories shall be left to Washington state agencies.

### Laboratory Operations

Franklin County does not participate in the collection, transportation, delivery, or analysis of field samples. Therefore, Franklin County does not have any direct interaction with laboratories analyzing such field samples.

## Chapter 5 – Emergency Classification System (PLANNING STANDARD D)

### 5.1 Emergency Classification System (D.1.b, D.4)

Franklin County adopts the standard emergency classifications and their definitions as used by Energy Northwest for classifying emergencies at the Columbia Generating Station. These classifications are set out in Chapter 1.2 and Figure 1: Emergency Classification Levels and Emergency Action. Use of this classification system as the basis for determining the level of local response to a Columbia Generating Station emergency and an annual review of the scheme assures the consistency of emergency response with Franklin County and Energy Northwest. Some of these incident initiators include Hostile Action Based events and are explained in Annex E.

Each of the classification levels requires specific predetermined actions of Franklin County emergency organizations and includes alert and mobilization procedures. The FCEOC predetermined actions are explained within the Annex D, Implementing Procedures. Annex E information has been redacted due to its sensitive nature and is labeled FOUO. HAB/security type events (Annex E) may be an exception prompting independent unplanned actions:

- a. HAB/security events (Annex E) will be classified within one of the four classification types/levels. These event types are dynamic/evolving and have to be addressed individually at the time of the incident/event by the on-scene Incident Commander and EOCs. HAB/security type events may deviate from standard operating procedures, they may not allow for predetermined actions based on the nature of those types of events. Incident Commanders and responders may need to utilize professional judgment and utilize methods not yet established as standards/procedures. Protective Action Decisions, for the general public, will be coordinated with the Incident Commander/Incident Command Post.
- b. HAB/security events are discussed in detail in Annex E.

### 5.2 Emergency Response Measures (D.1.b, D.4)

Franklin County measures in response to a classified emergency at the Columbia Generation Station shall be consistent with Table 6: Franklin County Emergency Response Measures based on ECLs.

Franklin County Emergency Response Measures based on ECLs				
<b>Key:</b> <b>A</b> = Activate <b>N</b> = Notify <b>S</b> = Support <b>(a)</b> = as Required, based on situation				
Agency/Organization/Individual	Unusual Event	Alert	Site Area Emergency	General Emergency
<b>Agencies</b>				
Commissioner		A	A	A
Health District Officer		A	A	A
FCEM Director	N	A	A	A
FCEM Staff	N	A	A	A
Legal Advisor		A	A	A
EWAC's	N	N	A (a)	A (a)
FCFD #1	N	N	N	N
FCFD #3	N	N	N	N
FCFD #4	N	N	N	N
FCFD #5	N	N	N	N
Pasco Fire Dept.	N	S (a)	A (a)	A (a)
FC Public Works		A	A	A
Public Information Officer		A	A	A
FC Sheriff	N	A	A	A
SECOMM	N	A	A	A
WA Dept of Fish & Wildlife		S(a)	A (a)	A (a)
WA Dept of Health		N	A (a)	A (a)
WA Dept of Agriculture		N	N	N
<b>City Police</b>				
Pasco	N	A	A	A
Connell	N	S	A (a)	A (a)
<b>Transportation</b>				
Pasco School District		A (a)	A (a)	A (a)
North Franklin School District		A (a)	A (a)	A (a)
Ben-Franklin Transit		A (a)	A (a)	A (a)
<b>Private Schools</b>				
Big River Country School		N	A	A
Country Christian Center		N	A	A
<b>Other Organizations</b>				
US Coast Guard		N	A	A
American Red Cross		A	A	A
Amateur Radio Operators		A	A	A
Lourdes Medical Center, Pasco		N	A (a)	A (a)

Table 6: Franklin County Emergency Response Measures based on ECLs

The actions listed in the table are intended for Columbia Generating Station emergencies that are not complicated by adverse conditions arising from hazardous materials emergencies, weather or geologic events or potential, ongoing, or terminated criminal activity (e.g., HAB).

Not all variations of potential situations that may arise during an emergency can be identified prior to its occurrence. Deviations from these plans and procedures may occur after consideration is given to other factors and offsite conditions (e.g., weather, road conditions, and threats). However, such deviations should be documented including the reasoning that led to those deviations.

## Chapter 6 – Notification Methods and Procedures (PLANNING STANDARD E)

### 6.1 Notification at the Licensee or Local Response Organizations (E.1-5)

#### Initial Notifications by Energy Northwest (E.1)

The licensee is required to notify Southeast Communications (SECOMM) within 15 minutes of classifying the emergency as an Unusual Event, Alert, Site Area Emergency, or General Emergency according to the Table 7 below, Notification Methods from CGS. The primary communication system will be via the licensee CRASH Phone. SECOMM will authenticate the notification of emergency if received by means other than the CRASH Phone of the licensee's affected facility. (E.1.i)

Initial Notification Methods to SECOMM		
Method of Receipt	Priority	Verification
Dedicated CRASH System	Primary	Not Required
Dedicated Fax System	Secondary	Contact Energy Northwest's Security Communications Center if CRASH call was not received
Dedicated Dial-up System	Secondary	Contact Energy Northwest's Security Communications Center to verify the notification if CRASH call was not received.
NAWAS dedicated emergency telephone	Secondary	
911 line or public switched network	Secondary	
Iridium Satellite Phone	Last Resort	

Table 7: Initial Notification Methods to SECOMM

Immediately upon receiving an emergency notification from Energy Northwest, dispatchers at SECOMM shall notify the local emergency response organizations listed in their Emergency Implementation Procedures. Additional notifications necessary to provide for full activation of the Franklin County EOC shall be made as provided for in the Implementation Procedures of the local emergency response organizations.

Additional releases of information shall be provided by the licensee as available. Once the Franklin County EOC is declared operational by the Emergency Chairperson, the licensee will establish contact with the FCEOC for the duration of the event.

If SECOMM is unable to contact Franklin County Emergency Management, plans and procedures are in place to dispatch response resources until the EOC is staffed through delegation of authority from BFHD Board of Health. If a Columbia Generating Station Hostile-Action Based incident (Annex E) is resolved before any assistance is requested beyond local law enforcement agencies, then Franklin County fully

expects that Energy Northwest shall provide any required notifications of a classified emergency in the same manner as usual for initial notifications.

Receipt by Franklin County of an initial notification of a Columbia Generating Station Emergency from a source other than Energy Northwest shall be made according to the following Table 8: *(E.1.iii)*

Initial Notification Verification Methods to FCEM	
Method of Receipt	Verification
Dedicated CRASH System	No verification needed.
Dedicated Fax System	
Dedicated Dial-up System	
Energy Northwest Security Radio	
Franklin County Public Safety Radio System	
911 line or public switched network	
Any other method of receipt	

Table 8: Initial Notification Verification Methods to FCEM *(E.1.iii)*

### Subsequent Notifications by Energy Northwest or Franklin County *(E.1.iv)*

SECOMM shall remain the primary 24-hr notification point for Franklin County prior to the activation of the Franklin County EOC. Once the Franklin County EOC is activated, the receipt of fax notifications and CRASH calls shall be within the EOC. The Director of Franklin County Emergency Management, or designee, is responsible for activating, maintaining and providing overall coordination for the Franklin County EOC. The Franklin County EOC shall be activated upon notification of an Alert, Site Area Emergency, or General Emergency or at the discretion of the EOC Director, or designee.

### Notifications to the Columbia Generating Station *(E.1)*

In the event of emergency conditions arising from hazardous materials emergencies, weather, or geologic events or potential, ongoing, or terminated criminal activity (HAB) not originating from the Columbia Generating Station but having the potential to adversely affect the Columbia Generating Station, Franklin County may notify Energy Northwest of the existence of those conditions.

The Columbia Generating Station Security Communications Center shall be the primary location for receiving notifications from SECOMM or the Franklin County Emergency Operations Center until such time that SECOMM or Franklin County have been notified that the Energy Northwest primary or alternate Emergency Operations Facility is operational.

## 6.2 Alert and Notification of Response Organizations

### Alerting/Activating Franklin County Response Personnel *(E.1.a, F.1.a)*

Telephones and radios are primary interagency communication systems used during a radiological emergency at Columbia Generating Station.

The fire, EMS, and law enforcement shall communicate to their response unit according to their established policies or SOPs and SECOMM protocols. Each EOC staff person overseeing personnel is responsible to notify them of escalations of the ECL and other pertinent information. Engineering, public

works and other response agencies shall utilize their established means of communications. Communications to the EWAC will be via commercial telephone lines, cell phones, and/or amateur radio. Amateur radio links will be established in the event that no commercial telephone lines or communications systems are available. Emergency Workers may also use their own equipment. The communication systems which are available at the SECOMM Dispatch Center and the Franklin County EOC to be used to communicate with other response organizations are listed in Tables 9 and 10.

SECOMM and the Franklin County EOC staff are responsible for overseeing and verifying the notification and activation of staff.

Names and contact information for other responders and officials are available in SECOMM response procedures and other directories kept at Benton County Emergency Services facilities. Assigning a person to go to a responder's home or place of business is a tertiary means of notification.



Communications Capability Between SECOMM Dispatch and Other Emergency Centers and Agencies (E.1.a.i)												
	CRASH		Dial-Up		FAX				Amateur		Cell	
<u>LOCATION</u>	CGS	DOE	CGS	DOE	CGS	CEMNET	Law	Fire	Radio	Commercial	Phones	Internet/LAN
Franklin EOC	X	X	X	X	X	X	X	X	X	X	X	X
SECOMM Dispatch	X	X	X	X	X		X	X		X		X
CGS	X	X	X	X	X			X		X	X	
WA State EOC	X	X	X	X	X	X	X			X	X	
Benton EOC	X	X		X		X			X		X	X
Yakima EOC								X		X		
Grant EOC								X		X		
Adams EOC								X		X		
Walla Walla EOC								X		X		
American Red Cross										X		
FC Sheriff								X		X	X	
BC Sheriff								X		X	X	
Pasco Police								X		X	X	
Connell Police								X		X	X	
Connell Fire								X		X	X	
Pasco Fire									X	X	X	
FCFPD #3									X	X	X	
FCFPD #4									X	X	X	
FCFPD #5									X	X	X	
Columbia Basin College EWAC								X	X	X	X	
Lourdes Health Network										X	X	X

Table 9: Communications Capability Between SECOMM Dispatch and Other Emergency Centers and Agencies (E.1.a.i, F.1, F.2)

Communications Capability Between the Franklin County EOC and Other Emergency Centers and Agencies (E.1.a.i)												
	CRASH		Dial-Up		FAX				Amateur		Cell	
<u>LOCATION</u>	CGS	DOE	CGS	DOE	CGS	CEMNET	Law	Fire	Radio	Commercial	Phones	Internet/LAN
Franklin EOC	X-P	X	XB	X	X	X	X-B	XB		X-B	XB	X
SECOMM Dispatch	X-P	X	XB	X	X		X	X	XB	X-B	XB	XB
CGS	X	X	X	X	X			X	X	X	X	
WA State EOC	X	X	X	X	X	X		X	X	X	X	X
Benton EOC	X	X	XB	X	XB	X		X	X	X	X	
Yakima EOC	X	X	X		X	X		X	X	X		
Grant EOC	X	X	X	X	X	X		X	X	X		
Adams EOC						X		X	X	X		
Walla Walla EOC						X		X	X	X		
American Red Cross										X	XB	X
FC Sheriff							X			XB	XB	XB
BC Sheriff							X			XB	XB	
Pasco Police							X			XB	XB	XB
Pasco Fire								X		XB	XB	XB
Connell Police								XB		XB	XB	
Connell Fire								XB		XB	XB	
FCFPD #3								X		XB	XB	
FCFPD #4								X		XB	XB	
FCFPD #5								X		XB	XB	
Columbia Basin College EWAC								X	X	XB	XB	
Lourdes Health Network								XB		XB	XB	
KEY: X = System Present, O = System Required, NOT Present, P = Primary, B = Backup												
Energy Northwest supplies 2 Satellite phones for Emergency Back-up. Satellite Phones are operationally checked on a quarterly basis.												

Table 10: Communications Capability Between the Franklin County EOC and Other Emergency Centers and Agencies (E.1.a.i, F.1, F.2)

## 6.3 Alert and Notification Systems for the Public (E.2-5)

### Fifteen Minute Design Objective (E.2.i)

It is the responsibility of Energy Northwest to provide notification systems capable of meeting the scope of public notification fifteen-minute design objective. Franklin County makes no representations as to the capabilities of the alert and notification system provided by Energy Northwest.

Benton and Franklin Counties have entered into an agreement concerning the activation of the alert and notification systems provided by Energy Northwest. Pursuant to that agreement, procedures have been established that provide for the activation of the system within fifteen minutes of the making of a protective action decision.

### Public Alert and Warning Notification Process (E.2.ii,iii)

Franklin County Emergency Management is responsible for 24 hour a day notification to the resident and transient populations within the Franklin County portion of the Plume Exposure Pathway EPZ, of protective actions and status of the emergency, within **a timely manner** (designed 15 minutes) of being notified by the Columbia Generating Station, utilizing public address sirens, EAS, emergency telephonic notification type systems, tone alert radios and the local broadcasters. The primary means of alert and notification for the residents of the Columbia Generating Station EPZ is the Siren System. CodeRED is the secondary system and the Emergency Alert System (EAS) is the tertiary means. If both the Franklin and Benton County Emergency Operation Centers are activated, the respective county Emergency Chairperson and Emergency Managers will coordinate the activation of the Siren System and the EAS. Following activation of the sirens, KONA Radio 610 AM/105.3 FM, KORD 102.7 FM, and KZHR 92.5 FM will be utilized to broadcast an Emergency Alert System (EAS) message which will include Protective Action instructions. KONA radio and KORD radio are the primary and secondary EAS stations, respectively. This EAS message will be broadcast in both **ENGLISH** and **SPANISH**.

In the event that a “Fast Breaking” emergency is underway (Site Area or General Emergency) the following will occur; Southeast Communications (SECOMM) will be the primary Siren and EAS activation source, Franklin County is second, with the Washington State Emergency Management Division being third (EAS only). The respective sources of EAS activation will follow the Protective Action Recommendations from the Classification Notification Form (CNF) and use the “EAS Message Decision Matrix” found in Annex D - Implementing Procedures (IP).

### Access and Functional Needs Notification (E.2.ii)

The county emergency organization is responsible for assisting Access and Functional Needs (AFN) populations affected by major emergencies or disasters. In order to fulfill this obligation, Franklin County Emergency Management shall attempt by reasonable means to identify the AFN population. The REP Program Coordinator will coordinate with the Washington State Southeast Washington Aging and Long-Term Care local coordinator as and additional source of information concerning individuals with AFN within the Franklin County portion of the Columbia Generating Station EPZ.

With the implementation of the Emergency Alert System (EAS), local Television stations, which monitor KONA Radio, will broadcast and provide visual messages for the hearing impaired.

AFN populations shall not be provided notification by means other than those used to notify the general public unless prior arrangements have been made on an individual basis. Transportation dependent people are determined by the Southeast Washington Aging and Long-Term Care Liaison for the Franklin County EOC.

A system of 44 sirens has been installed on or near CGS and Hanford DOE-RL. Twenty-One of these sirens are within Franklin County to alert people on or near the Columbia River, Wahluke Hunting Area, and Ringold Fishing Area and sections 1 and 2 of the CGS Emergency Planning Zone.

#### **Broadcast Stations and Other Alert and Warning Notification Systems (E.2.iv-ix, E.4, E.5)**

The primary public alert and notification system (ANS) for a Columbia event involves the use of 34 sirens within the 10-mile EPZ. The backup ANS is the CodeRED emergency telephone notification system (ETNS). CodeRED is an emergency notification telephone and software network which can utilize the Integrated Public Alert and Warning System (IPAWS), Wireless Emergency Alerts (WEA) and Non-Weather Emergency Message (NWEM). Tone Alert Radios (TARs) are also issued to the small number of residents in identified Access and Functional Needs (AFN) populations. These distributed TARs supplement the ANS for special needs populations only (e.g., selected schools and/or residents who identify themselves to their respective county emergency management officials as having hearing impairment-related special communication needs). These TARs are activated by reception of an EAS signal and are programmed to receive broadcasts from KONA 105.3 FM and KORD 102.7 FM. KONA and KORD Radio which are the primary (LPT1) and secondary (LPT2) EAS stations, respectively. Both radio stations participate in the "Columbia Basin Operational Area Plan."

Resident and transient populations shall be advised via public address sirens and/or the Emergency Alert System to monitor for emergency announcements and protective action instructions. The initial instructions will consist of predetermined emergency messages consistent with the emergency classification and will contain information such as:

- a. Identification of agency/organization issuing information.
- b. A statement that a licensee has had an accident.
- c. Identification of the communities or geographical areas affected by the emergency.
- d. A brief description of the type of emergency and the nature of the hazard.
- e. Specific protective measures such as monitor and prepare, sheltering in place, or evacuation to be taken by residents of the affected areas.
- f. A statement that further information will be given via the Emergency Alert System.

- g. Media interviews should be scheduled or conducted immediately after the EAS message to clarify the message.

KONA and KORD both participate in annual training and the CGS Full-Scale Exercise program. Benton and Franklin Counties collaborate with KONA Radio to pre-record all predetermined CGS EAS messages in both English and Spanish (E.4.v). Copies of the text of pre-recorded EAS messages and the messages to be read over the siren system are located at the end of Annex D - Implementing Procedures (IP)(E.2.vi, E.4.i), the contact information for KONA and KORD Radio are located in within Annex D - Implementing Procedures (IP)(E.2.vii).

The process for selecting, modifying, approving, and releasing EAS messages is stated in Annex D – Implementing Procedures (IP). EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast are located within the “Other Type Emergency” section of Annex D - Implementing Procedures (IP)(E.4.i).

Franklin County adopts the [U.S. Nuclear Regulatory Commission’s Emergency Classifications](#) and their definitions as used by Energy Northwest for classifying emergencies at the Columbia Generating Station (J.7.ii-iii). These classifications are set out in Figure 1: Emergency Classification Levels (ECL). Use of this classification system as the basis for determining the level of local response to a Columbia Generating Station emergency assures the consistency of emergency response with Benton County, the surrounding ingestion counties, and Energy Northwest (D.1.b.i, E.3.i-ii). Depending on the ECL, Franklin County will also notify KONA Radio to broadcast an Emergency Alert System (EAS) message. The rebroadcast period for broadcasting official information, statements, EAS messages and the follow-on information statements shall occur every 30 minutes and no less than 90 minutes, until further notice. (E.2.ix, E.4.iii-iv)

Franklin and Benton County EOCs will coordinate with the Energy Northwest Joint Information Center (JIC) to coordinate any special news/press releases or to disseminate appropriate supplemental information to the emergency alert system (EAS) message in a timely manner. (E.2.viii, E.5.i-iii)

### Pre-Emergency Information Dissemination

Based on the [REP Program Manual](#) Guidance, Franklin County foregoes providing:

- Public information publications in languages other than English and Spanish.
- Based on [Fact Sheet 320-073](#) from the Washington State Department of Health, no Potassium Iodide will be given to the general public.
- Information in telephone books, or utility bills.

### Outdoor Informational Signage and Transient Pamphlets

The pamphlet for transients, Emergency Information, is produced and provided in both English and Spanish. It includes information on:

- a. How notification will occur

- b. What instructions may be given
- c. What the protective action instructions mean
- d. Where to go for assistance
- e. How to obtain additional information.

Energy Northwest has installed, and Franklin County Emergency Management staff conducts site-checks on a quarterly basis, informational signs and pamphlet boxes at Ringold Hatchery Boat Launch and the Selph Landing Boat Launch. See following graphics:

It is important the following material be read very carefully! This information only applies to people in recreation areas or passing through the Emergency Planning Zones (see numbered areas on map.)

#### How will I be notified?

If you live or work within the **Hanford site** Emergency Planning Zones (EPZ):

- ▶ People on the Hanford site and Benton and Franklin County EPZ residents will be alerted by sirens or loudspeakers.
- ▶ Recreationists in the Horn Rapids area will be alerted by sirens followed by an audible message.
- ▶ Emergency messages will be broadcast over KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen to and follow instructions.
- ▶ All Benton & Franklin residents of the CGS EPZ are encouraged to register for **CodeRED** (at their county's website) to receive direct emergency notifications via phone, text, and/or e-mail.

If you are using the **Horn Rapids Off-Road Vehicle (ORV) Park**:

- ▶ Listen for sirens sounding for about three minutes followed by an audible message.
- ▶ The sirens signal you to evacuate the area. You may also be contacted by a park manager or an assistant.
- ▶ Tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Other radio and TV stations may also broadcast emergency information.

If you are using the **Columbia or Yakima rivers near the Hanford site**:

- ▶ Listen for sirens sounding for about three minutes followed by an audible message.
- ▶ The sirens will signal boaters and persons using the river to evacuate.
- ▶ Tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language), or the Marine Band Channels 16 or 22.
- ▶ If there is NO radiological or hazardous materials risk, you will be told to return to your launch point and evacuate.

- ▶ If there IS a risk of radiological or hazardous materials exposure, you will be directed to a monitoring station or assistance center where you and your boat will be checked for contamination. Monitoring points may be located at Leslie Groves Park or the Vernita Bridge. Boaters should await further instructions from county officials.

If you are using the **Wahluke hunting or Ringold fishing areas**:

- ▶ Listen for sirens sounding for about three minutes followed by an audible message.
- ▶ The sirens signal you to evacuate the area and tune your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen to instructions. Other radio and TV stations may also broadcast emergency information.

#### What will I be asked to do?

If you are told to **Evacuate**:

- ▶ Listen to instructions carefully. Be sure the section you are in is being evacuated before you follow the next steps.
- ▶ Take your pets with you. You must bring your own pet carrier, leash and proof of up-to-date vaccinations. Most shelters will not allow non-service animals so you may need to make other arrangements.
- ▶ Lock your doors and windows.
- ▶ Take your own car if possible. Take neighbors if they need a ride. If you don't have a car, ask your neighbor for a ride or call your county emergency management office.
- ▶ Children attending Edwin Markham Elementary School, Country Christian Center or Big River Country School will be taken to a safe location by school staff. Listen to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) to learn what actions officials are taking.
- ▶ Schools and day care centers near an area affected by the emergency may choose to evacuate. **Do NOT go to the school.** You may actually hinder the safe evacuation of your child. Parents are strongly urged to contact their school or day care provider to discuss their emergency plan **before** an emergency happens.
- ▶ Drive away from the Hanford site. Once outside the Emergency Planning Zone, go to the nearest open assistance center announced over the radio.

If you are told to **Shelter in Place**:

- ▶ Remain inside.
- ▶ Close all doors and windows.
- ▶ Use phone only for a personal emergency.
- ▶ Keep pets inside.
- ▶ If you must go outside, cover your nose and mouth with a wet cloth.
- ▶ Listen to a primary Emergency Alert System (EAS) radio station KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language) for further instructions.
- ▶ Start preparing for possible evacuation.
- ▶ Close anything that might bring air in from the outside, such as a fireplace damper, range fan, bathroom vent or clothes dryer.
- ▶ If you are in a car, keep the windows and vents closed. Continue to a destination away from the Hanford site.

If you are told to **Monitor and Prepare**:

- ▶ Turn on your radio to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language). Listen for further instructions and developments.
- ▶ Review your family or business emergency plan.
- ▶ Start making preparations to either evacuate or take shelter, if told to do so.

#### Where can I go?

Assistance centers are shown on the map. Register at the assistance center so friends and relatives can locate you easily.

Assistance center locations are:

- ▶ Southridge High School, 3520 Southridge Blvd., Kennewick
- ▶ Columbia Basin College (CBC), 2600 N. 20th, Pasco

Stay tuned to KONA 610 AM / 105.3 FM, KORD 102.7 FM, or KZHR 92.5 FM (Spanish language), drive carefully and remain calm.

#### Where can I get more information?

**Benton County** (509) 628-2600  
<http://www.boca.wa.gov>  
**Franklin County** (509) 545-3546  
 toll free (800) 258-5873  
<http://www.franklinem.org>

## EMERGENCY INFORMATION



### Public Emergency Instructions

Emergency plans have been developed to ensure the safety of the people near the facilities on the Hanford site. The Hanford site includes the Department of Energy's nuclear fuel storage facilities, radioactive and chemical waste treatment and storage facilities. The Columbia Generating Station nuclear energy facility operates on land leased on the Hanford site.

Plans to protect the public's health and safety have been prepared in the unlikely event of an emergency at one of these facilities. The purpose of this brochure is to describe the emergency actions for people who are using recreation areas or passing through the Hanford site Emergency Planning Zones. Check the numbered areas of the map on the other side to see if you are within one of these zones. If you have any questions, contact your emergency management office.

Publication design and editing services courtesy of Energy Northwest, operator of the Columbia Generating Station nuclear energy facility. Columbia provides enough electricity to power one million Washington homes.

Please keep this brochure and store it in a convenient place.

100017  
January 2019

¡Es importante leer con atención el siguiente material! Esta información se aplica únicamente a las personas en áreas recreativas o que transiten por las Zonas de Planificación de Emergencias (consulte las áreas numeradas en el mapa.)

### ¿Cómo me notificarán?

Si usted vive o trabaja dentro de las Zonas de Planificación de Emergencias (EPZ, por sus siglas en inglés) del **Sitio de Hanford**:

- ▶ Se informará a las personas en el Sitio de Hanford y los residentes de EPZ del condado de Benton y Franklin por medio de sirenas o altavoces.
- ▶ A las personas que estén realizando actividades al aire libre en el área de Horn Rapids se les advertirá por medio de sirenas seguidas de un mensaje audible.
- ▶ Los mensajes de emergencia se transmitirán a través de KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español). Escuche y siga las instrucciones.
- ▶ Se alerta a todos los residentes de la zona EPZ de la CGS de Benton y Franklin a registrarse en el **CoderED** (en el sitio web de su condado) para recibir notificaciones directas de emergencia a través del teléfono, mensajes de texto y/o correo electrónico.

Si está utilizando el **Parque de Vehículos Todo Terreno (ORV, por sus siglas en inglés) de Horn Rapids**:

- ▶ Escuchará el sonido de las sirenas durante aproximadamente tres minutos, seguido de un mensaje audible.
- ▶ Las sirenas le indican que evacue el área. También es posible que un administrador del parque o un asistente se comuniquen con usted.
- ▶ Sintonice su radio en KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español). Otras estaciones de radio y televisión también pueden transmitir información de emergencia.

Si está utilizando los **rios Columbia o Yakima** cerca del **Sitio de Hanford**:

- ▶ Escuchará el sonido de las sirenas durante aproximadamente tres minutos, seguido de un mensaje audible.
- ▶ Las sirenas indicarán a quienes estén navegando y a quienes estén usando el río que deben evacuarlo.
- ▶ Sintonice su radio en KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español) o en los Canales 16 o 22 de Marine Band.
- ▶ Si NO existe un riesgo radiológico o relacionado con materiales peligrosos, se le indicará que regrese a su punto de partida y evacue el lugar.

- ▶ Si EXISTE un riesgo de exposición radiológica o a materiales peligrosos, se le dirigirá a una estación de monitoreo o centro de asistencia donde los controlarán a usted y a su bote para detectar contaminación. Los puntos de control podrán estar ubicados en el Parque Leslie Groves o en el Puente Verrill. Las personas que estén navegando deben esperar más instrucciones de los funcionarios del condado.

Si está usando las áreas de **caza de Walhuke o de pesca de Ringold**:

- ▶ Escuchará el sonido de las sirenas durante aproximadamente tres minutos, seguido de un mensaje audible.
- ▶ Las sirenas le indican que evacue el área y sintonice su radio en KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español). Escuche las instrucciones. Otras estaciones de radio y televisión también pueden transmitir información de emergencia.

### ¿Qué me pedirán que haga?

Si le indican que **Evacue** el área:

- ▶ Escuche las instrucciones atentamente. Asegúrese de que la sección en la que se encuentre esté siendo evacuada antes de seguir con los próximos pasos.
- ▶ Lleve sus mascotas con usted. Debe cargar su propio transportador de mascotas, correa y constancia de vacunas al día. La mayoría de los refugios no permitirán la permanencia de animales que no sean de servicio, por lo que es probable que deba coordinar otros arreglos.
- ▶ Cierre puertas y ventanas con llave.
- ▶ De ser posible, use su propio automóvil. Lleve a sus vecinos si necesitan trasladarse. Si no tiene un automóvil, pídale a su vecino que lo lleve o llame a la oficina de administración de emergencias de su condado.
- ▶ Los niños que asistan a Edwin Markham Elementary School, Country Christian Center o Big River Country School serán llevados a un lugar seguro por el personal de la escuela. Escuche KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español) para saber qué medidas están tomando los funcionarios.
- ▶ Las escuelas y los centros de cuidados diurnos cercanos a un área afectada por la emergencia podrían optar por la evacuación. **NO vaya a la escuela.** De hecho, podría obstaculizar la evacuación segura de su hijo. Se recomienda enfáticamente que los padres se comuniquen con su escuela o proveedor de cuidados diurnos para analizar su plan de emergencia **antes** de que se produzca una emergencia.
- ▶ Aléjese del Sitio de Hanford. Una vez fuera de la Zona de Planificación de Emergencias, diríjase al centro de asistencia abierto más cercano que anuncie la radio.

Si le indican que se **Refugiar** en Donde Este:

- ▶ Permanezca en el interior.
- ▶ Cierre todas las puertas y ventanas.
- ▶ Use el teléfono solo para una emergencia personal.
- ▶ Mantenga las mascotas en el interior.
- ▶ Si debe salir, cúbrase la nariz y la boca con un paño húmedo.
- ▶ Escuche el Sistema de Alertas de Emergencia (EAS, por sus siglas en inglés) principal de la estación de radio KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español) para obtener más instrucciones.
- ▶ Comience a prepararse para una posible evacuación.
- ▶ Cierre todo aquello que permita el ingreso de aire desde el exterior, como el regulador de una chimenea, el ventilador de la estufa, la ventilación del baño o la secadora de ropa.
- ▶ Si está en un automóvil, mantenga las ventanas y las ventilaciones cerradas. Diríjase hacia un destino alejado del Sitio de Hanford.

Si se le indica que **Monitorear y Preparar**:

- ▶ Sintonice su radio en KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español). Escuche otras instrucciones y novedades.
- ▶ Revise el plan de emergencia de su familia o empresa. Comience a hacer los preparativos para evacuar o refugiarse en el lugar, si le dicen que lo haga.

### ¿Adónde puedo ir?

Los centros de asistencia se indican en el mapa. Regístrese en el centro de asistencia para que sus amigos y familiares puedan encontrarlo fácilmente.

Los centros de asistencia se encuentran ubicados en:

- ▶ Southridge High School, 3520 Southridge Blvd, Kennewick
- ▶ Columbia Basin College (CBC), 2600 N. 20th, Pasco
- ▶ Manténgase sintonizado en KONA 610 AM / 105.3 FM, KORD 102.7 FM o KZHR 92.5 FM (en español), conduzca con cuidado y permanezca tranquilo.

### ¿Dónde puedo obtener más información?

**Condado de Benton** (509) 628-2600  
<http://www.bces.wa.gov>

**Condado de Franklin** (509) 545-3546  
número gratuito (800) 258-5873  
<http://www.franklinem.org>

## INFORMACIÓN DE EMERGENCIA



### Instrucciones para casos de emergencia pública

Se han elaborado planes de emergencia para garantizar la seguridad de las personas cerca de las instalaciones en el Sitio de Hanford. El Sitio de Hanford incluye el centro de almacenamiento de combustible nuclear, el centro de tratamiento de residuos radiactivos y químicos, y el centro de almacenamiento del Departamento de Energía. El centro de energía nuclear de la Estación Generadora de Columbia opera en terrenos arrendados en el Sitio de Hanford.

Se han preparado planes para proteger la salud y la seguridad públicas en el improbable caso de que se produzca una emergencia en uno de estos centros. El propósito de este folleto es describir las medidas de emergencia para las personas que estén usando las áreas recreativas o que transiten por las Zonas de Planificación de Emergencias del Sitio de Hanford. Consulte las áreas numeradas en el mapa en el reverso para verificar si usted se encuentra en una de estas zonas. Si tiene alguna pregunta, comuníquese con su oficina de administración de emergencias.

Los servicios de diseño y edición de la publicación son cortesía de Energy Northwest, operador del centro de energía nuclear de la Estación Generadora de Columbia. Columbia proporciona suficiente electricidad para suministrar energía a un millón de hogares en Washington.

Conserve este folleto y guárdelo en un lugar conveniente.

100017  
Diciembre 2019



## Annual Information for Plume Emergency Planning Zone Residents

FCEM participates with Benton County Emergency Management (BCEM), Energy Northwest and the Department of Energy-Richland Operations in the annual review, preparation, and distribution of the Hanford Site Neighbor Calendar. The calendar is distributed annually, in both English and Spanish, within the Plume Emergency Planning Zone. The calendar includes:

- a. Descriptions and maps of protective action areas with evacuation routes and relocation/assistance centers
  - i. Detailed information on how the public in the EPZ will be notified and where to turn for emergency information and instructions.
- b. Information on protective actions, including:
  - i. Specific instructions for actions to take when sheltering-in-place.
  - ii. Instructions on evacuation and suggested evacuation destination(s) with an easy-to-read EPZ map that highlights the evacuation routes and location of reception centers and other centers used for public services during an emergency.
- c. Provisions and/or policies for persons with disabilities, Access and Functional Needs, and/or service animals
- d. Information consistent with the plans/procedures regarding
  - i. the care of children at public and private schools and
  - ii. licensed daycare centers (child and adult),
  - iii. mobility- and hearing-impaired persons, and
  - iv. those needing transportation assistance.
- e. Information on the evacuation routes leading to reception/relocation centers.
- f. Educational information that includes basic information on radiation, how the nuclear power plant produces electricity, and the emergency classification levels.
- g. Agricultural information, if appropriate to the area, including
  - i. information or instructions regarding protection of livestock and
  - ii. commercial agricultural or home garden products and
  - iii. references to additional sources of information.



Residents are encouraged to use the calendar and keep it readily available for quick reference in the event of an emergency. The calendar information is also readily available via links on the Franklin County Emergency Management website (<https://franklinem.org/>) .

### Plume and ingestion Phase Agricultural Information

Franklin County relies upon the Washington State Department of Agriculture and Washington State Department of Health to produce publications for distribution to the public meeting the ingestion exposure information requirements. Washington State Department of Agriculture's *Radiological Emergency Information for Farmers, Food Processors and Distributors* document has been produced in [English](#) and [Spanish](#).

These Washington State documents are available via links on the [Franklin County Emergency Management](#) website.

## Chapter 7 – Emergency Communication (PLANNING STANDARD F)

### 7.1 Communications Systems (F.1, F.2)

During an emergency, Franklin County communicates with local governments and response agencies within Franklin County, contiguous counties' emergency operations centers within Washington State, and the Washington State Emergency Operations Center. The specific communicator for each organization is described in the individual procedures for those organizations. The primary communicator for Franklin County EOC is the Director or their designee. Franklin County could communicate with contiguous counties' emergency operations centers in Oregon State but any communication with the State of Oregon would probably go through the Washington State Emergency Operations Center.

The following interagency communication systems have been provided for use during a radiological emergency at Columbia Generating Station.

Radios:

- a. Energy Northwest to the SECOMM Dispatch Center
- b. Emergency Alert System capabilities at Radio Station KONA and Franklin County Emergency Management. Both in Pasco, WA.
- c. Two-meter amateur radio volunteers at the Franklin County EOC, Columbia Basin College EWAC, and the American Red Cross office in Kennewick, WA
- d. Amateur radio communications unit in Franklin County EOC
- e. SECOMM Dispatch Center communication links:
  - 2-way radio
  - Computer-Aided Dispatch System

- Cell/Text
  - NAWAS
- f. Comprehensive Emergency Management Network (CEMNET) between Franklin County EOC and the Washington State EOC
  - g. Law Enforcement Radio Network (LERN)
  - h. Hospital Emergency Alert Radio (HEAR)
  - i. Satellite phones
  - j. 2-way radio (CGS to FCEOC)

Telephones:

- a. Commercial telephone system between the Franklin County EOC and organizations
- b. Dedicated system (CRASH/Dial-up/Fax system) between Energy Northwest and the State and County EOCs and Communications centers.

Internet Communications:

- a. E-mail
- b. WebEOC

The communication systems which are available at the SECOMM Dispatch Center and the Franklin County EOC to be used to communicate with other response organizations are listed in Tables 9, 10, and 11.

## 7.2 Communications Links (F.1.b.ii, F.1.c)

The primary method of communicating between the Columbia Generating Station Emergency Operational Facility and the Franklin County Emergency Operations Center is the dedicated (CRASH) phone system provided by Energy Northwest (ENW) in conjunction with the public switched network telecommunications providers.

The backup communications system between the Columbia Generating Station Emergency Operational Facility and the Franklin County Emergency Operations Center is the Site Wide Security Radio system provided by ENW.

Additional means of communications are available and can be implemented if needed, such as:

- a. Satellite telephones
- b. Cell phone
- c. Email

d. Washington State EMD Duty Officer

A table showing communications links between the Franklin County Emergency Management and other Offsite Response Organizations is included in this plan as Table 11: Prioritized Communications Links.

<b>COMMUNICATION LINKS</b> <b>P – Primary</b> <b>A – Alternate</b> <b>X - Additional</b>		COMMUNICATIONS SYSTEMS	ENERGY NORTHWEST CRASH	ENERGY NORTHWEST DIAL-UP	ENERGY NORTHWEST PIO DIAL-UP	ENERGY NORTHWEST FAX	10-DIGIT FAX	AMATEUR RADIO (DIGITAL, VHF)	CEMNET	PUBLIC SAFETY VHF	HOSPITAL EMERGENCY AMBULANCE RADIO	ULTRA HIGH FREQUENCY (UHF)	HIGH FREQUENCY (HF)	E-MAIL	NAWAS	800 MHZ	TELEPHONE / CELL PHONE	INTERNAL PROCEDURES
Washington	Oregon																	
<b>EMERGENCY CENTERS</b>																		
ENERGY NORTHWEST EMERGENCY OPERATIONS FACILITY			P	X	X	A	X					X		X	X		X	
ENERGY NORTHWEST JOINT INFORMATION CENTER			X	P	P	X	X							X			A	
WASHINGTON STATE EMERGENCY OPERATIONS CENTER			X	X	X	X	A	X	A					X			P	X
ADAMS COUNTY EMERGENCY OPERATIONS CENTER							A	X	A					X			P	
BENTON COUNTY EMERGENCY OPERATIONS CENTER			X	X		X	A	X	A	X	X		X	X			P	
GRANT COUNTY EMERGENCY OPERATIONS CENTER							A	X	A					X			P	
WALLA WALLA COUNTY EMERGENCY OPERATIONS CENTER							A	X	A					X			P	
YAKIMA COUNTY EMERGENCY OPERATIONS CENTER							A	X	A					X			P	
ACCESS & FUNCTIONAL NEEDS (SEWAALTC, DCYF, SLR)														A			P	X
3RIVERS-AUXCOMM (AMATEUR RADIO)								P						X			A	X
BEN FRANKLIN TRANSIT														A			P	X
BENTON FRANKLIN HEALTH DISTRICT							X							A		X	P	X
BENTON FRANKLIN POSSE														X		A	P	X
CITY OF CONNELL POLICE DEPARTMENT							X							X		P	A	
CITY OF PASCO FIRE DEPARTMENT							X			A	X			X			P	X
CITY OF PASCO POLICE DEPARTMENT							X							X		P	A	X
CITY OF PASCO PUBLIC WORKS							X			X				X		A	P	X
CITY OF RICHLAND FIRE DEPARTMENT							X			A	X			X			P	
COLUMBIA BASIN COLLEGE EMERGENCY WORKER / ASSISTANCE CENTER							X	X						A			P	X
CENTRAL AND SOUTHEASTERN CHAPTER OF AMERICAN RED CROSS							A	X						A			P	X
CHERRY CREEK MEDIA - KONA										A				X			P	X
WA DOH – OFFICE OF RADIATION PROTECTION														A			P	X
FRANKLIN COUNTY INFORMATION SERVICES (I.E., GIS)														A			P	X
FRANKLIN COUNTY PUBLIC HOSPITAL DISTRICT 1							X			A	A			X			P	X
FRANKLIN COUNTY PROSECUTING ATTORNEY’S OFFICE														A			P	X
FRANKLIN COUNTY PUBLIC WORKS							X			X				X		A	P	X
FRANKLIN COUNTY SHERIFF’S OFFICE							X									X	X	X
FIRE DISTRICTS (FC 3, 4, 5, WW5 & BC 1)							X			A	X			X			P	X
LOURDES HEALTH NETWORK (MEDICAL CENTER)							X				X			A			P	X
PRIVATE SCHOOLS (BIG RIVER & COUNTRY CHRISTIAN)														A			P	X

<b>COMMUNICATION LINKS</b> <b>P – Primary</b> <b>A – Alternate</b> <b>X - Additional</b>		COMMUNICATIONS SYSTEMS	ENERGY NORTHWEST CRASH	ENERGY NORTHWEST DIAL-UP	ENERGY NORTHWEST PIO DIAL-UP	ENERGY NORTHWEST FAX	10-DIGIT FAX	AMATEUR RADIO (DIGITAL, VHF)	CEMNET	PUBLIC SAFETY VHF	HOSPITAL EMERGENCY AMBULANCE RADIO	ULTRA HIGH FREQUENCY (UHF)	HIGH FREQUENCY (HF)	E-MAIL	NAWAS	800 MHZ	TELEPHONE / CELL PHONE	INTERNAL PROCEDURES
Washington	Oregon																	
<b>EMERGENCY CENTERS</b>																		
SCHOOL DISTRICTS (PASCO & NORTH FRANKLIN)														A			P	X
SECOMM							X			A	X	X	X	X		X	P	X
SWAT							X							X		P	A	
WA ARMY/AF NATIONAL GUARD (WA A/AFNG)														A			P	
WA DEPARTMENT OF AGRICULTURE (WSDA)							X							A			P	X
WA DEPARTMENT OF TRANSPORTATION (WSDOT)							X							A			P	X
WA STATE PATROL (WSP)							X							X		P	A	X
OREGON STATE EMERGENCY OPERATIONS CENTER							A	X						X			P	
UMATILLA COUNTY, EMERGENCY OPERATIONS CENTER (OREGON)							A	X					X	A		X	P	
MARROW COUNTY, EMERGENCY OPERATIONS CENTER (OREGON)							A	X					X	A		X	P	
U.S. COAST GUARD (OREGON)							X					X	X	A		X	P	

Table 11: Prioritized Communications Links (F.1, F.2)

## Alerting System for Emergency Personnel and Response Organizations (F.1.c)

The Licensee Representative providing notification shall provide information as outlined on the Energy Northwest Classification Notification Form. This information is sufficient to initiate immediate protective actions, if any are required. Additional releases of information shall be provided by the facility as available. Once the Franklin County EOC is declared activated by the Emergency Chairperson, the facility will establish contact with the EOC and will not continue to communicate through SECOMM Dispatch Center.

The Franklin County EOC Emergency Manager, or designee, will utilize the Franklin County EOC Implementing Procedures to contact any appropriate Offsite Response Organizations (OROs) based on the ECL. These Implementing Procedures are kept separate from this plan and updated quarterly or as obtained. Additional notifications necessary to provide for full activation of the Franklin County EOC shall be made as provided for in the Implementation Procedures of the local emergency response organizations.

### 7.3 Testing Communication Systems (F.3, N.4.f)

Drills shall be conducted by the emergency organizations in order to ensure that emergency response personnel maintain familiarity with their respective emergency responsibilities and to provide a means of performance evaluation. All communications drills include a message content check (see Table 12-Drilling/Testing Communications Systems Matrix). Such drills shall include the following:

- a. Weekly communications links tests between Energy Northwest and the SECOMM Dispatch center, Washington State EOC, and the Franklin County EOC. \*Communication testing with Federal resources is a WA State EMD responsibility\*
- b. Weekly dedicated telephone communications tests between Energy Northwest, Franklin County EOC, and the Washington State EOC.
- c. Annual communications links tests during exercises between Energy Northwest and the Facility field assessment teams, Washington State Department of Health and its field assessment teams, the SECOMM Dispatch center, the Washington State EOC, and the Franklin County EOC. FEMA will evaluate these links biennially (every other year).
- d. Weekly Siren and EAS Test procedures and the River Siren Annual Test procedures are both outlined within the Franklin County EOC Implementing Procedures.

Testing Communication System Table											
Timing/System	CRASH		Dial-Up		FAX		VHF-High			*When Scheduled	
	CGS	DOE	CGS	DOE	CGS	CEMNET	Amateur	DOE	Sirens	EAS	IPAWS
Weekly	X	X			X	X	X		X	X (RWT)	X
Monthly			X	X	X			X		X* (RMT)	
Annual									X	X	

## Chapter 8 Public Education and Information (Planning Standard G)

### 8.1 Public Education (G.1)

The Franklin County public education program is intended to make information available, in English and Spanish, to the resident and transient population within the Plume Exposure Emergency Planning Zone.

- a. An annual Hanford Site Neighbors calendar mailing (English and Spanish) which includes information and emergency instructions.
- b. A quarterly mailing of the Site Neighbors newsletter, **Open Lines**, to the “address of record” living within the Plume Emergency Planning Zone.
- c. Three brochures designed specifically for the transient population within the Plume Emergency Planning Zone (EPZ):
  - i. **Emergency Information for People on the Columbia River near the Hanford Site.** (English and Spanish) This brochure is placed at major boat launches/landings near or in the Plume EPZ. The supply of brochures is checked quarterly and are replaced as needed.
  - ii. **Emergency Information Public Emergency Instructions.** (English and Spanish) This brochure is designed specifically for supplying general emergency instructions.
  - iii. **Radiological Emergency Information for Farmers, Food Processors, and Distributors.** (English and Spanish) Addresses the concerns of producers of agricultural products and is produced by the Washington State Dept. of Agriculture.
- d. Franklin County Emergency Management and Energy Northwest cooperate in conducting the public information program. Copies of emergency preparedness information are available at Franklin County Emergency Management, and the offices of Energy Northwest.
- e. Staff members of Franklin County Emergency Management and Energy Northwest make presentations at various public meetings, provide information on the FCEM webpage and over the phone, and provide printed information.
- f. Franklin County Emergency Management hosts a website that contains public information regarding the Columbia Generating Station (<https://franklinem.org>).
- g. There are **NO** hotels or motels within the Franklin County portion of the Plume EPZ. The transient population consists of recreation, agriculture workers, and employees of the contractors on the Hanford Nuclear Reservation. The agricultural worker population is provided emergency public information and public education through a cooperative effort of the Washington State Migrant Worker Council, agricultural industry employers, and Franklin County Emergency Management.
- h. Migrant Employee Population within the Franklin County 10-Mile EPZ is estimated at 5000. The

number of migrant workers vary based on crops being harvested and the time of year. Peak harvest times are in May and June. This general area is North of Selph Landing Road, East of the Columbia River, South of Hollingsworth Road, and West of Glade North Road.

Franklin County Emergency Management is responsible for assisting AFN populations affected by major emergencies or disasters. In order to fulfill this obligation, Franklin County Emergency Management shall coordinate with the Southeast Washington Aging and Long-Term Care and WA State Department of Child, Youth and Family local coordinators as the sources of information concerning individuals with AFN within the Franklin County portion of the Columbia Generating Station EPZ. Due to HIPAA rules, Franklin County EOC cannot maintain a list of AFN individuals. AFN individuals are encouraged to contact FCEM or the Washington State agencies that they are registered with and/or provided services from.

## 8.2 Media Education (G.5)

Franklin County participates annually in licensee media information programs including the joint preparation of briefing materials (i.e., the Site Neighbors Calendar) to be presented to key media personnel, and by explaining the county response effort during special media presentations. If requested, Franklin County Emergency Management staff will assist Energy Northwest during their annual media information seminars.

## 8.3 Coordinating and Disseminating Information to Public and Media (G.2, G.3.a, G.5.i)

Franklin County participates annually in licensee media information programs including the joint preparation of briefing materials (i.e., the Site Neighbors Calendar) to be presented to key media personnel, and by explaining the county response effort during special media presentations. If requested, Franklin County Emergency Management staff will assist Energy Northwest during their annual media information seminars.

Franklin County EOC PIO and Joint Information Center (JIC) Implementing Procedures identify any potential individual(s), by title/position, to serve as news media point(s) of contact and spokesperson(s)/PIO(s) at any JIC location and identify procedures for control and authorization of releasing sensitive information. Coordination for the timely exchange, discussion, and coordination of information among all designated spokespersons/PIOs, including those at different locations should occur and is also discussed within the Annex D - Implementing Procedures (IP).

### *Joint Information Center (JIC) and Media Points of Contact*

Energy Northwest will activate a JIC for an Alert, Site Area Emergency, or General Emergency in the Energy Northwest Multipurpose Facility at 3000 George Washington Way, in Richland, Washington. This location will serve as the primary location for the timely exchange of information between the Energy Northwest and joint Energy Northwest, local, state, and federal emergency public information operations. Franklin County EOC or Franklin County Emergency Management will designate a Public Information Officer to represent Franklin County at the JIC. The FCEM PIO at the JIC will maintain communications with the FC EOC to coordinate all news release information.

Joint news releases will be prepared, the media personnel briefed, and media work areas will be



provided at the Energy Northwest JIC. The Energy Northwest JIC has established phone teams and phone numbers where the media and general public can call into for additional information. The media concern line and the public concern line numbers are published on the Energy Northwest website at: <https://www.energy-northwest.com/emergency-information/Pages/default.aspx>

JIC personnel, onsite and offsite, will review media releases and monitor information that is being disseminated by the media via, radio/social media/print etc.

In the event that the primary CGS Joint Information Center (JIC is not operational the following alternate facilities will be used in the order as shown:

- a. Department of Energy JIC located at the Federal Building in Richland
- b. Facilities at the City of Richland Shops area located at 2700 Duportail in Richland
- c. CGS will secure a conference facility at a local hotel

#### 8.4 Media Points of Contact (G.3)

The Franklin County PIO staff are authorized to initiate press briefings or media contacts. The FCEM PIO at the JIC will maintain communications with the FC EOC to coordinate all news release information. They are instructed to refer all media inquiries referring to Franklin County to the Franklin County PIO staff at the JIC. (G.3.i)

Franklin County EOC Annex D - Implementing Procedures (IP) have all phone contacts and the processes to obtain, verify, and coordinate approval in advance of disseminating information to the public and/or media regardless of physical location.

If physical participation in the JIC is not feasible, public affairs activities will be coordinated using a Joint Information System (JIS) approach. Coordination will be accomplished via email or by phone. (G.3.ii) Ten minutes or a mutually agreed upon time limit, should be allowed for this purpose, after which the releasing agency will send out its information. Franklin County will issue information to the public and media from their EOC during these instances. During a HAB event, special considerations and coordinating procedures will be utilized as discussed in Annex E of this document. During a HAB event, all public information will be approved and vetted by Incident Command.

In the event that Franklin County has not yet staffed the PIO position at the ENW JIC, the PIO at the Franklin County Emergency Operations Center, who is also the main point of contact for response information at the Franklin Command Emergency Operations Center, is responsible for coordinating with and exchanging information with information officers from other organizations at the Energy Northwest Joint Information Center. The coordination/approval process of the news releases will be done via FCEM PIO and Director Implementing Procedures. (G.3.iii)

Initially, the ENW will release preliminary information to the media on the nature of the incident, the status of CGS, and any other pertinent information. The content of the news releases will be coordinated telephonically, email and/or by facsimile between the licensee, county, and state. Any release of sensitive information (such as a HAB incident) would need to be a coordinated effort between the Franklin County EOC Chairperson and Emergency Manager, and other involved parties. (G.3.iv)

## 8.5 Public Inquiries and Media Monitoring (G.4)

The Franklin County EOC PIO with approval of the FCEOC answers press and public inquiries concerning EOC activities and address inaccurate information between the EOC and JIC. The PIO also ensures facilities are available at the EOC should media interviews take place at the EOC.

News releases, media interviews, social media and website posts will be the methods for publicizing all the available communication channels, including dedicated telephone number(s) and other platforms, for public inquiries. Franklin County EOC also posts wall-mounted boards including the CGS JIC media and public info line phone numbers throughout the EOC. The JIC, via a sufficient infrastructure and multiple telephone lines, effectively monitors media information messages to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain. The JIC also coordinates the public inquiries program and the method for contacting that organization.

Franklin County will staff or share personnel with Benton County to staff an information officer position at the Energy Northwest JIC (ENW JIC) if there are staffing shortages at the time of the emergency. Franklin County EM PIO at the JIC has access via a JIC “box” that contains the current annual calendar, plant brochures and graphics, media contact information and procedures. Franklin County PIO staff participates in JIC processes, as needed, to investigate, respond to, and brief joint information system center personnel and both the public inquiry and media inquiry phone teams on the current emergency response situation and the outcome of any information discovered during their participation in the rumor control/inaccurate information process. The communications systems available for addressing inaccurate information with assisting organizations is listed below:

<b>COMMUNICATIONS SYSTEMS AVAILABLE FOR ADDRESSING INACCURATE INFORMATION WITH ASSISTING ORGANIZATIONS</b>
Dedicated phone lines that are extensions off an Energy Northwest PBX
Dedicated Fax Line
Dedicated Dial Up Line
CRASH Line
Dedicated Pio Dial Up Line
Public Switched Telephone Network
Cellular Telephone
Text Messaging
Virtual Private Network Connections to FCEM
Email
Washington Emergency Management Division WebEOC
Amateur Radio

The exchange of information between Franklin County PIO staff at the JIC and the Franklin County Emergency Operation Center will use the above communications links. These links provide access to information about the emergency, and how to verify such information. These links also provide a verification/coordination process between Benton and Franklin County EOCs/JIC/Response personnel.

## Chapter 9 Facilities and Equipment (Planning Standard H)

### 9.1 Franklin County Emergency Operations Center (H.6,9,11)

The Franklin County EOC is located in the offices of Franklin County Emergency Management (FCEM), at 1011 East Ainsworth St., Pasco, Washington. The FCEM Director, or designee, is responsible for maintaining the operational readiness of the EOC. (H.6.i-ii)

The EOC is the facility where the Franklin County Board of Commissioners, Director of FCEM, Franklin County Sheriff, Health District Officer, Public Information Officer(s), Operations/Support Coordinator, Transportation Coordinator, American Red Cross Representative, Fire Coordinator, Law Enforcement Representatives, Licensee Representative, Washington State Emergency Management Division, Washington State Patrol Representative, and the representatives of the other organizations responding to the emergency will assemble to direct and control the implementation of protective actions and other emergency measures within Franklin County, Washington.

Access to the Franklin County Emergency Operations Center is limited to Franklin County Emergency Management personnel and personnel from coordinating and supporting agencies participating in command-and-control activities as part of the incident command organization or multi-agency coordination group. Others may be admitted on an ad hoc basis. Access control during an EOC activation will be maintained by a security detail mainly made up of the Benton-Franklin Posse. FCEM has premade signage for access control and direction purposes and Annex D – Implementing Procedures (IP). Armed access control for the facility will be established if needed. (H.6.iv)

A floor plan for the EOC is provided in Figure 5 on the next page. A list of equipment which is available at the EOC is listed below:

Crash Phone	Copier	Dedicated Fax
Commercial Fax	Commercial Phones	Computers/Workstations
Printers/ Plotter	Security Cameras	Wi-Fi
Restrooms	Tables	Screens
Interactive Projectors	Procedures	Reader board
Backup Generator	Radio Equipment	Satellite Phones

Backup power is provided by an uninterruptable power supply diesel-powered generator capable of providing power for the continued operation of the Franklin County Emergency Operations Center. The Benton County Emergency Management building at 651 Truman Ave., in Richland, is the pre-identified alternate emergency operations center for Franklin County Emergency Management. A floor plan for the Benton County EOC is provided in Figure 6 on the next page. Backup power for Benton County Emergency Management is provided by an uninterruptable power supply capable of providing power for

the continued operation of the Benton County Emergency Services facilities for up to 30 minutes. The uninterruptable power supply is powered by offsite power or a diesel-powered generator. All power used in the building, except for power from the red colored power outlets, is filtered through the uninterruptable power supply. If both Franklin and Benton County Emergency Management's buildings are not safe or accessible, a 2<sup>nd</sup> alternate facility is designated in the Franklin County Sheriff's Office Training Room at 1016 N. 4<sup>th</sup> Ave in Pasco, WA. The generator is located on the outside of the jail addition in a gated area (5th Ave, outside the kitchen). The generator will power the Justice center and Jail addition until power is restored. (H.6.v-vi)

# Franklin County EOC/EOC Diagram (1011 E. Ainsworth St., Pasco)

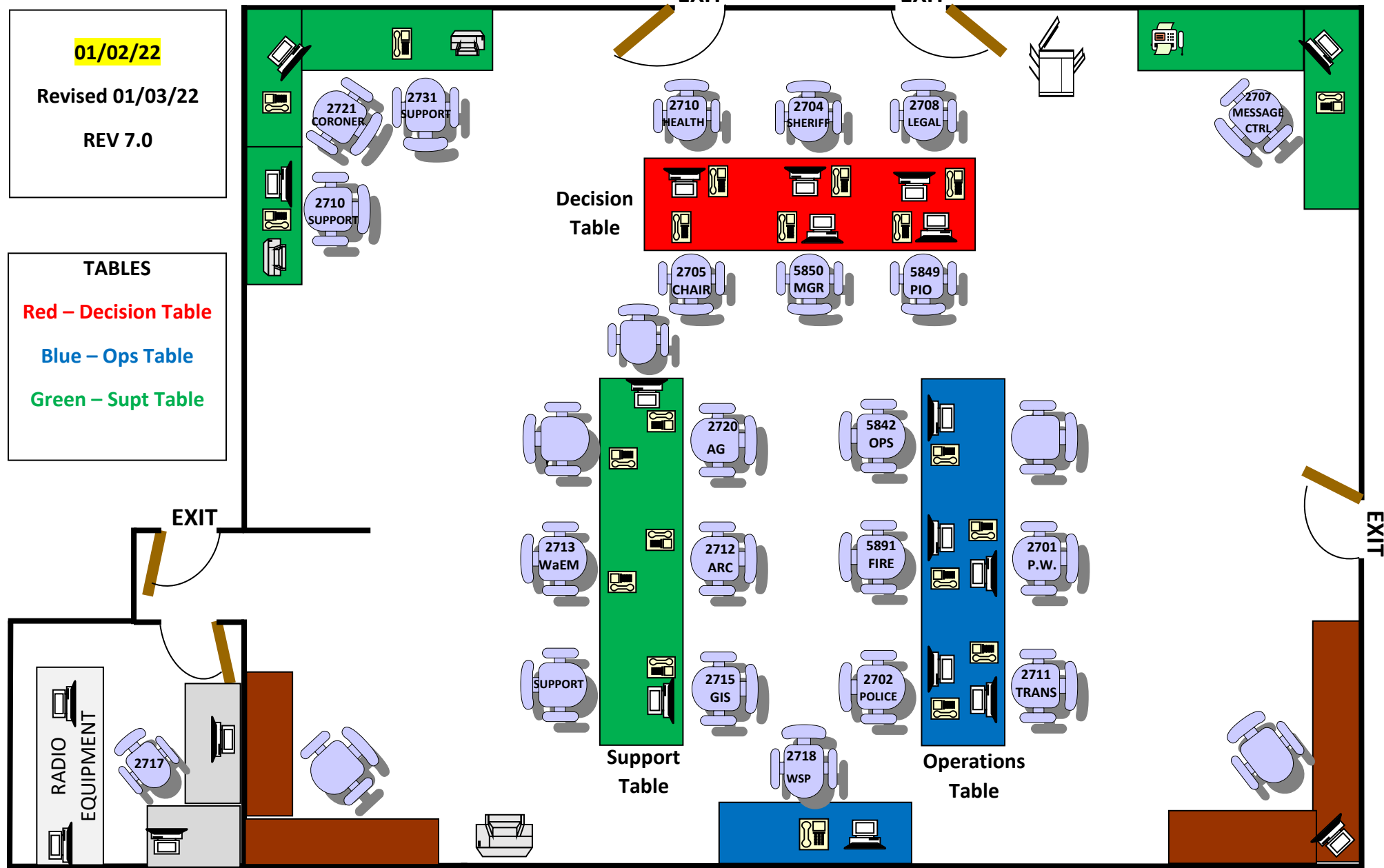


Figure 5: Franklin County EOC/EOC Diagram (H.6.i)

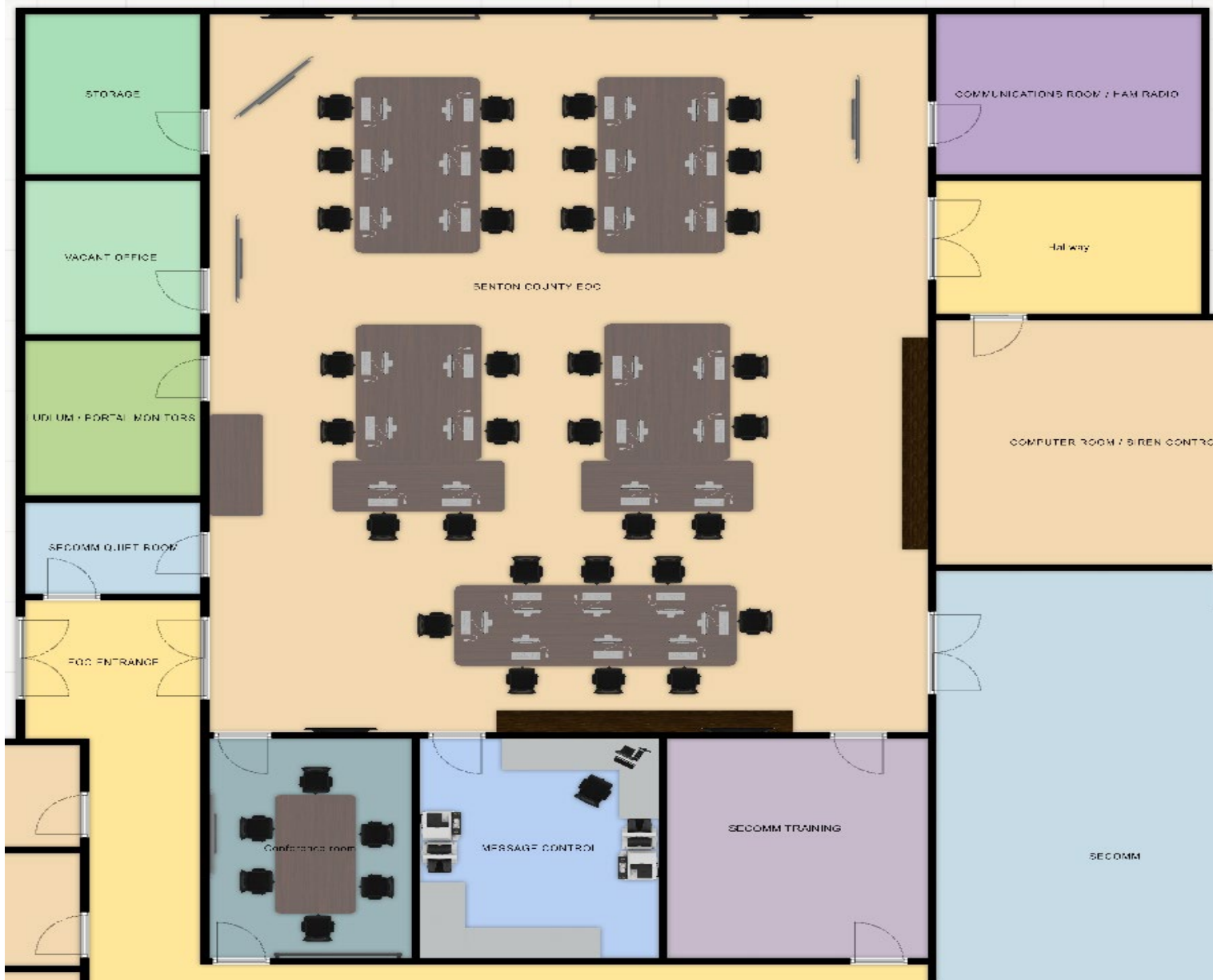


Figure 6: Alternate Benton County EOC/EOC Diagram  
(H.6.i)

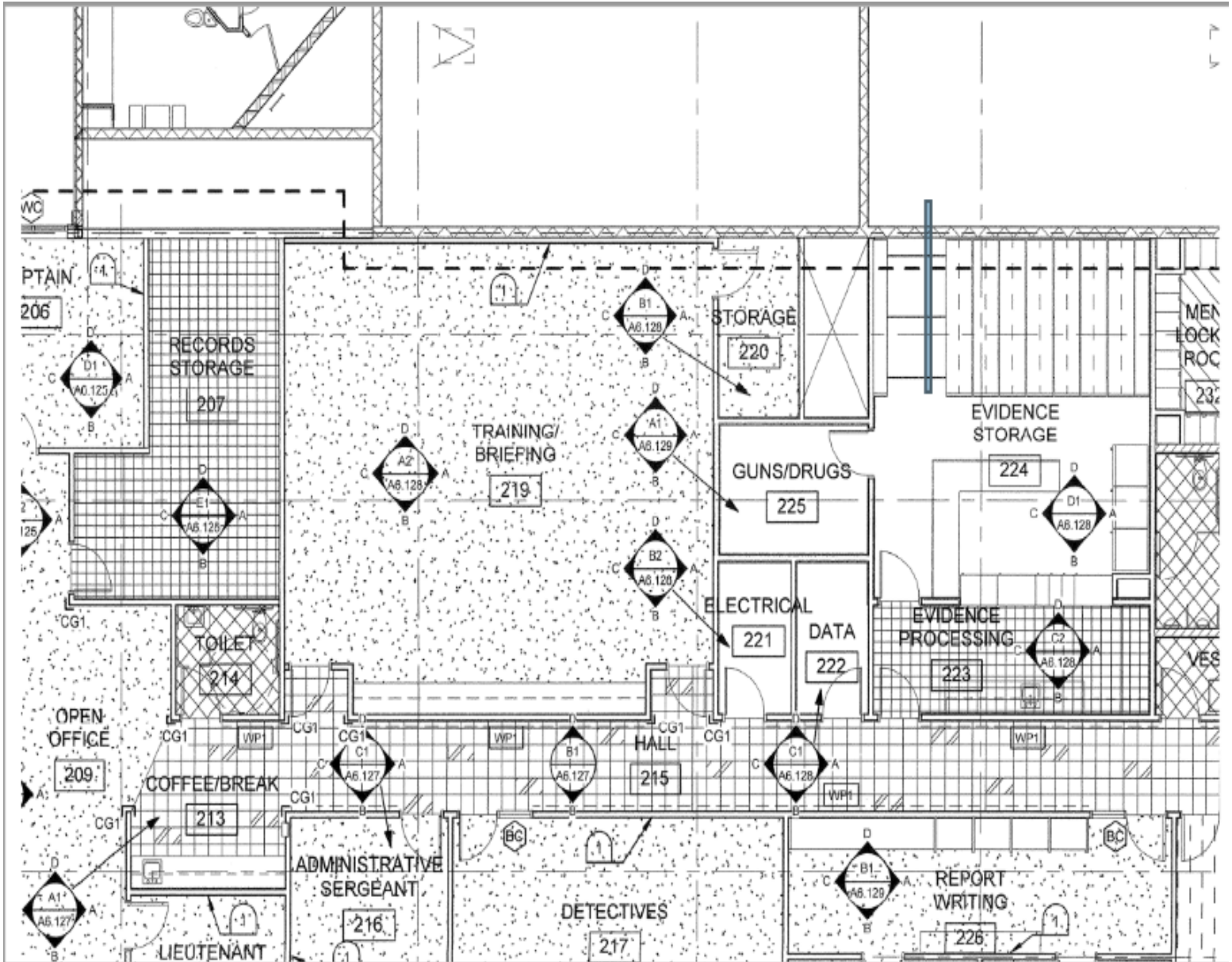


Figure 7: Alternate EOC FC Sheriff's Training Room (H.6.vi)



## 9.2 Offsite Radiological Monitoring Equipment (H.9, H.11, H.12, L.1.iv)

Franklin County Emergency Management can provide for off-site radiological monitoring equipment in the vicinity of the nuclear facility. The radiation monitoring equipment inventoried and maintained by Franklin County Emergency Management includes (H.11.a):

- Johnson AM - 801 portable portal monitors
- 81 Ludlum Model 26-1 Integrated Friskers

The Ludlum equipment is calibrated annually. The portal monitors and Ludlum equipment is checked operationally each calendar quarter and before each use. Documentation methods for all testing and maintenance procedures performed are documented and submitted as part of the quarterly reports that contribute to the Annual Letter of Certification (ALC). (H.9.i, H.11, L.1.iv)

There are sufficient reserves of instruments/equipment to replace those that are sent for calibration or repair. Calibration of equipment is provided at intervals recommended by the supplier of the equipment. Franklin County does not provide or maintain fixed radiological monitoring stations near the Columbia Generating Station. OSL's will be utilized as the permanent record dosimeter (refer to table 13 and 14). (H.9.ii, H.11)

Spare Emergency Worker Equipment (Stored at FCEM)						
OSL		DRD		LUDLUM 26-1		
XTRAS - SPARES	EWAC - KIT In Service	EWAC - KIT In Service	EWAC XTRAS	EWAC - KIT In-Service	EWAC XTRA	INDIVIDUAL SPARES
20	36	20	15	20	15	6

Table 13: Spare Emergency Worker Detection Equipment (Stored at FCEM)



EW Equipment Location							
EW KIT #	LOCATION		Ultra-Radiac's	Ludlum 26-1's	DRD's	OSL's	KI
000	FCEM	FCEM - EOC	4	6			
00	PFD - BC	Station 84 (3139)		1	1	1	1
1	FPD 5	Eltopia		1	1	1	1
2	FCEM	EOC			5	5	5
3	CONNELL	Public Works			9	9	9
4	FRANKLIN COUNTY	Public Works			8	8	8
5	FRANKLIN COUNTY	Sheriff's Office / PPD			45	45	45
6	FPD 3	Station 36	12 PENDING TRAINING IN AUG	2	15	15	15
7	FPD 4	Basin City Fire Station		2	14	14	14
8	FCPHD #1	Mesa Ambulance Barn		1	4	4	4
9	FCPHD #1	Basin City Ambulance		1	3	3	3
10	FCPHD #1	Basin City Ambulance Barn			3	3	3
11	FCPHD #1	Eltopia Ambulance Barn			4	4	4
12	FCPHD #1	Connell Ambulance Barn "B"		1	4	4	4
13	NFSD	Basin City Elementary School			2	2	2
14	NFSD	Connell Transportation Office			3	3	3
15	PASCO SCHOOL DIST.	Transportation			15	15	15
16	PFD	Station 82 - ENG (3137)		1	3	3	3
17	PFD	Station 81 - ENG (3148)		1	3	3	3
18	PFD	Station 82 - MED (3155)		1	2	2	2
19	PFD	Station 81 - MED (3144)		1	2	2	2
20	PFD	Station 83 - ENG (3147)		1	3	3	3
21	PFD	Station 83 - MED (3145)		1	2	2	2
22	PFD	Station 84 - MED (3136)		1	2	2	2
23	PFD	Station 84 - ENG/LADD (3134)		1	3	3	3
24	WA STATE - Fish & Wildlife	Ringold Hatchery			4	4	4
25	WA STATE - Dept of AG	FCEM EOC - Storage			20	20	20
26	WA STATE - Dept of Trans	Pasco Field Office			10	10	10
27	WA STATE - WSP	Moses Lake Detachment			5	5	5
28	FCPHD #1	Connell Ambulance Barn "A"		1	3	3	3
29	FCPHD #1	Wahluke Ambulance Barn		1	3	3	3
31a	WW FD #5	Main Station - MED			1	1	1
31b	WW FD #5	Main Station - MED			1	1	1
31c	WW FD #5	Station 51			1	1	1
32	SWAT				32	32	32
33	FCEM - Training Kits	FCEM			13	13	13
34	CONNELL	Police Department			3	3	3
37	WA STATE - WSP	Ritzville Detachment			3	3	3
EWAC	FCEM	FCEM EOC - Storage		20	20	20	20

<b>Totals</b>	<b>16</b>	<b>45</b>	<b>274</b>	<b>274</b>	<b>274</b>
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Table 14: Emergency Worker Radiological Detection Equipment Location and Amounts

### 9.3

### Dosimetry and

### Potassium-Iodide for Emergency Workers (H.9.i, H.11, H.12, J.11.b.iv, J.11.b.v, K.3.i, K.3.ii, K.3.iii K.3.vi, L.4.vii)

Franklin County prepares, distributes and maintains supplies in pouches/binders referred to as Emergency Worker Kits for use by emergency workers who may be exposed to radiation or radiological materials during a Columbia Generating Station emergency. The Washington State Department of Health, Office of Radiation also performs checks on OSLs. The Emergency Worker Kits are rotated out with recalibrated cache and delivered on an annual basis by FCEM staff to emergency workers/responders. (K.3.iii) An Emergency Worker Kit would be supplied to individuals, from the Emergency Worker Cache, who receive permission to reenter restricted areas for the protection of human or animal life or valuable property. These kits include:

- One 0 to 20 R direct reading dosimeter
- One optically stimulated luminescence dosimeter (OSL)
- One blister pack of 20 65 mg Potassium-Iodide tablets
- Emergency Worker Kit Instructions
- Emergency Worker Personal Information Form
- One Potassium-Iodide drug information sheet

The blister packs of Potassium Iodide maintained by Franklin County are inspected quarterly. Upon the need for shelf-life extensions, and timely replacement of radioprotective drugs, Franklin County will contact FEMA's Region 10 REP Regional Assistance Committee Chair, or their designee, to either:

- Obtain direction for sending samples out to a lab and receiving permission for a shelf-life extension from the lab or;
- Request new stock.

The emergency workers report to the EWAC at the end of assigned duty, or when their direct reading dosimeters (DRD) register a dose limit, or as directed by their supervisor. The primary EWAC is located at Columbia Basin College, 2600 N. 20<sup>th</sup> Ave in Pasco, WA. The alternate EWAC is located at Southridge High School, 3520 Southridge Blvd in Kennewick, WA.

The emergency workers are responsible for:

- Reporting to the radiation monitors for survey and decontamination.
- Carrying an OSL and DRD for the duration of the incident.
- Turning in a completed Emergency Worker Information Form on the first day of the incident.
- Recording DRD readings every 30 minutes on an Emergency Worker Dosimeter Issue Log, this is turned in at the EWAC.

When an emergency worker reports to a EWAC after their shift, they are surveyed and dosimetry is collected. Turnback values has taken into account an inhalation factor and may change based upon information from Washington State DOH.

Levels of contamination are recorded by a Dose Tracker, assigned by the Washington State Department of Health Office of Radiation (K.3.vi). The Dose Tracker is responsible for obtaining and recording personal information for both public and emergency workers, individual exposure readings, and processing increased exposure requests.

#### 9.4. Processing OSL Dosimeters (J.11.b.iv, K.3.i, K.3.ii, K.3.iii, L.1.iv, L.4.vii)

Franklin County does not process any permanent record dosimeters. They are either delivered directly to a representative of the Office of Radiation Protection or turned in according to the instructions they receive from their supervisor. (L.1.iv)

The Office of Radiation Protection is responsible for providing the means and process for arranging for 24-hour-per-day capability to determine the doses received by emergency personnel involved in any nuclear accident.

The Office of Radiation Protection is also responsible for periodic readings of the OSL dosimeters to establish control baselines.

If additional Dosimetry or Potassium Iodide are needed, they can be ordered from the Benton County EOC.

The location of emergency worker kits are set out in Table 14 in Chapter 9.2 of this plan. The direct reading dosimeters are inspected for electrical leakage when performing maintenance on the stored Potassium Iodide or OSL dosimeters. The DRDs are calibrated annually. Inventories of the direct reading dosimeters are sufficient to maintain minimum necessary quantities during removals for calibration.

#### 9.5 Organizations Responsible for Radiological Assessment Data (C.4.ii, H.13, I.8, I.9, I.10, J.12.iv, J.12.v, M.7)

Franklin County does not conduct radiological assessments or dose projections. All field monitoring data collected by Field Monitoring Teams (FMTs) are reported to Washington State Department of Health, Office of Radiation Protection (DOH-ORP) personnel located at the Meteorological Unified Dose Assessment Center (MUDAC) which is co-located with Columbia Generating Station's Emergency Operations Facility (EOF).

Washington State DOH-ORP is responsible for assessing radiological data, the central point for compiling and analyzing all field monitoring data, methods used by Field Monitoring Teams to relay information to a central point, and the means by which it is processed. DOH-ORP coordinates and analyzes sample media and describe methods for transporting samples, including identification of: (1) laboratories involved, (2) predetermined transfer points, if used, and (3) responsible for deciding which samples are sent to which laboratory. The Washington State Public Health Laboratories (PHL) maintains their analytical laboratory capability to analyze various samples and the procedure for reporting analytical

results to the appropriate organization.

## Chapter 10 Accident Assessment (Planning Standard I)

### 10.1 Field Monitoring Capability and Resources (I.2, I.5, I.6, I.7)

Franklin County does not participate in the collection, transportation, delivery, or analysis of airborne or waterborne field samples. Washington State Department of Health, Office of Radiation Protection (DOH-ORP) is responsible for supporting laboratory procedures, Field Monitoring Teams (FMT) activity, and determining the capabilities and resources of FMTs. Franklin County has no direct contracts or agreements with radiological laboratories. Processes and procedures regarding accident assessment, FMTs, and radiological laboratories can be found in the Washington State Department of Health's Radiological Emergency Response Plan.

Washington State Department of Health has the responsibility to collect, detect and measure air samples within the plume exposure pathway. Additionally, they will perform analysis to determine radioiodine concentrations. (I.7)

## Chapter 11 Protective Response (Planning Standard J)

### 11. 1 Evacuation and Protection of Energy Northwest Personnel (J.2)

Franklin County has not been requested to assist in the evacuation of onsite personnel. If any assistance is requested during an incident, that assistance would be ad-hoc and coordinated and implemented using existing systems and processes.

Except for a hostile action-based emergency where evacuation routes are compromised, or mass casualty incidents where pre-hospital emergency medical services transportation resources are required, it is assumed that no off-site response organization assistance will be required.

In the event of a hostile action-based emergency which compromises evacuation routes between the Columbia Generating Station licensee-controlled area and the offsite accountability point (near Energy Northwest facilities in the vicinity of 3000 George Washington Way in Richland, Washington), Energy Northwest will coordinate with the Benton County Sheriff's Department Incident Commander. Off-site accountability point for Energy Northwest personnel will be decided per their internal procedures.

### 11.2 Precautionary Protective Actions (J.11.g)

Upon notification of a Site Area Emergency from the licensee, predetermined precautionary protective actions have been agreed upon between the counties and the licensee. The licensee will issue a PAR at Site Area Emergency that will precautionarily evacuate the following areas:

- Columbia River from the Vernita bridge to Leslie Groves Park
- Ringold Fishing Area
- Wahluke Hunting Area
- Horn Rapids Recreation Area/ ORV Park
- Schools within the 10-mile EPZ

## Franklin County Precautionary Protective Actions

Emergency Classification	Unusual Event	Alert	Site Area Emergency	General Emergency			
Emergency Phase	Plume Early Phase	Plume Early Phase	Plume Early Phase	Plume Early Phase	Post Plume Intermediate Phase	Post Plume Relocation Phase	Post Plume Ingestion Phase
<b>Plant Conditions</b>	Indicates a potential degradation of the level of safety of the plant or that a security threat to facility protection has been initiated	Indicates an actual or potential substantial degradation of the level of plant safety or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of hostile action.	Events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public.	Indicates actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility	Indicates actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility		
<b>Radiological Release</b>	There are no expected releases of radioactive material requiring offsite response or monitoring unless further degradation of safety systems occurs	Releases of radioactive materials, if any, are expected to be limited to small fractions of the EPA Protective Action Guidelines	Releases of radioactive materials, if any, are not expected exceed the EPA Protective Action Guidelines beyond the site boundary	Releases of radioactive materials, if any, can be reasonably expected to exceed the EPA Protective Action Guidelines beyond the site boundary	Releases, if any, are below levels that are considered hazardous; however, there may be significant levels of contamination in areas that are accessible to the public		
<b>Potential Effects on Public Safety</b>	There are no known threats to public safety, but the situation warrants increased awareness	There is no known threat to the public, but the situation warrants increased awareness, notification of response organization personnel, activation of response organization facilities, and potential activation of the response organization	There is no known immediate threat to the public, but the situation warrants increased awareness, notification of response organization personnel, activation of response organization facilities, and activation of the response organization	The potential for radiological exposure to the public warrants notification and activation of the response organization activation of response organization facilities, and activation of the response organization	Continuing efforts to identify areas of deposited contamination and the types and levels of actual and potential radiation exposure.		
<b>Type of Action</b>	<i>None</i>	<i>Precautionary</i>	<i>Precautionary</i>	<i>Preventative</i>	<i>Preventative</i>		
<b>Protective Action Decisions</b>	No Protective Action Decisions need be considered by Franklin County.	Protective Action Decisions may be considered by Franklin County, but none are required. These may include Monitor and Prepare, Shelter-in-Place, or Evacuate.	Franklin County Protective Action Decisions are required by agreement even though they are precautionary in nature. These include Evacuation of Edwin Markham Elementary, Big River School, and Country Christian Center; recreation areas; and the Columbia River near the Hanford Site.	Protective Action Decisions are required. These may include, in addition to those mentioned for a Site Area Emergency: Monitor and Prepare, Shelter-in-Place, or Evacuate portions of Franklin County adjacent to the Hanford Site. An Agricultural Advisory may be issued by the Washington Department of Agriculture.	Protective Action Decisions designating areas of Franklin County that should Monitor and Prepare, Shelter-in-Place, or Evacuate have been made. Those decisions are being reviewed and modified as appropriate in consultation with the State of Washington.	Protective Action Decisions made by Franklin County are being reviewed and modified by the State of Washington in consultation with Franklin County. The modifications concern reopening transportation corridors, those areas that were previously evacuated, but can be reoccupied, areas that were evacuated that cannot be reoccupied, and areas that were not evacuated that must be evacuated permanently.	Protective Action Decisions made by Franklin County are being reviewed and modified by the State of Washington in consultation with Franklin County. The modifications concern designating areas within Franklin County that are subject to an embargo of commercial quantities of agricultural products, establishing identifiable, enforceable boundaries for that area, identifying the resources needed to enforce the embargo order, and implementing the embargo.
<b>Area Affected</b>	<i>None</i>	Most likely no areas of Franklin County are subject to a Protective Action Decision.	Recreation areas and the Columbia and Yakima Rivers adjacent to the Hanford Site, including: the Rattlesnake Mountain Shooting Facility, and the Horn Rapids Off-Road Vehicle Park.	In addition to the recreation areas listed under Site Area Emergency, Sections 1 and 2 of the Plume Emergency Planning Zone are affected.	In addition to those areas identified under Site Area and General Emergencies, other areas within Franklin County may be included as appropriate.	Areas previously evacuated or near those areas previously evacuated may be opened or permanently closed. Transportation routes crossing through evacuated areas may be reopened	All, or portions of, Franklin County may be included in the agriculture embargo area

Table 15 depicts precautionary protective actions (J.7.i).

Table 15: Franklin County Precautionary Protective Actions (J.7.i, J.11.g.iii)

### 11.3 Developing Protective Action Recommendations (J.6, J.11)

The Licensee (Columbia Generating Station) will develop Protective Action Recommendations (PARs) based on the current condition of the power plant and the local meteorological situation. The nuclear power plant will disseminate the Classification Notification Form (CNF) with the appropriate Emergency Action Level (EAL) and PARs to the counties and other OROs.

The current Protective Action Recommendations include:

- a. Monitor and Prepare
- b. Shelter in Place
- c. Evacuate

The areas most likely to be included in Protective Action Recommendations include:

- a. Recreation areas within the Plume Emergency Planning Zone
- b. Schools within the Plume Emergency Planning Zone
- c. The 2-mile radius around the Columbia Generating Station
- d. Four predesignated areas extending about 10 miles from the Columbia Generating Station within the Plume Emergency Planning Zone

The Protective Action Recommendation from Energy Northwest forms the primary basis for the Protective Action Decision made by Franklin County.

### 11.4 Protective Action Decisions (J.6, J.9, J.11)

State and local officials base their decisions on the protective action recommendations from the nuclear power plant licensee and their own radiological public health organizations. The PAG's for the Plume and Ingestion Exposure Emergency Planning Zones, and the corresponding protective actions to be taken to prevent radiation doses from exceeding those specified in the [EPA-400 Protective Action Guides \(PAG\) Manual](#) for the Public and Emergency Workers, are in the Washington State DOH Response Procedures for Radiation Emergencies.

The Protective Action Recommendation (PAR) from Energy Northwest forms the primary basis for the Protective Action Decisions (PAD) for areas within the 10-mile EPZ(s). These decisions can be made by the Franklin County Incident Commander, their designee, or in concert with Benton County's Incident Commander, local and state public health offices. PADs consider concurrent emergencies such as hazardous weather, technological, geological, or seismic related conditions, or hostile criminal activity when comparing relative risks and the advisability of potential protective action decisions. PADs will be made in accordance with EPA PAGs regarding potential radiation dose to the public (J.11.ii, J.11.iii)

In the event of a Hostile Action Based emergency, the Incident Commander of the Tri-City Regional Special Weapons and Tactics Team (SWAT) shall be consulted prior to making protective action decisions.

Benton and Franklin County EOCs have developed a Protective Action Strategy Plan (PASP)(Annex F) that expedites the PAD process by authorizing predetermined actions by SECOMM and/or BCEM/FCEM staff if county commissioners cannot be contacted in a timely manner. Benton and Franklin County EOCs will coordinate with each other to determine if the Licensee's PARs will provide the most protection for the lives and property across the EPZ. The two county EOCs, likely in coordination with both Unified Coordination Groups (UCG)/Policy Groups, will take into account current and forecast weather conditions, the current operational situation, and if the EPA PAG thresholds within the [EPA-400 Protective Action Guides \(PAG\) Manual](#) have been or will likely be met before they make any PADs regarding any particular EPZ sectors. (J.11)

When Franklin County enters the Intermediate Phase of a radiological incident, the Protective Action Decisions associated with the ingestion exposure pathway emergency planning zone shifts from strictly the local level to a coordinated, consensus decision making process with the state. The protective action decisions for Food Control are made at the State level with the consensus of the impacted local jurisdictions. The Washington State Emergency Operations Center (SEOC) uses Protective Action Decision Packages to document the Protective Action Recommendation from the Department of Health, the Protective Action Decision signed by the State Coordinating Officer (SCO) (or other authorized designee), and the rationale for the decision based upon the information known at the time and any coordination regarding implementation. (J.11.ii, J.11.iii, J.12.i., J.12.ii.) Each of the Protective Action Decision Packages can be revised or terminated using this same process.

The Washington Department of Health, as the radiation authority ([RCW 70A.388.040](#)) within the state, has developed the basis and methodology in developing the State's Criteria for the use of radioprotective drugs (J.6.ii). The [Washington Department of Health's policy](#) does not call for the distribution of radioprotective drugs to the public. Potassium Iodide is on the formulary for all pharmacies in Washington State. Neither the state, nor Franklin County stockpile KI for distribution to the public. This is contained in the Washington Department of Health Radiation Emergency Plan. (J.6.iii.)

During a Hostile Action Based (Annex E)/security incident, Potassium-Iodide (KI) and dosimetry distribution will be disseminated by Energy Northwest. Dose limits have been preauthorized by the Benton-Franklin Health District Health Officer in a preauthorization letter dated February 22, 2017. HAB specific training and equipment, for SWAT Team members, will be provided to these responders. This is detailed in Annex E.

#### *Licensee Communicating Protective Action Recommendations to OROs (J.9)*

The Licensee, or Columbia Generating Station (CGS), is required to notify SECOMM within 15 minutes of classifying the emergency as an Unusual Event, Alert, Site Area Emergency, or General Emergency. The primary communication system will be via the licensee Crash Phone. Alternate means of communication are via commercial telephone or radio. The SECOMM Dispatcher who receives the notification of emergency will confirm the emergency notification with the CGS Security Communications Center Duty Officer.

The information outlined on the Energy Northwest Classification Notification Form is sufficient to initiate immediate protective actions, if any are required. Additional releases of information shall be provided by the Licensee as available. Once the Franklin County EOC is declared operational, CGS will establish

contact with the FCEOC and SECOMM Dispatch Center will no longer answer for Franklin County unless instructed.

### 11.5 Evacuation Time Estimate (J.7.iii, J.8, J.8.b, J.11.c.i)

Evacuation Time Estimate studies are considered when planning for evacuation. They calculate the time it takes to evacuate the public within the plume exposure pathway under emergency conditions. Columbia Generating Station develops and maintains an Evacuation Time Estimate (ETE) Study in accordance with Nuclear Regulatory Commission (NRC) guidance. Each ETE is updated after the release of the decennial Census information. They conduct an annual review to the ETE as required by the NRC to determine if population growth requires an update to the ETE Study. The ETE considers population and roadway capacity. In accordance with federal requirements, the annual ETE reviews are based on estimated changes to the permanent resident population within the Emergency Planning Zone (EPZ) of the plant. The roadway assessment includes reviews of transportation improvements, constraints, traffic flow, and changes in transient flow through the Emergency Planning Zone.

Annex B contains the information from the most recent full ETE Study (2012) and documents the results of the annual reviews. (J.7.iii, J.8.i, J.11.c.i) Additionally, the most recent annual review (2020) documentation (included in Annex B-2). As stated in this document, it was confirmed that there was no need to update the ETE and that the population levels confirmed that there is still no need to do staged evacuations. (J.8.b.ii)

The Evacuation Time Estimate (2012)<sup>1</sup> in Tables 8-13 and 8-14 on page 8-20 estimated that the Special Needs Populations in one wave would take between 4:30 and 5:20 depending on weather conditions. That time increases if the transportation is done in two waves to between 5:40 and 6:35, also dependent on weather conditions. (J.8.b.iii.)

Figure 10-2 on page 10-3 of the 2012 Evacuation Time Estimate shows the evacuation routes in the EPZ (Figure 8). Evacuees will select routes within the EPZ in such a way as to minimize their exposure to risk. This expectation is met by the DYNEV II model routing traffic away from the location of the plant to the extent practicable. The DTRAD model satisfies this behavior by routing traffic so as to balance traffic demand relative to the available highway capacity to the extent possible. (J.8.b.iv.) While no specific alternate routes are mentioned in the ETE Study, the local jurisdictions allow law enforcement to adjust evacuation routes in the event of impediments to traffic. These are considered in the decision-making process and are communicated to the public as described in the local jurisdiction plans/procedures. (J.8.b.v.)

### 11.6 Emergency Planning Zone Maps and Charts (J.10, J.10.a, J.10.b)

The following figures (6 through 9) and Table 16 show maps of all evacuation routes, evacuation areas, reception/relocation centers and other information showing population distribution around CGS by evacuation areas.

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<sup>1</sup> Ref KLD Engineering Columbia Generating Station Development of Evacuation Time Estimates, KLD TR-497, October 2012, Final report, rev 1.



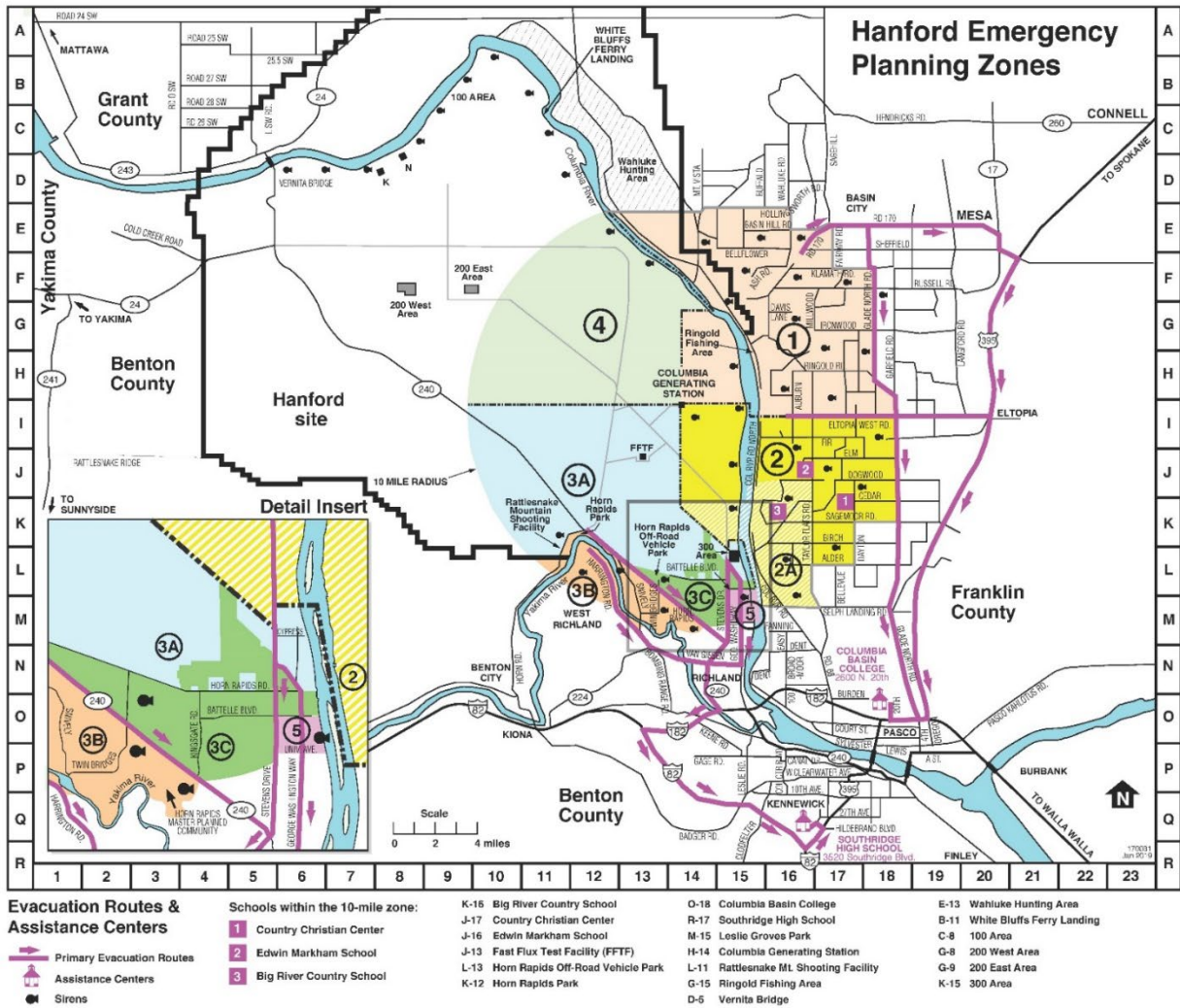


Figure 8: Evacuation Routes and Emergency Worker / Assistance Centers

## Section 1 of the 10-Mile Emergency Planning Zone for CGS

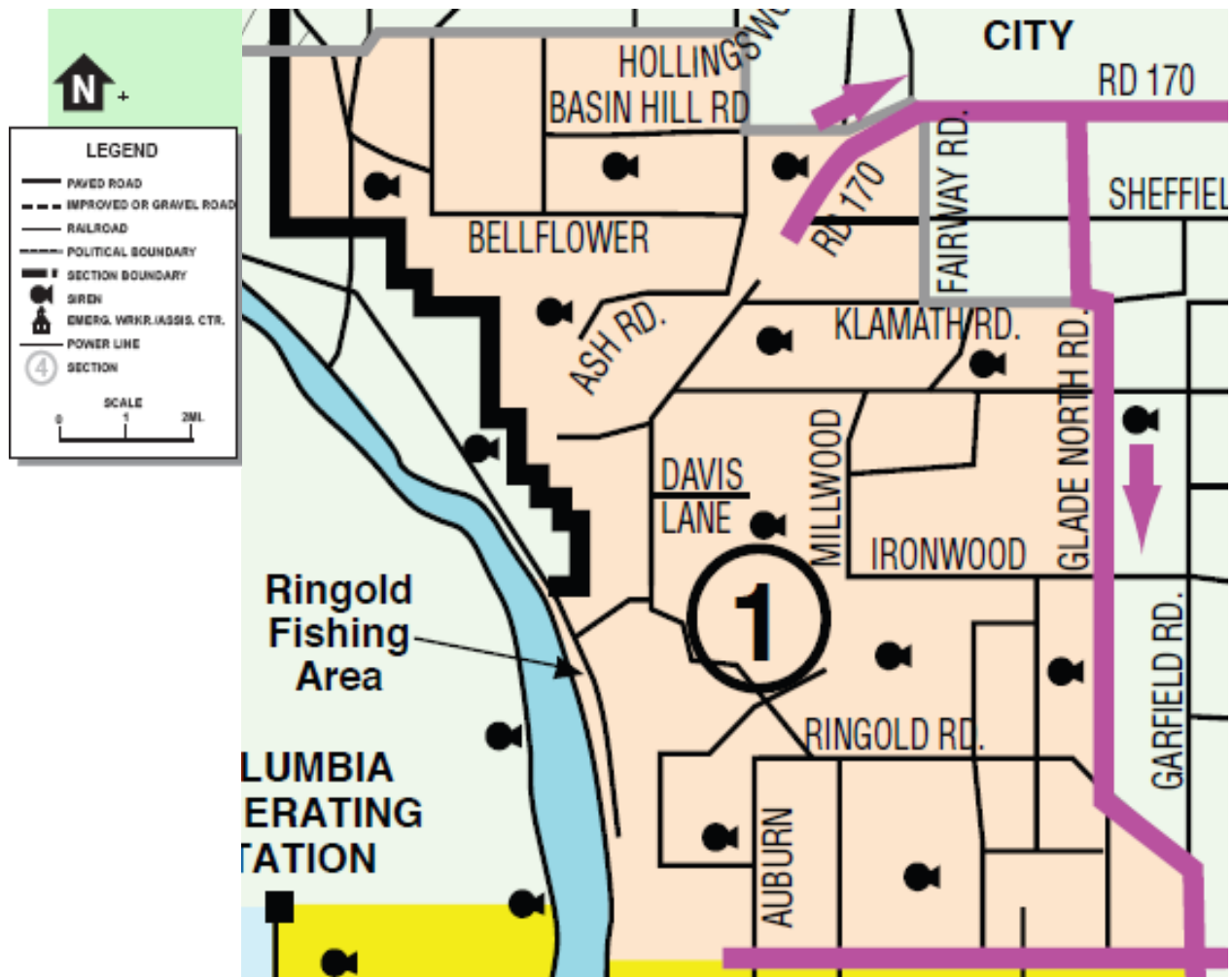


Figure 9: Section 1 of the 10-Mile Emergency Planning Zone

## Section 2 (including 2A) of the 10-Mile Emergency Planning Zone for CGS

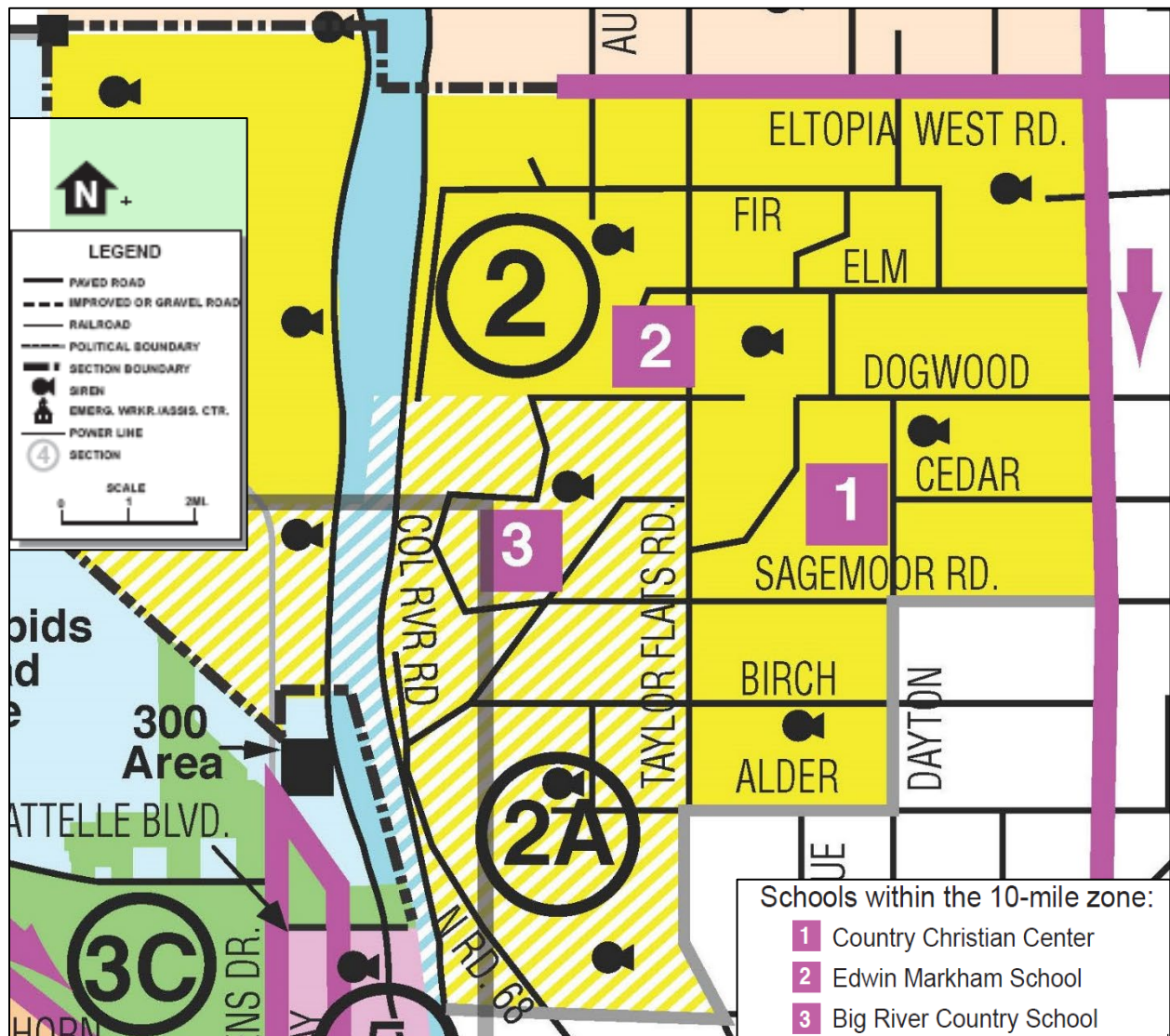


Figure 10: Section 2 (including 2A) of the 10-Mile Emergency Planning Zone

## ETE Map (Draft)

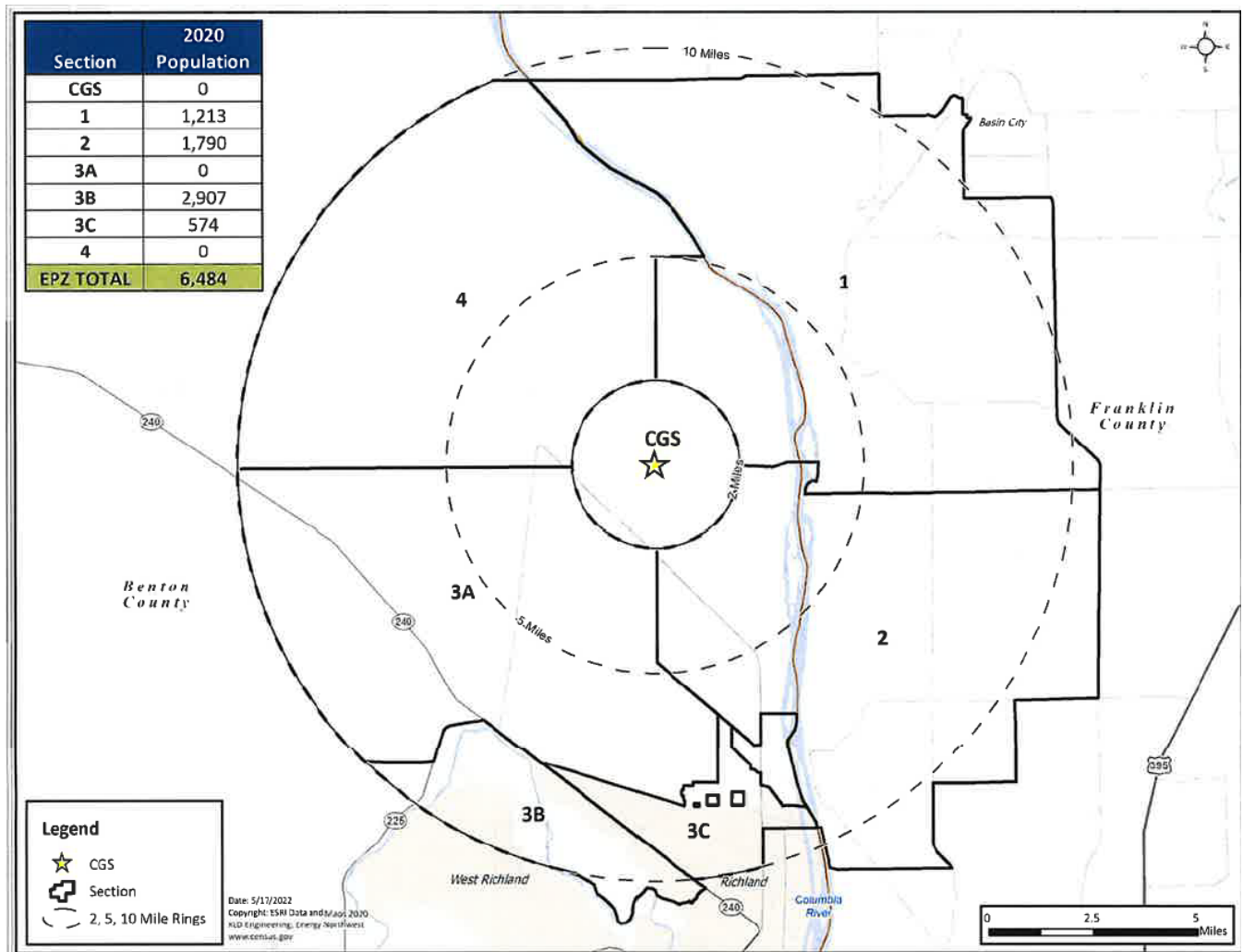


Figure 11: Sections Comprising the CGS EPZ (J.10.b.i)



## 50-Mile Ingestion Emergency Planning Zone Map for CGS

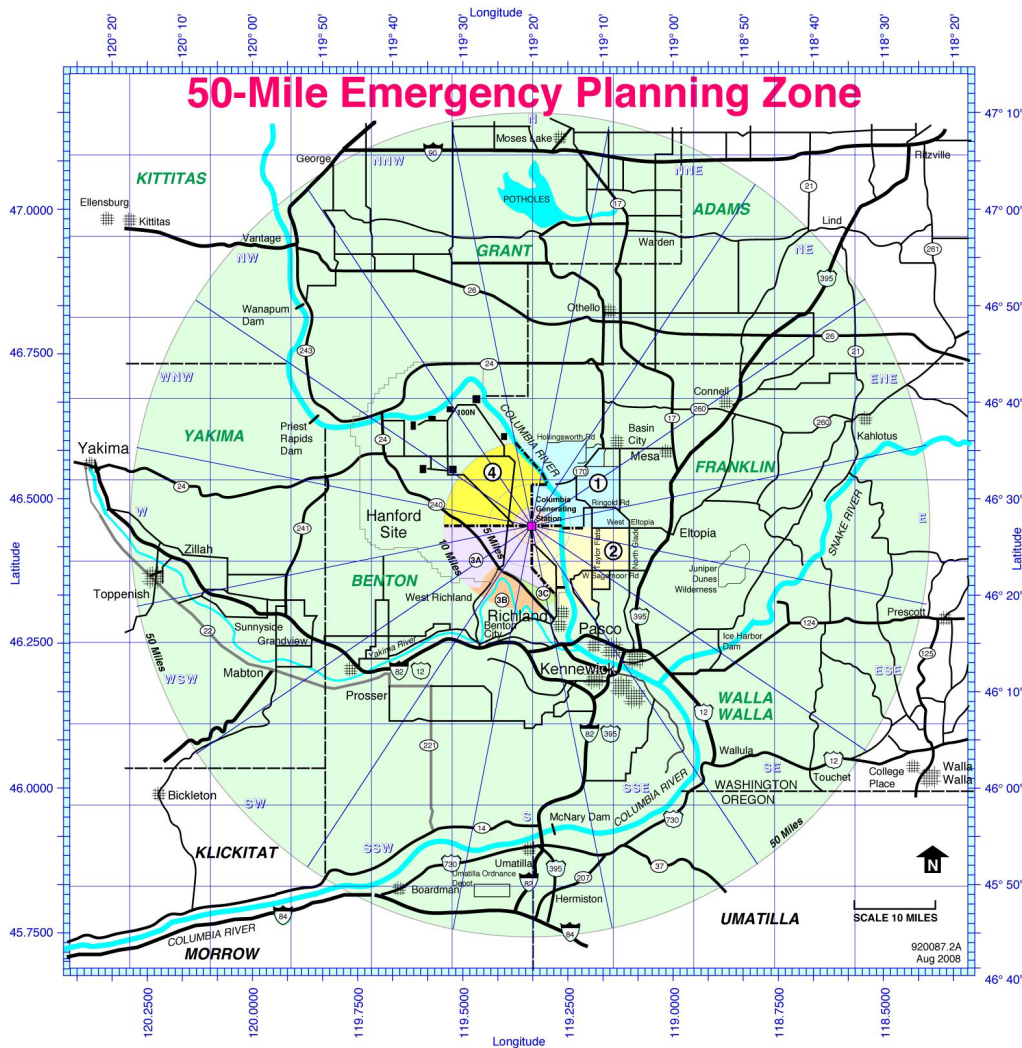


Figure 12: 50-Mile Ingestion Emergency Planning Zone

Population Data by EPZ Section - Daytime				
EPZ Section	Resident Population	Transient Population	Access and Functional Needs Population	Total Population
1	1,224	4,517	0	5,741
2	1,456	2,106	460	4,022
3A	0	1,876	0	1,876
3B	1,403	155	0	1,558
3C	454	4,753	0	5,207
4	0	3,461	0	3,461
5				
<b>Total</b>	4,537	16,868	460	21,865
Population Data by EPZ Section - Nighttime				
EPZ Section	Resident Population	Transient Population	Access and Functional Needs Population	Total Population
1	1,224	3	0	1,227
2	1,456	0	41	1,497
3A	0	62	0	62
3B	1,403	75	0	1,478
3C	454	273	0	727
4	0	918	0	918
5				
<b>Total</b>	4,537	1,331	41	5,909

Table 16: Day and Night Resident/Transient Population Data

### 11.7 Protecting Mobility Impaired Residents (J.11.a)

Franklin County Emergency Management is responsible for assisting AFN populations affected by major emergencies or disasters. In order to fulfill this obligation, Franklin County Emergency Management shall coordinate with the Southeast Washington Aging and Long-Term Care and WA State Department of Child, Youth and Family local coordinators as the sources of information concerning individuals with AFN within the Franklin County portion of the Columbia Generating Station EPZ. Due to HIPAA rules, Franklin County EOC does not maintain a list of AFN individuals.

AFN populations will be notified by the same means as those used to notify the general public unless prior arrangements have been made on an individual basis. Transportation dependent people are identified by the AFN Liaison(s) database. Consideration shall be given to those with AFN whose mobility may be impaired (e.g., students in schools, EPZ residents) and those facilities which may require minimal crews to maintain safe operations during or after an evacuation.

Precautionary evacuation is the preferred protective action for schools; therefore, they may be evacuated before the general public. Schools and childcare facilities will have a means of tracking what

students live within the 10-mile EPZ and make accommodations for them, in the event of an emergency at the Columbia Generating Station. The schools in the EPZ will be notified by the Franklin County EOC that they will need to contact, locate and provide for those students living within the 10-mile EPZ, until they can be picked up according to District/school policies and procedures. The school districts identified as providing transportation assistance have accommodations for those with access and functional needs.

There are no aging care facilities or correctional facilities within the Franklin County portion of the Columbia Generating Station plume emergency planning zone. Franklin County Emergency Management coordinates with supporting agencies who maintain a database of residents who have self-identified as being potentially without transportation or may otherwise need assistance during an evacuation of the plume emergency planning zone.

### 11.8 Radioprotective Drugs (J.11.b)

Neither the State of Washington nor Franklin County [stockpiles Potassium Iodide \(KI\)](#) for distribution to the public during a radiological incident. The State of Washington has listed KI on the pharmacy formulary if a pharmacy wanted to stockpile and sell the drug.

Within the State of Washington, the Benton Franklin County Public Health Officer or the State Health Officer can make the decision to recommend the use of radioprotective drugs within the plume exposure pathway for emergency workers during an emergency. (J.11.b.i.) The criteria for recommending KI to emergency workers is determined by the Department of Health when there is an indication of a release to the environment above a specified level or if there is an unfiltered or unmonitored release from a fixed nuclear facility as detailed in the Department of Health Radiological Emergency Response Plan.

The Benton Franklin County Public Health Officer may make the decision based upon consultation with or upon recommendation of the Department of Health or as otherwise detailed within their plan/procedures. (J.11.b.ii.) The Benton Franklin County Public Health Officer may consider recommending KI for certain individuals or groups of people if they cannot implement evacuation quickly to reduce risk from possible exposure to radioactive iodine. (J.11.b.iii.)

FCEM maintains adequate supplies of KI for emergency workers. FCEM also provides instructions to the emergency workers on the safe and proper use of KI within the Emergency Worker Kits. (J.11.b.iv.) FCEM provides adequate maintenance of KI and, if upon inventory or inspection, are found to be expired or close to expiration the county will replace when new supplies are purchased by the Office of Radiation Protection. As a contingency FCEM may also seek to obtain a shelf-life extension through coordination with WADOH and FEMA. (J.11.b.v.) Once the decision is made to recommend Emergency Workers take KI, it is communicated as detailed within Annex D - Implementing Procedures (IP). There will be no official recommendation for the public to ingest [Potassium Iodide \(KI\)](#) (J.11.b.vi.)

### 11.9 Evacuation and Access Control (J.11.c, J.11.e, J.11.f)

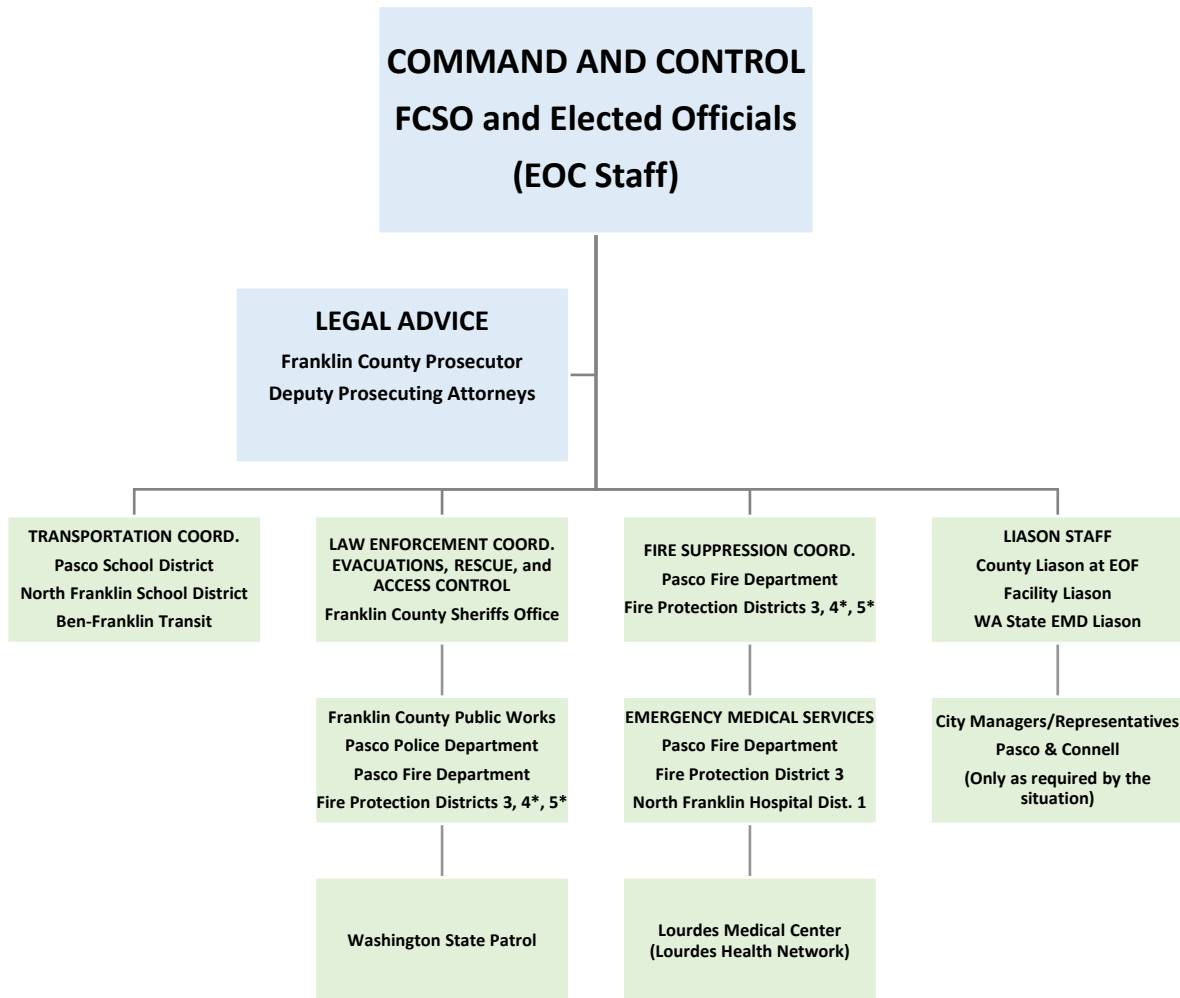
The evacuation plan and procedures are based on the Annex B-2 2012 Evacuation Time Estimate (ETE).

Resident and transient populations shall be advised via sirens, CodeRED, and IPAWS to monitor the Emergency Alert System for emergency announcements and protective action instructions. The initial instructions will consist of prescribed emergency messages consistent with the emergency classification and will contain periodically updated information. Evacuation, Sheltering-in-Place and/or Monitor and Prepare are the principle immediate protective actions which can be taken by the general public within the Plume Exposure Pathway EPZ.

The primary Protective Action Decision for citizens and responders within an effected area of the 10-mile EPZ is evacuation along established evacuation routes. Law enforcement agencies within Franklin County and the Washington State Patrol will coordinate Access Control Points (ACPs), traffic control, and normal law enforcement duties. Pre-determined sites for these traffic and access control points have been established and are sufficient to control entry into evacuated areas. Agencies staffing Access Control Points will adhere to their own agencies' policy and procedures for controlling ingress and egress (J.11.e.v)

Figure 13 depicts these activities will be coordinated and monitored by the Law Enforcement Coordinator within the Franklin County EOC. Figure 14 lists the ACPs within Franklin County. Franklin County and the City of Pasco Public Works Departments, and possibly the Washington Department of Transportation, will provide signage and road blockage material and/or staff as needed. Agencies staffing these positions will be updated via normal communication methods.





*\*Franklin County Fire/EMS response agencies will operate under an agreed upon Radiological Response Plan based on an ICS structure of their design.*

*Figure 13: Franklin County Field Forces Functional Areas Organization*

ACCESS CONTROL POINTS LIST			
ACP LOCATION	Agency Staffed By	EPZ Section #	Report to EWAC at End of Shift
Selph Landing @ Glade North	FCSO	2	Columbia Basin College
Sagemoor @ Glade North	FCSO	2	Columbia Basin College
Eltopia West @ Glade North	FCSO	Border	Columbia Basin College
R-170 Road at Glade North	FCSO	1	Columbia Basin College
R-170 Road @ Sagehill	FCSO	1	Columbia Basin College
Columbia River Rd @ Selph Landing	Pasco Police	2	Columbia Basin College
Fraser Dr @ Selph Landing	Pasco Police	2	Columbia Basin College
Taylor Flats @ Selph Landing	Pasco Police	2	Columbia Basin College

Figure 14: Access Control Points List within Franklin County EPZ

#### *Traffic Impediments and Alternate Evacuation Routes (J.11.f)*

Designated evacuation routes are identified in Figures 6, 7, and 8. An accident or other traffic impediment along any of these routes would not significantly slow an evacuation. According to the “Columbia Generating Station Ten Mile EPZ Evacuation Time Estimate Study” (Annex B-2) the capacity for roads in the Franklin County portions of the EPZ are, at a minimum, approximately 1700 passenger vehicles per hour. However, an accident or other traffic impediment may still need to be cleared. Law enforcement, public works, fire, and any other agencies which would normally respond to traffic accidents or other traffic impediments in the event of an evacuation will resolve these traffic impeding situations according to the specific agency standard operating procedures.

Blizzards, extremely heavy snow, ice storms and other severe weather types could seriously hamper an evacuation. In the event of extreme weather conditions or other situations which make the risk of harm during an evacuation greater than that of sheltering-in-place, the public official acting as the Emergency Chairperson, shall take into consideration the adverse conditions when determining whether to evacuate the affected area or to shelter-in-place. The Emergency Plan Implementing Procedures (EPIP's) of the Energy Northwest Emergency Plan includes procedures requiring the individual(s) making Protective Action Recommendations to consider weather or other adverse conditions when preparing the recommendation.

A time may exist when Franklin County may need to utilize alternate evacuation routes or detours. The Franklin EOC Law Enforcement Coordinator in collaboration with the Operations Coordinator would be responsible for coordinating resources and rerouting traffic with on-scene responders.

#### **11.10 Assistance Centers (J.11.d, J.13)**

Columbia Basin College located at 2600 N. 20<sup>th</sup> Ave., Pasco, WA is the primary Emergency Worker / Assistance Center (EWAC) for Benton/Franklin County. Southridge High School located at 3520 Southridge Blvd., Kennewick, WA is designated as the alternate EWAC. See Figures 8, 9, and 10 for EPZ, assistance centers and evacuation routes.

### *Responsible Organizations and Staffing*

The Columbia Basin College will provide facilities for use as an Emergency Worker Assistance Center (EWAC) in the event of an emergency at the Columbia Generating Station. CBC staff will deliver FCEM EWAC trailers (that are located in CBC maintenance area) to the gym facility/student recreational area and assist with setup if requested, capable, and as staffing allows.

The Washington State Department of Health, Office of Radiation Protection (WA DOH-ORP) ensure that EWAC personnel properly monitor and decontaminate evacuees, possessions and service animals. They ensure DOH procedures are followed for medical attention referral, provide health physics technical expertise to activated EWAC's, and maintain the inventory of DOH equipment maintained in the EWAC storage containers.

The ARC will establish and operate a shelter in conjunction with the Columbia Basin College EWAC in Pasco. The ARC is responsible for providing registration services, providing for food, lodging, first aid, and counseling services for evacuees, to emergency workers at the EWAC and/or shelters within Franklin County. Per an existing MOU between ARC and CBC, there is a large enough occupancy to accommodate the anticipated number of evacuees. ARC also has MOU's with other facilities to host more evacuees. (J.11.d.vi)

The public-school districts within or near the EPZ are responsible for school facilities and students in their respective districts, and for potentially assisting in the evacuation of the public in the EPZ who do not have access to transportation. The three schools in the EPZ will follow their internal procedures and checklists for any evacuations, and the schools will follow their own internal procedures to reunite children with the parents once they have been monitored. (J.11.d.iv)

Lourdes Health Network in Franklin County, Kadlec Medical Center, and Trios Southridge Hospital in Benton County are willing to accept and have adequately trained personnel and facilities to provide care for injured, exposed, or contaminated patients. (J.11.d.v.)

### **11.11 Ingestion Exposure Pathway Emergency Planning Zone (J.12)**

When the State of Washington enters into the Intermediate Phase of a radiological incident, the Protective Action Decisions associated with the ingestion exposure pathway emergency planning zone shifts from strictly the local level to a coordinated, consensus decision making process. The protective action decisions for Food Control are made at the State level with the consensus of the impacted local jurisdictions. The Washington State Emergency Operations Center (SEOC) uses Protective Action Decision Packages to document the Protective Action Recommendation from the Department of Health, the Protective Action Decision (PAD) signed by the State Coordinating Officer (SCO) (or other authorized designee), and the rationale for the decision based upon the information known at the time and any coordination regarding implementation. (J.12.i., J.12.ii.) Each of the Protective Action Decision Packages can be revised or terminated using this same process.

PADs for the ingestion exposure pathway are actions that are taken to limit the radiation dose from ingestion by avoiding or reducing the contamination that could occur on the surface of, or be incorporated into, human food and animal feeds. Such actions can be taken prior to and/or after

confirmation of contamination. The protective actions for a specific incident are determined by the particulars of the incident and once initiated, they continue at least until the concentrations are expected to remain below the Derived Intervention Levels (DILs).

The Washington Department of Agriculture cannot interdict or put an embargo ([RCW 69.04.110](#)) in place on commercial quantities of agricultural products over a large area without some means to determine probable cause. Thus, a range of precautionary measures may be applied for the ingestion exposure pathway. Prior to data being available to show where the contamination deposited, a precautionary agricultural advisory may be put into place by the Washington Department of Agriculture (WSDA) under their authorities under [RCW 69.04](#) which establishes the WSDA as the agency responsible for safeguarding the public from injury due to adulterated or misbranded food; [RCW 15.36](#) which establishes legislation to safeguard the public from milk products that are unsafe for consumption and the Food and Safety Act, [RCW 15.130](#).

At a Site Area Emergency, WSDA recommends a preliminary Agricultural Advisory to the plume exposure pathway counties. The actions for the public are as follows:

- put dairy cows and other livestock inside barns or enclosed and covered sheds,
- restrict dairy cows and other livestock to feed that is in enclosed or covered storage, and
- restricting livestock to water sources that are covered or are from enclosed underground storage.

They also caution that if an evacuation is recommended that they stop taking care of the livestock and leave the area.

At a General Emergency, or anytime the Washington Department of Health recommends, WSDA releases the comprehensive Agricultural Advisory. This advisory tells the public to:

- put dairy cows and other livestock inside barns or enclosed and covered sheds,
- restrict dairy cows and other livestock to feed that has been in enclosed or covered storage,
- restrict livestock to water sources that are covered or are from enclosed underground storage,
- do not drink fresh milk produced on or after a specified date/time,
- do not drink water from streams, lakes or ponds,
- do not let animals drink water from streams, lakes, ponds or puddles,
- do not harvest food from farms or gardens, including fruits and vegetables, grain, eggs, honey or livestock, and
- do not transport uncovered agricultural products out of the advisory area.

The largest difference between the preliminary agricultural advisory is that the comprehensive covers a

much larger area. The area covered by the comprehensive agricultural advisory is the entire 10-mile EPZ plus pre-designated areas within a 180-degree arc out to 50-miles in the direction of the wind from the nuclear power plant. WSDA has coordinated previously with all counties in the 50-mile EPZ to predesignate areas within the jurisdiction that may be impacted. If WSDA finds that the 180-degree arc and the 10-mile EPZ touches any part of a pre-designated areas, then that entire area is included in the comprehensive agricultural advisory. WSDA makes the agricultural advisory through a news release, and it is communicated to the public and media through the Joint Information Center (JIC). It is important to note compliance with the Agricultural Advisory is voluntary. There is no law that requires the food producer, processor, or distributor to comply.

Part of the implementation precautionary and emergency protective measures includes WSDA contacting state licensed agricultural producers, food processors, and distributors (referred from here on out as 'agribusiness') to inform them of the precautionary measures put into place. This is also done once a food control area is developed and implemented.

The Department of Health (DOH) is responsible for determining the contaminated areas that exceed federal guidance contained in the PAG Manual and/or the FDA DIL's. Part of the process to determine the ingestion pathway begins with the Departments of Health (DOH) and Agriculture (WSDA) coordinating on the development of a sampling plan. DOH has the expertise on radiological matters but WSDA has the expertise when it comes to agricultural matters. (J.12.iii.)

DOH collects all samples other than milk samples. The [RCW 15.36.111](#), the [Pasteurized Milk Ordinance](#), and [WAC 16-101](#) requires that WSDA is the only entity that can collect milk samples. The samples are collected using the procedures and equipment detailed in the DOH REP Plan and are then transported to a certified laboratory for analysis. The WSDA REP Plan discusses the equipment and processes used to collect milk samples and transfer of the samples to DOH for analysis. WSDA assists DOH by coordinating with farmers and producers to gain their permission to collect samples for analysis. (J.12.iii., J.12.iv.)

DOH primarily uses the State laboratory in Shoreline, WA for analysis of samples. The lab has the equipment and personnel to conduct analysis of various samples and reports the results to the DOH. The processes and procedures for conducting the analysis and reporting the results are discussed within the DOH REP Plan. (J.12.v.)

Part of the implementation precautionary and emergency protective measures includes WSDA contacting state licensed agricultural producers, food processors, and distributors (referred from here on out as 'agribusiness') to inform them of the precautionary measures put into place. This is also done once a food control area is developed and implemented. WSDA licenses various agribusiness within the State and maintains contact information and business locations per agency regulatory authority. This information is used to contact agribusiness in the impacted areas as well as agribusiness in other locations of the State to inform them of the situation and any protective measures put in place to prevent adulterated food stuffs from reaching the market. (J.12.vi.)

WSDA also coordinates with adjacent States to communicate what protective measures have been put in place to protect the food supply in the State. WSDA may also use other resources to obtain any additional information and contact info for food production facilities that are licensed by the federal government that the State may not have contact with. (J.12.vii.)

WSDA maintains a database of crop data to help determine what products are in production to include having an understanding on when certain crops conduct harvesting operations. This information is shared with DOH as well as local jurisdictions, if requested, to help provide more of a common operating

picture of the impacts to the agribusiness and the local farmers. (J.12.viii.)

DOH plans discuss which standards are used to determine what levels of contamination are deemed unsafe for human consumption. (J.12.ix.)

DOH utilizes a variety of tools to track and document where samples came from, what areas exceed the PAG and/or DILs. The States of Washington and Oregon both utilize RadResponder. The Civil Support Team and the Region Assistance Program for Region 8 use it as well. Additionally, a variety of mapping products are used to track where the contamination deposited and to track what areas exceed the PAGs and/or DILs. These are discussed in more detail on the DOH RERP Plan. (J.12.x.)

The WSDA REP plan discusses how they track where agribusinesses are. This helps to influence the most effective methods to keep agribusiness informed of any protective action decision that would impact their ability to sell or movement of food stuffs or agricultural products. Some of the methods available to use are news releases, social media, direct contact via telephone or email, and through announcements at news conferences from the JIC. (J.12.xi.)

The Washington State Military Department, Emergency Management Division will coordinate the protective measures to be used for the Ingestion Exposure Pathway EPZ within the State of Washington, along with DOH, WSDA and local county jurisdictions including methods for protecting the public from consumption of contaminated foodstuffs and water. They will utilize the Washington Information Sharing Environment (WISE) GIS tool as a collaborative mapping tool to designate the areas of concern where monitoring and sampling will be implemented.

The Washington State Health Officer, with the assistance of the WSDA, personnel in the Columbia Generating Station EOF MUDAC and the State EOC Executive Table, is responsible for providing protective action recommendations concerning food, agricultural products and water supplies.

Washington Department of Health (DOH), including DOH Office of Radiation Protection and WSDA response plans will determine the methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures, as well as determine the laboratory capability to analyze various samples and the procedure for reporting analytical results. (J.12.iv-v)

Watersheds, community water systems, dairies, food producers, and processors within the Ingestion Exposure Pathway EPZ are listed in the: United States Department of Agriculture Farm Service Agency Database for Franklin County. (J.12.vi)

WSDA may partner with local land use manager, including Conservation Districts, to coordinate the location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting. (J.12.viii)

The Washington State Department of Agriculture will issue agricultural advisories as the means to notify agribusiness of a PAD that would affect the ability to sell or move foodstuffs or agricultural products. Methods and procedures for implementing protective actions are described in the Washington State

Fixed Nuclear Facility Protection Plan and in the Washington State Department of Agriculture Radiological Emergency Plan. (J.12.xi)

The area subject to Food Control Protective Actions shall be determined jointly by the State and Local Governments. Washington DOH shall have the primary responsibility for identifying those areas subject to radiological deposition of a sufficient amount to justify the imposition of Food Control Protective Actions. Local Government representatives shall have the responsibility of identifying enforceable geopolitical boundaries and Food Control Points for the area identified by Washington DOH. State officials at the Washington State EOC shall have the responsibility for declaring the Food Control Boundaries and Protective Actions, providing authority to enforce the Food Control Area Declaration and providing the additional personnel and other resources necessary to assist local officials in implementing the Food Control Area while also carrying out their normal duties and daily operations.

Franklin County will assist the Washington Department of Agriculture in the distribution of the brochure titled: [“Preparing for a Radiological Emergency in Washington State”](#) (Both for English and Spanish). This brochure is to be distributed to the locations specified in Annex-D Implementing Procedure (IP) O-5 Public Works Coordinator. The Franklin County Public Works Department with the assistance of other county and municipal agencies will deliver copies of this document to the specified locations.

#### 11.12 Relocation (J.14)

As a public health matter, any area that has received radiation contamination that exceeds the 2 REM first year or 0.5 REM any subsequent year relocation Protective Action Guide (PAG) cannot have the public residing in the area. It is the State of Washington’s plan to relocate residents from any area exceeding the PAG for Relocation. (J.14.i.) This will be discussed and coordinated with the local jurisdictions. The final decision will be made with the consensus of the State and impacted jurisdictions (J.14.a.i.) This applies to any area regardless of which fixed nuclear facility the contamination originated from.

The Washington State Department of Health (DOH) has the subject matter expertise to obtain the data required to determine if an area exceeds the PAG for Relocation. They utilize multiple methods to determine the areas that exceed the relocation PAG to include the addition of a buffer zone around the area. The specifics on the means to identify and determine the boundaries of relocation areas as well as how DOH will prioritize relocation based on projected dose to an individual will be determined for relocation areas is included in the Washington State Department of Health Radiological Emergency Response Plan (REPP). (J.14.b.i-ii, J.14.c.i-ii)

The State of Washington uses a Relocation Protective Action Decision Package form to document the recommendation, decision, and implementation of actions to relocate populations from any area that exceeds the PAG for relocation. When the DOH determines that an area exceeds the PAG for Relocation, they fill out the Protective Action Recommendation (PAR) part of the Protective Action Decision Package for Relocation. The PAR documents the recommendation(s) to the State EOC and impacted local jurisdictions as follows:

- establish a relocation area boundary in accordance with the information provided by the DOH,

- relocate persons previously evacuated from the impacted area as well as anyone not yet evacuated from the designated area,
- to establish access control points around the relocation area and limit access to emergency workers and authorized residents,
- provide for monitoring and decontamination
- establishing dose tracking at appropriate locations for any persons entering the relocation area
- cancel PAR for administering KI to Emergency Workers or
- terminate the Relocation Area PAR

The Protective Action Decision Package for Relocation also documents the supporting rationale for the decision as coordinated between the state and local jurisdictions. The rationale part of the decision package documents the requirements, health and implementation considerations, and the tasks to implement the decision. The State EOC will lead the coordination effort on the decision package. The rationale part of the decision package discusses what the coordination effort needs to discuss and plan for. Some of the requirements include development of a map of the relocation area and a written description of the geopolitical boundaries around the relocation area consistent with the graphic display on a map. The coordination effort will develop a list of relocation area access control points and whether they are staffed or unstaffed (i.e., barricaded). (J.14.d.i.)

The coordination effort further looks at any health considerations such as DOH Field Team verification that other areas will result in radiation doses less than the relocation PAG, any other public health risks (e.g., hazardous materials) are accounted for, and that the evacuated/relocated populations are being provided opportunities to be monitored and registered. Other considerations to be reviewed are whether the relocation area covers areas not previously evacuated and that actions are taken to relocate those populations, any facilities within the relocation area that require essential personnel to reenter into, if any special population groups are present (e.g., institutional facilities), critical facilities and any exceptions to relocation, time required to establish and/or reposition access control points, river picket locations, distribution of public information materials and any additional resources required for implementation. The decision package includes development of tasks to implement the decision such as confirming changes in relocation area control points, working on issuing coordinated public information messages statewide, temporary services available for impacted populations such as temporary shelter/housing, financial/economic assistance availability (Stafford Act and/or ANI immediate financial assistance) (J.14.f), re-confirming the re-entry and exposure control processes in effect in each impacted jurisdiction (J.14.d.ii-iv, J.14.e), consideration on the need for transportation route decontamination of roads or railways, coordination on resource needs by state agencies and local jurisdictions and any other task related to implementation that may arise.

The decision package documents:

- which state and local officials are involved in the coordination process
- the final decision that was made



- concurrence received from all impacted parties
- when the decision will be implemented

(J.14.ii., J.14.a.i.)

Once the decision is made on Relocation, the State and impacted local jurisdictions will use existing public information methods and channels to communicate the notification of the relocation area to the public and media. This may be through the use of news releases, social media channels, news conferences from the Joint Information Center, or electronic notification methods such as CodeRED or any other method deemed appropriate. (J.14.a.iii.)

Individuals who demonstrate a need to enter the Relocation Area, on a temporary basis, in order to care for livestock, secure their residence, or carry out other duties of a critical nature to their business or homes, will be allowed to enter the Relocation Area. In accordance with WADOH policies, these persons will receive training at the EWAC in order to be designated Temporary Emergency Workers. They will be issued a pass and their entry and exit will be documented by WADOH. (J.14.d)

The state would likely lead this removal or continued exclusion of individuals from restricted areas decision process through the [WEMD Fixed Nuclear Facility Plan](#) including, but not limited to, the Washington Emergency Management Division (WEMD), the Washington Department of Health, Office of Radiation Protection (DOH-ORP), Washington Department of Agriculture (WSDA). These general relocation plans will be included in the [WEMD Fixed Nuclear Facility Plan](#) (J.14).

DOH-ORP, in coordination with the WEMD and Franklin County, has the responsibility for making relocation decisions, and DOH-ORP response plans will influence the rationale used to determine areas for relocation. WEMD, Franklin County Emergency Management, and the Licensee will use the public alert and warning process using EAS, radio Follow-On Messages, press releases and JIC news conferences for notifying individuals who are being relocated. (J.14.a)

DOH-ORP will determine the process used to identify the area(s) where the projected first-year dose may exceed the EPA's 2 REM relocation PAG, any need for buffer zones (J.14.b.ii), as well as designate the intervals used to continually assess projected doses. (J.14.b.i, J.14.c.ii) The initial post plume priority will be to examine areas that have not been evacuated, determining whether contamination levels necessitate relocation. The next priority will be to survey contamination levels in evacuated areas, gauging the possibility and timeline for safe return to areas where safe reoccupation can occur. (J.14.c.i)

The process for the establishment of access control/check points around the relocation area using roadways and geopolitical boundaries will be determined through coordination between the State of Washington and Franklin County. Establishment of control points at boundaries to facilitate relocation, prevent entry, and maintain security checkpoints on all roadways will be determined and agreed upon by Franklin County, local law enforcement, and Washington State. (J.14.d.i, J.14.d.iii)

Franklin County, in coordination with Washington State, would establish monitoring and decontamination stations at Access Control Points within the buffer zone around relocation areas and

areas not previously evacuated. This is provided the EWAC has been closed at this point in the response. (J.14.d.iv, J.14.e)

Decisions to relax protective measures and allow re-entry into relocation area(s) will likely require a continuous assessment of the radiological situation. The processes for identifying those who will be authorized to enter relocation areas will be coordinated between Franklin County, Benton-Franklin Health District, and Washington State. The Benton-Franklin Health Officer has the ultimate decision authority. Individuals, who are not emergency workers, entering the access-controlled area must be given a brief explanation of the hazards within the area and, if practical, escorted within the area by an emergency worker. (J.14.d.ii)

Physical and economic assistance for those who are relocated; and provisions for physical, economic, and financial assistance of individuals being relocated will be prioritized and established by Franklin County. These priorities will be driven by information communicated by individuals within Franklin County, the Benton-Franklin Health District, Washington State Department of Health, Office of Radiation Protection to the Franklin County Emergency Management. If the assistance needs exceed the local capabilities or resources, Franklin County Emergency Management may send requests for additional support to Washington State Emergency Management Division's (EMD), [Public Assistance and Individual Assistance recovery section](#) under [ESF 14](#). (J.14.f)

## Chapter 12 Radiological Exposure (Planning Standard K)

### 12.1 Emergency Worker Dose Limits (K.2, K.2.b, K.3.iv)

An administrative turn-back exposure limit of 2.5 R has been established for Franklin County emergency workers. After consultation with Washington State officials, the Benton Franklin District Health Officer may authorize Emergency Workers, who knowingly, volunteer to receive exposure in excess of those set forth in the Protective Action Guides (PAG's) in order to protect human life or valuable property. The PAG manual establishes guidance of 5 R general, 10 R valuable property, and 25 R lifesaving. Due to dosimetry limit of 20 R, an administrative limit of 20 R TEDE has been established for all emergency workers.

In making the decision to authorize radiological exposure in excess of the PAG's, the District Health Officer may obtain dose estimates from the MUDAC at the Columbia Generating Station EOF. The PAG's are stated in Annex-D Implementing Procedures (IP) D-5 Benton-Franklin Health District Officer. (K.2)

The Environmental Protection Agency establishes emergency worker radiation exposure and dose guidelines. They are set out in [PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents \(EPA-400/R-17/001 | January 2017\)](#). The Benton-Franklin Health District Health Officer has preauthorized tactical components of the Regional SWAT Team, who have been briefed on the increased risks of exceeding doses, to exceed the 5 R and 10 R total effective dose equivalent limits for emergency workers up to 20 R TEDE during a response to a hostile action-based Columbia Generating Station emergency.

Permission to accumulate additional exposures can be obtained from the Benton-Franklin District Health Officer, or their designee, in the EOC via predetermined communication channels (K.2.b.ii). If permission

is granted, dose will continue to be recorded and documentation is the responsibility of the Benton-Franklin Health Officer (K.2.b.iii).

Due to perceived limitations of the 0-20 R direct reading dosimeters distributed in emergency worker kits, an administrative limit of 20 R TEDE has been established for all emergency workers for non-voluntary lifesaving activities. Emergency workers will document any readings in their “emergency worker kit” instructions found with their dosimetry.

All county emergency workers operate under general Washington Division of Occupational Safety and Health radiological safety requirements and when responding to an emergency for a CGS incident, radiological dose will be controlled under federal guidance and procedures as set forth in this plan.

## 12.2 Dosimetry (K.3.i-iii, K.3.a, L.4.vi)

Franklin County response organization personnel supervising emergency workers in the field shall:

- a. confirm that emergency workers who are part of the response organization have emergency worker kits.
- b. confirm the emergency workers they supervise periodically check and record direct reading dosimeter readings including the place, date, and time of the reading.

The dosimetry referred to above shall be worn by ALL Emergency Workers, except those Emergency Workers performing duties at either the Columbia Basin College EWAC or Southridge High School EWAC. The EWAC staff are considered Class III Emergency Workers, and are NOT required to use a Self-Reading, or Pencil Dosimeter. They will be issued an OSL Dosimeter in order to establish a permanent record of exposure. Types and quantities of dosimeters (and dosimeter chargers, when applicable) available per location for a Franklin County response are listed in Table 14: Emergency Worker Radiological Detection Equipment Location and Amounts, referenced in Chapter 9.2 of this plan (K.3.i-ii). Field-deployed dosimeters with provided annual emergency worker kit training and accompanied user instructions allows for quicker response mobility. (K.3.iii)

Franklin County Emergency Management (FCEM) is responsible for maintaining a supply of dosimetry equipment for Emergency Workers, and other persons who may be granted permission to temporarily re-enter a controlled area. The Washington State DOH is responsible for maintaining radiation dosimetry and exposure records for the monitored public, Emergency Workers, and government employees. Each agency involved in the response is responsible for ensuring that their personnel have been issued the correct dosimetry and have been trained in its use prior to assigning any personnel duties in or at the borders of a radiological contaminated area.

FCEM, in conjunction with the Washington State DOH, Office of Radiation Protection (DOH-ORP), trains public employees and volunteers in the use of personal dosimetry. The Washington State DOH-ORP reviews the lesson plans and conduct of the training in order to ensure that the training is correct and consistent. FCEM maintains all records of quarterly operational checks and annual calibrations. Emergency Workers are encouraged to read their direct reading dosimetry at least every 30 minutes to

monitor for any change in the reading from the initial reading that was recorded at the time the emergency worker kit was obtained (K.3.a.i). All emergency workers record each reading and note any exposure (including no exposure) on a record card or form provided with their Emergency Worker Kit. They are to report any change in the reading of their direct reading dosimeter to the person supervising them during the emergency response and to the Franklin County Emergency Operations Center. (K.3.a.ii, K.3.v-vi)

Emergency workers are instructed to contact the person supervising them during the emergency response to receive directions regarding where to go at the end of their shift to be checked for contamination, decontaminated if necessary, and to turn in their direct reading dosimeters for reuse and their permanent record dosimeters (OSLs) for processing by the Office of Radiation Protection. Appropriate reporting by the Dose Tracker or other DOH representative during this end of shift process at an Emergency Worker Assistance Center (EWAC) will take place if administrative limits have been reached or exceeded. All records will be maintained by Washington State DOH. (K.3.a.iii-v)

### 12.3 Monitoring and Decontamination (G.3.a, J.11, J.13, K.4, L.4.ii)

Columbia Basin College, located at 2600 N. 20<sup>th</sup> Ave., Pasco, WA 99301, is 18 miles from the center of the Columbia Generating Station Plume Emergency Planning Zone and has been designated for use as one of two possible mass monitoring, decontamination, and mass care facilities. The second option is Southridge High School, located at 3520 Southridge Blvd., Kennewick, WA 99338. Southridge High School is 21 miles from the center of the Columbia Generating Station Plume Emergency Planning Zone (K.4.iii).

Radiological monitoring shall be provided at the EWAC for Emergency Workers and those members of the general public who may have been exposed to radioactive material. People, their vehicles, and equipment will be monitored for radiological contamination and if necessary, decontaminated at the EWAC. This central location for radiological monitoring ensures that the Washington State Department of Health, Office of Radiation Protection (DOH-ORP) can accurately track radiological exposure. Radiological monitoring methods, equipment, decontamination, and documentation shall be performed under the direction of Washington State DOH Health Physics personnel. Monitoring methods, equipment, and documentation requirements are included in the Washington State DOH Response Procedures for Radiation Emergencies. Emergency worker equipment is listed in table 14 in chapter 9.2 (K.4.v,vi).

The Department of Health (DOH) supports the EWAC by providing trained staff consisting of Radiation Health Physicist(s) (RHPs) and Dose Trackers and is further detailed in Washington DOH-ORP's Radiological Emergency Response Plan. (K.4.iv) Potentially contaminated Emergency Workers report to the EWAC upon completion of duties within the Controlled Area, when their personal dosimetry indicates 5 R (5 rem) or when their turnback limit of 2.5 R (2.5 rem) has been reached. (K.4.i,ii)

Franklin County Emergency Management is responsible for coordinating the opening and staffing of the EWAC located in Franklin County and to provide assistance to the Washington State DOH personnel assigned to the EWAC or performing field monitoring missions. (K.4.iv)

The Columbia Basin College EWAC is mapped out and segregated to keep contaminated areas separate from uncontaminated areas like the Assistant Center portion of the facility. These methods for the flow pattern within the facilities and controlling the spread of contamination at the EWAC are covered within the FCEM EWAC plan. (K.4.vii)

The Washington State DOH-ORP is responsible for coordinating the collection, handling, storage and disposal of radioactive waste (K.4.viii). Upon completion of all duties or upon receiving a Dosimeter reading, Emergency Workers are directed to report to the EWAC for radiological monitoring and possible decontamination. The Washington State DOH-ORP also maintains equipment tubs at the EWAC storage sites which contain items to be used in the event of an EWAC activation. Radioactive contamination levels that will trigger (100 counts per minute [cpm] above background) decontamination procedures and the process for re-monitoring individuals, equipment, vehicles, and personal possessions, and recording the results are covered within the Washington State DOH-ORP Radiological Emergency Response Plan, Appendices and Procedures. (K.4.ix-x)

**Medical Transportation:** Organizations that are responsible for medical transportation within the Plume Exposure Pathway EPZ are identified in Table 4, reference in Chapter 3.3 of this plan. Other medical service organizations and transportation equipment within Washington State, which could, if available, provide Transportation for individuals requiring medical care would be requested through the Washington State EOC. (K.4.xi, L.4.ii)

When contamination has been detected on individuals, a more elaborate whole-body survey is performed under the supervision of the Lead Radiation Health Physicist (RHP) to quantify and record the level of contamination. Decontamination is performed as necessary. If a person cannot be sufficiently decontaminated, or has open/contaminated wounds, the Lead RHP is notified. Individuals with open/fixed contamination should seek attention at a proper medical facility. The RHP will recommend further evaluation and care, as applicable, per the Washington State DOH Radiological Emergency Response Plan. (K.4.xi)

The Assistance Center portion of the EWAC provides the following services for citizens who have evacuated from the EPZ:

- a. For families who decide not to remain at a shelter a registration and reunification process is available through the American Red Cross (ARC). This will enable the ARC to facilitate reunification of families, as well as answer inquiries about specific evacuees.
- b. Location where radiological monitoring and registration is performed for all members of society, emergency workers and general public, who are suspected of being radiologically contaminated on the basis of where they have traveled from, or those members of the public who request monitoring. Individuals who are found to be contaminated will be decontaminated at the EWAC.
- c. Information Exchange Point – Assistance Center Staff will do their utmost to ensure current information concerning the emergency is made available to persons at the EWAC. Evacuees can inform Assistance Center Staff of any conditions within the evacuated area that requires attention. (G.3.a)

Emergency personnel working under the direction of the Washington DOH or Franklin County, and who may be required to perform tasks in an area of potential radiological hazard, will be equipped with a Permanent Record OSL and/or a Self-Reading (Pencil) Dosimeter, depending on assignment location. The Benton-Franklin District Health Officer shall confer with state and facility experts in order to determine the locations of potential radiological hazard areas. This determination will be based on information provided by the MUDAC at the Columbia Generating Station EOF, field monitoring team readings, aerial monitoring readings, and dosimetry readings from the field. The location of Emergency Worker Kits and their contents is found in Table 14 in Chapter 9.2 of this plan.

## Monitoring, Decontamination, Registration

### Monitoring

Both the primary and alternate EWAC facilities are of adequate size and can be staffed with trained personnel and functional up-to-date equipment for radiological monitoring of a minimum of 20 percent of the total plume exposure pathway EPZ population (including transients) within a 12-hour period. Benton County response personnel are capable of monitoring 20 percent of the plume exposure pathway EPZ population, including transients, with a 12-hour period. Methods for monitoring and decontamination of individuals who may be relocated from areas not previously evacuated can also be performed at the EWAC, unless it is determined to be more appropriate, and resources are identified and available to support the use of monitoring and decontamination stations in the buffer zone (J.14.e.i).

Using portal monitors EWAC staff can screen individuals for contamination at the rate of 3 per minute or 180 per hour. Using two portal monitors would permit the initial screening of about 4000 individuals in a 12-hour period. Four thousand is 20 percent of 20,000. The number of residents and transients within the Franklin County portion of the Columbia Generating Station does not exceed 20,000 people. The portal monitors do not require more than two trained operators each. Vehicles arriving at the EWAC will not be automatically monitored however, should the occupant(s) be determined to be contaminated, the associated vehicle will be surveyed and decontaminated with the occupants' permission. If monitoring and decontamination of the vehicle is waived by the occupant(s), guidance will be provided for self-decontamination.

Service animals and pets will be monitored for radioactive contamination using the same portal monitors used to monitor evacuees. If a service animal is contaminated, it will not be allowed into a mass care facility operated by the American Red Cross. An attempt may be made to further identify and document the areas of contamination on the service animal or pet if the animal is compliant. If decontamination of service animal is needed, EWAC personnel may assist or the owner may be instructed how to proceed (J.13.i).

Personal property or equipment in the possession of evacuees or emergency workers shall be monitored for contamination using portable portal monitors. Other items considered valuable or essential (Medical equipment, medication containers, baby supplies, emergency response equipment, service animals) that cause a portal monitor to alarm will be hand monitored with a Ludlum 26-1 will be subjected to attempted decontamination. (K.4.v, K4.vi)

Items that exceed the trigger/action levels are determined by Washington State Department of Health, Office of Radiation Protection (WA DOH ORP) will be considered contaminated and will be held for

decontamination or other disposition. Items that cannot be successfully decontaminated and those items identified as radioactive waste shall be held for disposition and or disposal.

### Decontamination

The decontamination procedures including the triggers/action levels, which are twice the background radiation level or 100 counts per minute, or that indicate the need for decontamination activities and procedures for medical attention referral are determined by the WA DOH ORP (K.4.ix). Decontamination supplies, equipment, activities and procedures for service animals and pets are determined by Washington State Department of Agriculture (WSDA) (K.4.vi).

Contamination control measures, such as safety requirements, and decontamination protocol are also the purview of WA DOH ORP <https://doh.wa.gov/community-and-environment/radiation/radiological-emergency-preparedness/plans-and-procedures> (J.13.iii). Any persons deemed contaminated will be re-monitored and decontaminated and any person remaining contaminated or for other medical reasons will be transported to a medical facility according to procedures (K.4.x, K.4.xi).

A list or other record of all persons, vehicles, and service animals upon which contamination was detected when monitored shall be done in accordance with the plans and procedures of WA DOH ORP and the WSDA (J.13.v).

### Registration

Once an evacuee is determined to be uncontaminated or decontaminated, they may be requested to register with the Central and Southeastern Washington Chapter of the American Red Cross. The American Red Cross will use their procedures and plans for the temporary care of and referral to shelter services for evacuees.

### Contamination Control

Contamination control measures at the EWAC are achieved by dividing the EWAC facility into a Contamination Control Zone and a Clean Zone. Station positioning and flow is carefully considered to minimize potential for cross-contamination or re-contamination between both zones (K.4.vii).

- i. **Greeting and Initial Sorting:** Within the Contamination Control Zone EWAC staff will greet people and monitor them for radioactive contamination using a combination of partial and full-body screening techniques, then direct or escort the person to a Wash Station if necessary.
- ii. **First Aid:** those with urgent medical needs are assessed, medically treated, or sent to the hospital for treatment and screened for contamination at pre-designated hospitals; Kadlec Medical Center, and Trios Health Southridge Hospital in Benton County and Lourdes Medical Center in Franklin County. (J.11.d.v)
- iii. **Wash Station:** People considered to be contaminated above the established screening criteria may be directed to the shower area of the EWAC and decontaminated using the procedures set for by WA DOH ORP. EWAC staff will re-screen the individual to ensure they are decontaminated.

- iv. **Pet & Service Animal Station:** Pets and services animals can be screened for contamination using the same screening techniques as their owners. If decontamination of an animal is needed, the owner will be directed to animal decontamination areas. If decontamination of service animal is needed, EWAC personnel may assist, or the owner may be instructed how to proceed. The procedures for decontamination of service animals and pets are the responsibility of the Washington State Department of Agriculture. (J.13.i)
- v. **Registration:** American Red Cross staff will collect demographic and incident-specific information from people who have been screened and cleared to enter the Clean Zone. Evacuees refusing to register will not be required to register.
- vi. **Congregate Care:** American Red Cross staff will provide shelter services to any evacuee that may need them. (J.11.d.vi) Service animals that assist people with disabilities are allowed in Red Cross shelters.



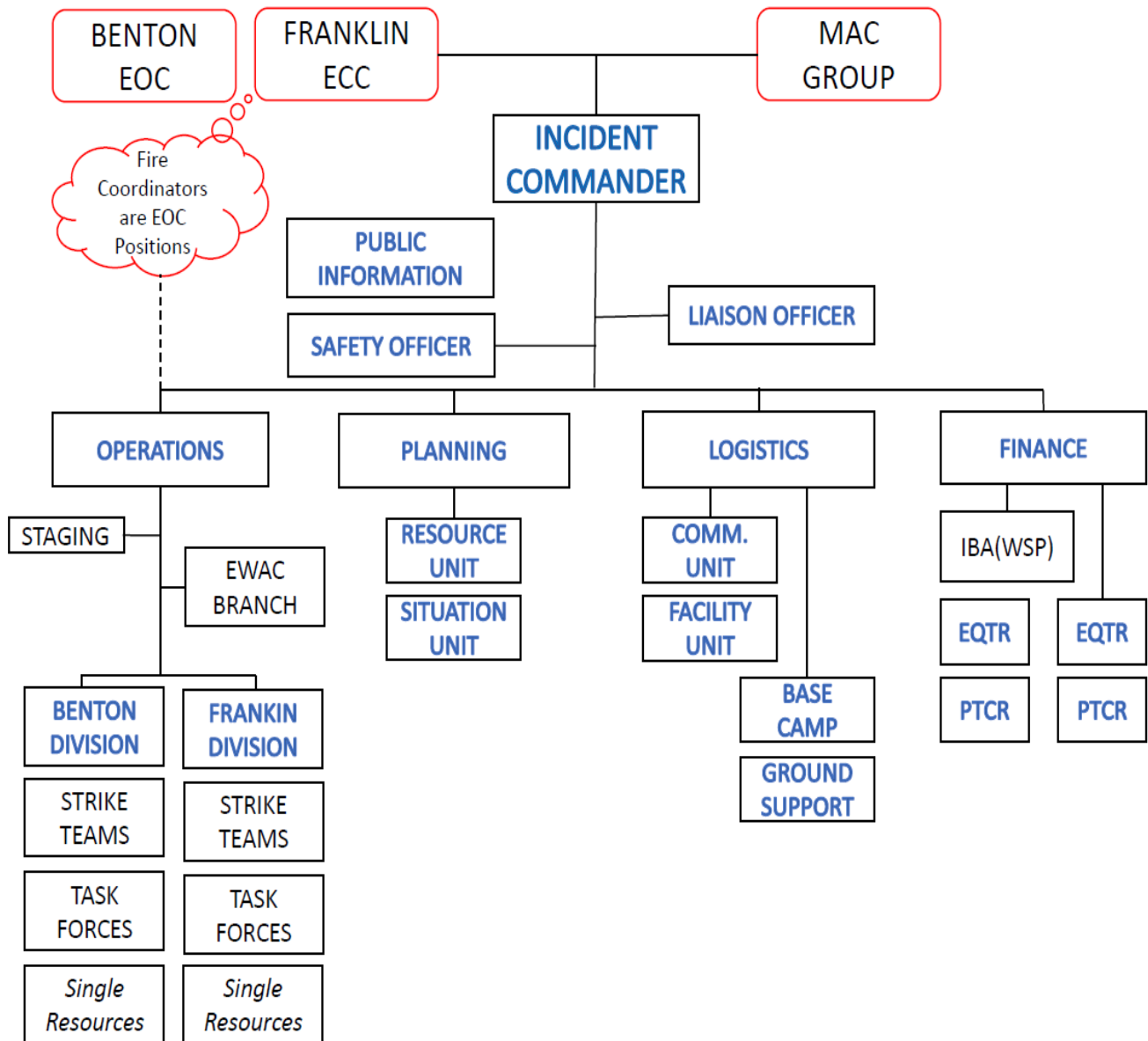


Figure 15: EOC ICS Command Structure (J.11.d.ii)

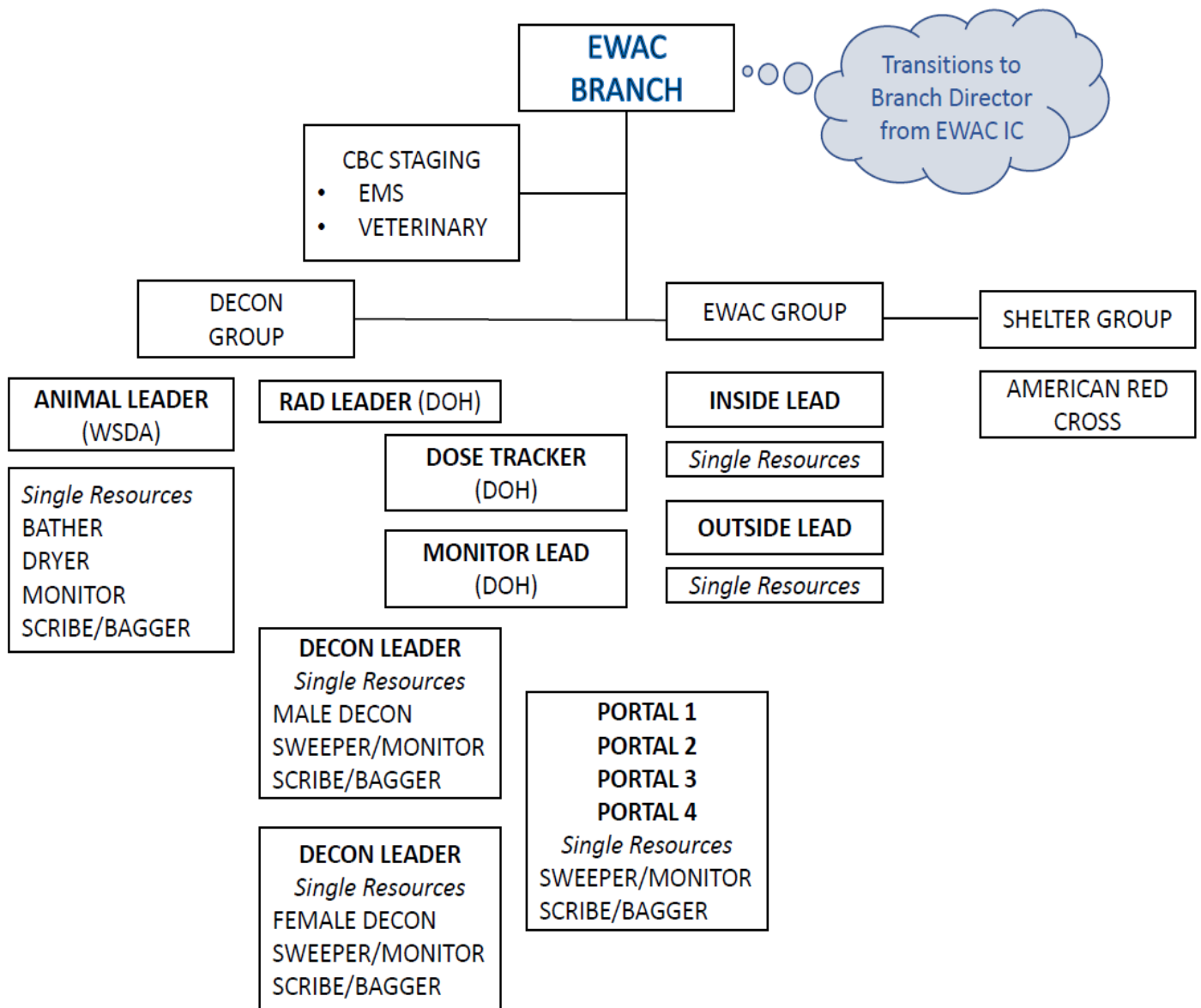
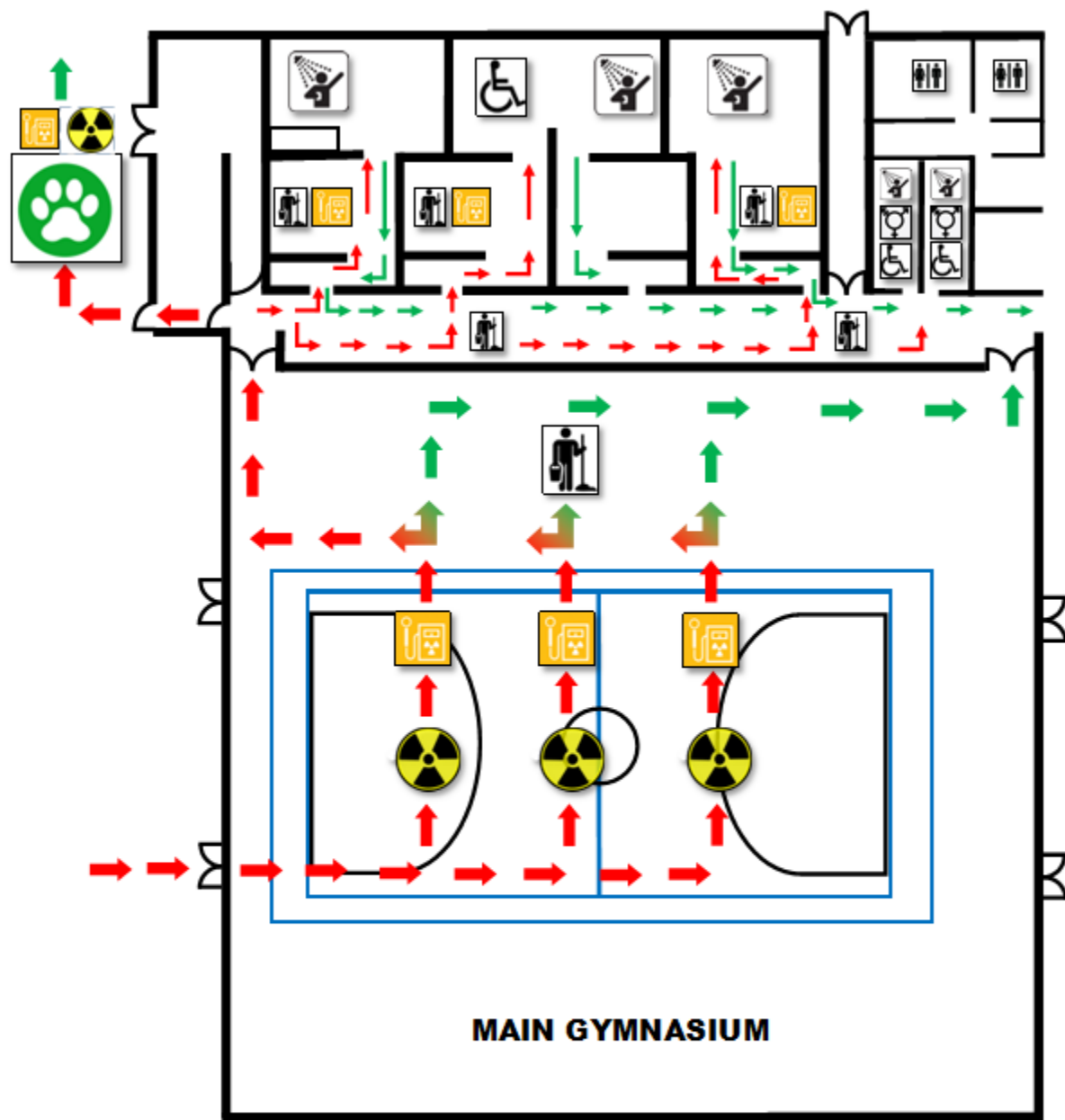


Figure 16: EWAC ICS Command Structure (J.11.d.ii, K.4.i-ii,iv)



						
Portal Monitor	Hand Survey	Cross Contamination Control	Pet Monitor and Decon Area	Shower Area	Gender Neutral	Access Functional Needs

Figure 17: EWAC Diagram (K.4.i-ii,iv)

## Chapter 13 – Medical and Public Health Support (Planning Standard L)

### 13.1 Hospitals and Medical Facilities (L.1, L.3)

Lourdes Medical Center of the Lourdes Health Network (Pasco), Kadlec Regional Medical Center (Richland), and Trios Health Southridge Hospital (Kennewick) are the three principal medical facilities supporting the EPZ. Each are staffed, trained and able to provide care for injured, exposed, or contaminated patients. Table 5 referenced in Chapter 3.3 within this plan, states the capacity of contaminated patients at each medical facility. Separate plans and procedures are prepared by each hospital. The hospitals are the final arbiter of approval of the hospital plans and procedures for the evaluation and treatment of radiologically contaminated injured patients. Lourdes Medical Center has their own dosimetry, which is provided by the licensee.

Normal First Aid services for the general public and Emergency Workers shall be administered by emergency organizations as indicated in Table 3 referenced in Chapter 3.1 of this plan. Additional information shall be available at the EWAC.

### 13.2 Transportation of Contaminated and Injured Individuals (L.4)

Pre-hospital treatment and transportation of radiologically contaminated patients is provided by the responding City or County Fire and/or Emergency Medical Service (EMS) agency. Each fire and/or EMS agency will follow their respective mission statement and standard operating procedures/protocols to determine the appropriate hospital/medical facility to receive the contaminated injured patient using the same processes used to make the same determination for non-contaminated injured patients. Local plans and procedures for implementing the process of distributing patients to medical facilities in the event of a major emergency or disaster are found in the [Disaster Medical Coordination Center \(DMCC\) plan](#) and the Benton-Franklin Counties MCI Plan with DMCC Procedures. Telephone systems, cellular and public switched network, and the Hospital Emergency Administrative Radio frequencies are used for communications between emergency medical services facilities and/or transports (L.4.iv).

Communication used between the pre-hospital emergency medical services treatment and transport providers shall be the same as that used on a daily basis for non-contaminated patients or according to the Benton-Franklin Counties MCI Plan with DMCC Procedures, as appropriate. In order to maintain a sense of privacy, cell phones are the primary communications link used by pre-hospital emergency medical service providers to communicate with emergency medical services facilities.

The priority is protecting the patient by providing lifesaving emergency medical services and prompt transportation to the receiving hospital. Therefore, pre-hospital monitoring is limited to determining whether contamination is present and surveying patients' faces, potential intravenous sites, and other areas that the provider deems appropriate.

Contamination control is achieved by establishing artificial clean areas using layers of barriers, cocooning the patient, draping stretchers, and securing the barriers. Unless delaying transportation

jeopardizes the life or health of the patient, the patient's outer clothing may be removed prior to cocooning for transportation by cutting with shears rather than tearing.

The same vehicles that are used to transport other patients shall be used to transport contaminated injured patients. However, those vehicles will be out of service after such transportation and until they are surveyed and decontaminated, if needed, prior to transporting non-contaminated patients. The vehicles will not be surveyed, decontaminated, or considered out of service if returning to the same or a similar scene, that is, or is suspected of being, radiologically contaminated. This provision shall not apply in mass casualty incidents where in the professional judgment of the pre-hospital care providers the potential for cross contamination is outweighed by the need to preserve life or prevent further harm.

Pre-hospital decontamination techniques and trigger action levels are the same as those that are used at Emergency Worker Assistance Centers (Twice the background radiation level as determined prior to entering the scene, or 100 counts per minute), however, in order to protect the life and health of the patient, lifesaving and stabilizing medical services and transportation of the patient to the hospital have priority over radiological surveys and decontamination other than as necessary and ancillary to providing that treatment and transportation.

Emergency Worker (EW) Kits and Ludlum 26-1 detectors are assigned to Pasco Fire Department, Fire Protection Districts, and the Public Hospital District medical transport vehicles as listed in Table 14 in Chapter 9.2 of this plan. EW Kits contains a Direct Reading Dosimeter (DRD), an Optically Stimulated Luminescence ((OSL) dosimeter, and a box of Potassium-Iodide (KI) tablets.

## Chapter 14 Recovery (Planning Standard M)

### 14.1 Recovery, Re-entry, and Return Plans (M.1, M.1.b)

During the intermediate and late phases of the incident in Washington State, local and tribal governments are responsible for planning and managing community response and recovery, in partnership with non-governmental stakeholders and with the technical support of state agencies. Based on the incident type, scope and magnitude, sections, or all of the [Washington Restoration Framework](#) (WRF) may activate. (M.1.i)

Franklin County will coordinate with the Washington State Department of Health, Office of Radiation Protection and Benton-Franklin Health District, regarding re-entry into areas of Franklin County that are restricted due to a protective action decision. (M.1.ii)

The process to establish restricted areas begins with the Department of Health (DOH) coordinating with other state agencies to provide boundaries and control points of the impacted area within the Washington Information Sharing Environment (WISE) platform. The State EOC leads the coordination, consultation, and consensus building efforts with the appropriate State agencies and Franklin and Benton Counties to finalize the restricted area. The restricted zone will be established based upon intermediate phase EPA PAG's. Also refer back to 11.12 (M.1.iii)

Any decision regarding the return of households and communities to relocated areas during the Late Phase cleanup process, also referred to as re-occupancy, will require the involvement of specific state

agencies and impacted local jurisdictions to discuss what might be acceptable and defensible to allow for the return of previously relocated residents while late phase cleanup activities are occurring. Vital services such as water, sewer, electric, public safety services, will be restored before any decision is made. Return is the permanent resettlement in evacuation or relocation areas with no restrictions, based on acceptable environmental and public health conditions. Re-occupancy is the return of households and communities to relocation areas during the cleanup process, at radiation levels acceptable to the community.

If a consensus is gained, then the proposal will be presented to the impacted community(ies) during a series of public outreach meetings. The purpose being to gauge whether the community would be accepting of the proposal. It is not anticipated that this will occur until well into the Late phase and after significant cleanup operations are ongoing and the radiological public health picture is much clearer. (M.1.1.iv)

FCEOC will coordinate with the State of Washington in the identification and implementation of relocation (Relocation: the removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure. Relocation area: areas where people (households) have been removed or excluded to avoid chronic radiation exposure. May also be referred to as Restricted Area) within Franklin County by:

- a. Drawing and describing geopolitical boundaries that include the relocation isopleths provided by Washington State Department of Health, Office of Radiation Protection.
- b. Suggesting locations for access control points for entering and exiting relocation areas.
- c. Assistance in identifying primary and alternate evacuation routes for those being relocated, if needed.
- d. Providing local representative(s) to the Washington Recovery Group (WRG).
- e. Providing personnel, as available, to assist with the process of relocating families and others effected by a protective action decision.

Franklin County Emergency Operations Center (FCEOC) will coordinate with the State of Washington to consider health effect concerns, the PAR, and the socio-economic impacts of relocation. FCEOC will also coordinate with the State of Washington to assure that enforceable boundaries for areas subject to relocation following a Columbia Generating Station emergency are identified.

#### 14.2 Process for Initiating Recovery Actions (M.4)

Recovery actions shall be determined by the specific type of accident and radioactive release that has occurred. The response during this action transfers from the emergency/response phase to the recovery phase. Recovery actions can include: (M.4.i-ii)

- a. Maintenance of access restrictions to the evacuated areas until re-entry criteria levels are

achieved.

- b. Imposition of food control measures until measured radioactivity is below the specified levels.
- c. Surface decontamination such as road wash down, land plowing, surface removal, packaging, and transportation to a waste repository.
- d. Extensive environmental monitoring and analyses to determine compliance with reentry criteria.

The Washington State Emergency Operations Center (SEOC), at the Governor's direction, shall coordinate all off-site recovery activities. The agencies with specific responsibilities and/or resources for undertaking recovery activities include the following (M.4.iii):

- a. Department of Agriculture: Is responsible for food control measures with the assistance of the Washington State Army/Air National Guard and State or Local Law Enforcement Personnel.
- b. Local Law Enforcement Agencies, Washington State Patrol, and the Military Department: Have the authority and/or resources for access control, traffic control, and security of evacuated areas.
- c. Washington State Department of Health: Responsible for radiological monitoring, Re-entry Criteria, and Drinking Water Control Measures.
- d. Benton-Franklin Health District: Coordination of local public health response actions.
- e. Franklin County Emergency Management: Planning and coordination of Local Disaster Assistance. Four Franklin County Re-Entry and Recovery Annex D - Implementing Procedures (IP)'s have been incorporated into this plan.

- |      |          |                                    |
|------|----------|------------------------------------|
| i.   | IP R&R-0 | RE-ENTRY and RECOVERY ACTIONS LIST |
| ii.  | IP R&R-1 | TEMPORARY EMERGENCY WORKER         |
| iii. | IP R&R-2 | ACCESS CONTROL POINT (ACP) STAFF   |
| iv.  | IP R&R-3 | EWAC ADMINISTRATIVE ASSISTANT      |

*NOTE: IP R&R-0 RE-ENTRY and RECOVERY ACTIONS LIST provides general guidance for the Emergency Operations Center (EOC) staff during the Recovery phase of an emergency. The remaining R&R series procedures detail the steps to be taken by those individuals requesting reentry, the ACP Staff, and the EWAC Administrative Assistant to allow entry into the Relocation Area.*

Franklin County EOC will still likely be operational to some extent when the emergency incident transitions from the response to the recovery phase. ESF 14 of the Franklin County and Washington

State Comprehensive Emergency Management Plans (CEMPs) plays major roles in supporting the transition from response to recovery operations. (M.4.ii)

As the response operations diminish and a Washington Recovery Group (WRG) is established, Recovery Support Functions (RSFs) may transition recovery operations from the SEOC and Franklin County EOC to a Federal Joint Field Office (JFO), depending on the incident scope and magnitude. Further explanation can be found within the [Washington State Fixed Nuclear Facility Protection Plan](#). (M.4.iii)

ESF 14 and activated RSFs work with the impacted communities and with their state and federal partners to maintain situational awareness on all recovery matters. The state EMD is the coordinating agency for all RSFs and will provide recovery updates to the appropriate authorities when necessary, including via the Unified Coordination Group, SEOC Supervisor, and the State Coordinating Officer. Additionally, Recovery Branch meetings will take place regularly to coordinate recovery activities, identify challenges or resource needs, and collect essential elements of information (EEI) that will inform the recovery “Common Operating Picture” (COP). (M.4.iv)

### 14.3. Relaxing Protective Actions (M.1.ii, M.1.b, M.5, M.6.ii)

The Re-entry Matrix in Table 4-2 of the EPA-400/R-17/001 [Protective Action Guides \(PAG\) and Planning Guidance for Radiological Incidents Manual \(2017\)](#) provides a quick reference for public and worker dose guidelines and considerations for re-entry during this phase. (M.1.b.i)

Franklin County will cooperate with the State of Washington in the identification and implementation of re-entry within Franklin County by: (M.1.b.ii)

- a. Suggesting locations for access control points to facilitate the orderly re-entry to restricted areas identified as having risk associated with radiation exposure.
- b. Providing personnel and/or other resources, as available, to secure restricted areas and facilitating orderly re-entry.
- c. Providing local representative(s) to the [Washington Recovery Group](#).
- d. The process review for reentry will also be weighed against anticipated dose, time needed to complete task, safety, security, etc.

The [Washington State CEMP ESF-5 Annex - Appendix 1, The Post-Disaster Re-Entry Framework](#), is not REP specific but could help provide further guidance for Franklin County regarding re-entry after a radiological incident (M.6.ii)

When temporary reentry is requested, the requestor goes to the Emergency Worker Assistance Center (EWAC) and fills out a request form. If the EWAC has been closed, report to Franklin County Emergency Management, 1011 E. Ainsworth St., Pasco, for further instructions. The request form is then reviewed and, if the need is appropriate, access would be granted. The requestor must complete Emergency Worker Kit training, check out an Emergency Worker Kit, provide their own means of communications in



the event of a need for assistance, provide their own transportation, and ingress/egress at the specified location(s). Upon departure, they either process through the egress point or the EWAC to be monitored for contamination, and if needed, be decontaminated. This re-entry determination a cooperative decision between Franklin County and Washington State depending on available resources, any potentially contaminated equipment that can will remain in the restricted zone. The re-entry requestor will also have their dosimetry read and recorded by the Department of Health in order to track the persons cumulative exposure. (M.1.ii, M.1.b.) The detailed procedures for the reentry process are listed in Chapter 14.2 of this section, as well as Chapter 11.12.

#### 14.4 Cleanup Operations (M.6)

The only recent, real-life experience on how to conduct clean-up of radiologically contaminated areas comes from the Fukushima incident following the earthquake and tsunami in Japan and what has been learned through clean-up operations conducted on federal lands such as the Department of Energy's (DOE) Hanford Site north of Richland, Washington and a few other DOE projects around the country. Plans/procedures specify the appropriate Federal, state, local, and tribal organization(s) with primary responsibility for determining the need for, and carrying out, cleanup operations of radioactive waste. Plans/procedures take into account resources that may be needed by the responsible organizations to conduct cleanup efforts. Applicable Federal guidance is considered during the cleanup process.

Franklin County will coordinate with the State of Washington in the identification and implementation of the clean-up process within Franklin County by:

- a. If requested, drawing, and describing geopolitical boundaries that include the return isopleths provided by Washington State Department of Health, Office of Radiation Protection.
- b. Suggesting locations for access control points to facilitate the orderly return to evacuated areas identified as being safe by Washington State Department of Health, Office of Radiation Protection.
- c. Providing personnel, as available, to assist with patrolling and securing evacuated areas and facilitating an orderly return.

Providing local representative(s) to the Washington Recovery Group (WRG)

- i. The need for any restricted or buffer zones are included within the isopleths provided by Washington State Department of Health, Office of Radiation Protection personnel for identification of geopolitical boundaries. No additional consideration is required by Franklin County.

#### 14.5 Sampling Plans and Laboratory Analysis (M.7)

Washington State DOH and WSDA will continually coordinate and evolve sampling plans and determine what additional, specific analyses will be required before individuals are able to safely return. DOH and WSDA will also describe each identified laboratory and define their capabilities and capacity to conduct all necessary types of analysis.

#### 14.6 Assessing Long-term Public Exposure (M.8)

Washington State DOH has the lead responsibility for ensuring offsite dose assessments and the methodology for periodically conducting radiological assessments. Dose assessors use computer codes for various types of dose projections.

### Chapter 15 Exercises and Drills (Planning Standard N)

#### 15.1 Exercise Conduct, Evaluation, and Corrective Actions (N.1, N.1.a, N.1.b, N.2, N.2.a, N.2.b)

Franklin County shall participate in emergency preparedness exercises that simulate emergencies that result in an offsite radiological release within Franklin County. REP exercises will be conducted in accordance with NRC and FEMA regulations and guidance. (N.1)

Qualified controllers/evaluators from federal, state, county government and the licensee shall observe the exercise. A critique shall be scheduled following the exercise to evaluate the ability of the organizations to respond in accordance with the preparedness and response plan. A written evaluation shall result from the critique and the After-Action Report (AAR) will be managed by WAEMD and coordinated with FEMA Region 10. Any corrective action shall be reviewed by all pertinent agencies and a plan will be developed and agreed upon to remediate the corrective action. The Franklin County Emergency Management Director, or designee, shall be responsible for tracking identified findings and corrective actions, and for ensuring that the required corrective actions are included within the plan. Verification of corrective actions that are being implemented will be reported in the Annual Letter of Certification (ALC). All exercises shall be in accordance with FEMA REP exercise methodology. (N.1.a, N.1.b)

Arrangements for controllers/evaluators and the advance materials to be provided to them shall be determined, documented, and incorporated in the scenario package for each evaluated exercise. The advance materials will consist of; the scenario for the drill/exercise, the procedures being used, and a copy of the exercise injects. (N.2)

Capabilities and scenarios are exercised annually, or at least biennially, in response to a plume exposure pathway scenario in which the scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives. Each exercise shall include the mobilization of state and county personnel and resources (e.g., emergency operations centers, joint information center, and assistance centers) as required to adequately verify their ability to respond. (N.2.a)

These exercise scenarios, including participating in an ingestion pathway exercise at least once every 8 years, shall be prepared by the licensee with input from the Emergency Management Director, or designees from Washington State, Franklin County, and any other affected counties. All major elements of plans/procedures are tested at minimum specified frequencies. Details regarding the required content and frequency of plume and ingestion exercises are provided below.

Ingestion exposure pathway (IEP) exercises include mobilization of Washington and Oregon State EOCs and eight county government personnel and resources including Adams, Benton, Franklin, Grant,

Kittitas, Klickitat, Yakima and Walla Walla counties in Washington and Morrow and Umatilla Counties in Oregon. These IEP exercises also include implementation of emergency plans to demonstrate response capabilities to a release of radioactive materials requiring post-plume phase protective actions within the ingestion exposure pathway EPZ. Since Franklin County participates in the full-scale ingestion exercise with the state, Franklin County is not required to participate in any additional ingestion TTX or other ingestion pathway training activity during each eight-year exercise cycle. FCEM participation in ingestion exposure pathway exercises will include adequate numbers of personnel to demonstrate the capabilities of the plan and procedures. The amount of personnel needed or the types/roles of personnel needed to accomplish this will change as the scenario changes. The staffing needs will be evaluated by the FCEM Director and Operations. (N.2.b)

### 15.2 Exercise Scenarios (N.3)

Advance knowledge of the scenarios and the times of the exercises will be prohibited to ensure a realistic response and duty performance of the exercise participants. Scenarios will be varied from exercise to exercise to provide an opportunity for appropriate capabilities to be demonstrated. All required scenario elements will be used during the eight-year exercise cycle. These exercises will generally conform to the Homeland Security Exercise and Evaluation Program (HSEEP) principles. The exercise scenarios used shall include the following:

- a. The basic objective(s) and evaluation criteria of the exercise.
- b. The date(s), time period, places(s) and participating organizations.
- c. The simulated events.
- d. A time schedule of real and simulated initiating events.
- e. No radiological release or an unplanned minimal radiological release that requires the site to declare a Site Area Emergency but does not require declaration of a General Emergency. The no/minimal release scenario will only be used once in an eight-year cycle.
- f. Hostile Action-Based scenario directed at the plant site involving the integration of offsite resources with onsite response. HAB exercise will be utilized at least once in an eight-year cycle. (N.3.a.i) The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site. (N.3.a.ii)
- g. An initial classification of a rapid escalation to a Site Area Emergency or General Emergency scenario will take place at least once in an eight-year cycle. (N.3.b)

Franklin County will account for capabilities and activities (e.g. Extent of Play) that may not have the opportunity to be evaluated under the no/minimal radiological release scenario elements by conducting out of sequence activities or other means as described by FEMA guidance. Participation in no/minimal release scenario is optional for offsite organizations; however, FCEM may consider involving necessary

offsite organization participation/involvement as needed. FCEM considers alternative demonstration and evaluation venues. (N.3.c)

Franklin County Emergency Management (FCEM) has established an MOU with Energy Northwest to provide resource integration during an emergency response. This integration may involve Franklin County Sheriff's Office and/or Pasco PD who are members of SWAT. FCEM may dispatch a representative, if available and can safely travel, to the Energy Northwest Emergency Operations Facility (EOF) and Energy Northwest will dispatch a representative to the Franklin County Emergency Operations Center (EOC). However, FCEM and Washington State EMD have agreed that the state may represent FCEM at the Energy Northwest EOF, if available. (N.3.d)

### 15.3 Drills for Key Skills and Capabilities (N.4)

Drills are designed to enable the county to demonstrate and maintain skills and the capabilities needed to fulfill key roles. The types of required drills, and the groups that will participate in each drill type are described below. Medical emergency drills (MS-1 Drills) involving a simulated radiological contaminated individual, which involves participation by county support services (ambulance and offsite medical treatment) shall be conducted and evaluated in accordance to the current "REP Evaluated Exercise cycle". (N.4.b)

Laboratory and environmental monitoring drills, plans, and procedures are the responsibility of the Washington DOH-ORP. (N.4.c, N.4.d)

The Washington Emergency Management Division (WEMD) of the Washington State Military Department will coordinate the protective actions to be used for the biennial Ingestion Exposure Pathway drills that include other OROs such as State DOH and WSDA and all eight ingestion counties. All participants utilize the Washington Information Sharing Environment (WISE) GIS tool as a collaborative mapping tool to designate the areas of concern where monitoring and sampling will be implemented. (N.4.e)

FCEOC will participate/support the licensee in Emergency Response Organization (ERO) team drills as scheduled by the licensee.

Communications drills are discussed in Chapter 7.3 of this plan to include Table 12 that shows all the communication systems to be drilled. Message content checks are included in all communications drills. (N.4.f)

## Chapter 16 Training (Planning Standard O)

### 16.1 Training Responsibility (O.1.i, O.1.iv-viii)

Specialized training programs are provided to ensure that initial and annual refresher training is provided to EOC personnel and other Offsite Response Organizations (ORO) and personnel who have a role in the implementation of this plan, the Franklin County Columbia Generating Station (CGS) Emergency Preparedness Plan. The training programs are managed by the FCEM Director and delivered primarily by the FCEM REP Coordinators. Depending on the training, all FCEM Staff may be involved.

Provisions are in place to ensure that individuals with operational roles in CGS emergency response receive appropriate training.

Initial and continuation training will be conducted in cooperation with Washington Military Department Emergency Management Division (EMD), DOH, WSDA, and Energy Northwest. Training Outlines and Courses have been established and approved for use by Washington State Department of Health for the following; EWAC Personnel, EOC Staff, Law Enforcement/Police Security (Franklin County, City of Pasco and Connell), Fire Fighters (City of Pasco and Connell, three Franklin County Districts and one Walla Walla County District), Ambulance Crews (City of Pasco and one rural ambulance district), Elected Officials, State Agencies (WSDA, WA Fish and Wildlife, WSDOT and WSP), County and City Emergency Workers, SECOMM Dispatch, Transportation agencies, hospital medical and support staff and Volunteers.

Just-in-time training is typically provided as instructions immediately before performing a task. It would typically be provided to mutual aid organizations, (such as firefighters or law enforcement) and will include topics such as basic radiation protection. Just-in-time training and documentation is contained within each emergency worker kit. See Table 17 below:

**FRANKLIN COUNTY EMERGENCY RESPONSE ORGANIZATIONS  
RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM (REP) INITIAL TRAINING MATRIX**

<b>Organization</b>	<b>Emergency Response Procedures (SECOMM, EOC, EOF, JIC)</b>	<b>EWAC Procedures</b>	<b>Emergency Worker Kits</b>	<b>Ingestion, Re-Entry and Recovery</b>	<b>EOC Orientation</b>	<b>Fire/Rescue Radiation Detection</b>	<b>Hospital Radiation Training</b>
FCEM: Emergency Manager, EOC and JIC PIO, OPS/SPT Coord	X	X	X	X	X		
FC Commissioners: Emergency Chairman, JIC County Spokesperson	X		X	X	X		
FC Staff	X	X	X	X	X	X	X
FC Sheriff's Office	X		X	X	X		
FC Prosecutors Office	X				X		
FC Public Works Public Works Coordinator	X		X	X	X		
FC Fire District 5			X				
FC Fire District 3: Fire Coordinator	X	X	X		X	X	
FC Fire District 4			X			X	
WW Fire District #5	X		X				
Pasco Police Dept			X	X	X		
Pasco Fire Dept: Fire Coordinator	X	X	X		X	X	
WA Dept of Agriculture			X	X	X		
Pasco School Dist : Transportation Coord	X		X		X		
North Franklin School Dist: Transportation Coord	X		X		X		
NFHPD#1			X			X	

FRANKLIN COUNTY EMERGENCY RESPONSE ORGANIZATIONS RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM (REP) INITIAL TRAINING MATRIX							
Organization	Emergency Response Procedures (SECOMM, EOC, EOF, JIC)	EWAC Procedures	Emergency Worker Kits	Ingestion, Re-Entry and Recovery	EOC Orientation	Fire/Rescue Radiation Detection	Hospital Radiation Training
Lourdes Medical Center/(LHN)							X
B/F Chapter Red Cross	X	X			X		
B/F Health District	X			X	X		
SECOMM Dispatch: Communications Coord	X				X		
WA Dept of Fish & Wildlife			X				
Amateur Radio Operators	X	X			X		
Individual Volunteers	X	X	X		X		
Edwin Markham Elem. School	X						
Big River Country School	X						
Country Christian Center	X						

Table 17: Franklin County Emergency Response Organizations Radiological Emergency Preparedness Program (REP) Training Matrix

Each organization providing the training shall be responsible for documenting the following for training sessions:

- a. Subject Matter (Lesson Plans, description of Training Aids, Reference Materials)
- b. Lesson plans and training shall reference just-in-time training. *Note: Just-in-time training documents are also included in all Emergency Worker Kits.*
- c. Attendance Roster

Copies of training documentation conducted by other groups shall be sent to Franklin County Emergency Management within 30 days of the conduct of the training. The Franklin County Emergency Management Director will maintain this documentation until 6 years after the closing of the applicable nuclear facilities.

Mutual aid organizations (listed above in Table 17) are offered and provided training.

## 16.2 Description of Training Programs (O.1.ii-iii)

Table 18 lists Franklin County Radiological Emergency Preparedness Program (REP) training courses and descriptions and Table 17 shows the training matrix of organizations with their appropriate training. (O.1.iii)

Response agencies that have signed a MOU agree to respond to a radiological emergency in accordance with their operating procedures, training levels, certifications/capabilities, with the understanding that services and response capabilities will have to be assessed at the time of the emergency to consider response to everyday/normal operations. FCEM will contact each agency(s) "training officer" to coordinate training schedules. All Memorandums of Understanding or Agreements will be reviewed annually to verify their validity. FCEM maintains records/copies of all MOU's. Mutual aid organizations are provided an opportunity to participate in initial and annual retraining. Personnel providing supplemental response during an emergency will be provided just-in-time training for their specific position.



**Franklin County Radiological Emergency Preparedness Program (REP) Refresher Training Courses**

<b>Training Courses</b>	<b>Time Interval</b>	<b>Presented By</b>	<b>Presented To</b>	<b>Brief Description</b>	<b>Proponent Organization</b>
EOC Duty Positions	Annually	Franklin County Emergency Management (FCEM) Staff	County and Municipal Elected Official, employees, and volunteers who staff specific EOC positions during an emergency	Each EOC duty position has a procedure describing the duties of the individual during and activation of the EOC. This type of training is usually conducted using a One-on-One format	Franklin County Emergency Management (FCEM) Staff
Emergency Worker Assistance Center (EWAC) Duty Positions	Annually	FCEM Staff	Pasco Fire, ORPT Members, Columbia Basin College staff, CBC Student volunteers, and other volunteers	Instruction is taught using the procedures specific to each EWAC duty position staffed by volunteers and specific organizations supporting the EWAC. This training is taught to each EWAC Functional Area group (Monitoring, Decon, Admin)	FCEM Staff (The Washington State Dept. of Health (DOH) reviews those procedures specific to radiation monitoring and decontamination, once approved the procedure is taught by FCEM Staff.)
Emergency Worker Kits (Both Class I and Class III)	Annually (will reach out quarterly if training not complete)	FCEM Staff	<b>Class I:</b> Franklin County (FC) Sheriffs, FC Public Works, FC Fire Districts (FD) 3, 4 & 5, Walla Walla FD 5, North Franklin Hospital District, Pasco Fire Dept., Pasco Police Dept., WA Dept. of Transportation, Pasco School District	Course describes and demonstrates the proper use and wearing of dosimetry, turn back values, importance of emergency worker exposure form and in for Class I Emergency Workers zeroing and use of	FCEM Staff

Franklin County Radiological Emergency Preparedness Program (REP) Refresher Training Courses					
Training Courses	Time Interval	Presented By	Presented To	Brief Description	Proponent Organization
			<b>Class I</b> (cont.): North Franklin School District, <b>CLASS III:</b> EWAC Volunteers in all EWAC Functional Areas	Pencil Dosimeters and need to record pencil dosimeter readings	
Ingestion, Recovery, and Re-Entry	At least every 8 years	FCEM Staff with assistance as requested from WA DOH, WSDA, WEMD and Energy NW	EOC Staff, EWAC Staff, Class I Emergency Workers who staff Access Control Points	Set of procedures used to instruct response activities for Franklin Co. personnel post-plume. Details specific activities for certain EOC staff and provides instruction on Access Control and accountability of persons entering Relocation Area	FCEM developed, based on FEMA and EPA Guidance, uses WA Emergency Management, WSDA, DOH info.
EOC Orientation	Annually	FCEM Staff	EOC Staff, Facility and State Liaisons, and other interested persons	EOC tour, explanation, and description of facility and its capabilities	FCEM Staff
Fire Department and EWAC Radiation Detector Training	Annually	FCEM Staff, with assistance from WA DOH and if available Energy NW support	Pasco Fire Dept., FCFD 1 (Connell Fire Dept.), 3, & 4, North Franklin Hospital District, EWAC Monitoring and Decontamination Staff	Procedure based training used to describe components, assembly, functions check and use of both types of detectors.	FCEM Staff, WA DOH and Energy NW if requested
Hospital Radiation Training	Annually	FCEM Facilitated, Energy NW instructed	Refresher course for Lourdes Medical Center /Lourdes Health Network (LMC/LHN) Emergency Room staff.	Training based on LMC/LHN Procedure and Set-Up Action Cards	LMC/LHN Procedure, updated and maintained by FCEM

Table 18: Franklin County Radiological Emergency Preparedness Program (REP) Training Courses and Descriptions

## Chapter 17 Planning Effort (Planning Standard P)

### 17.1 Responsibility for the Planning Effort (P.1, P.2, P.3)

Two positions within FCEM have responsibilities for the Radiological Emergency Preparedness Program (REPP) planning effort. These positions are the Program Coordinators.

Under the FCEM Director's authority, the FCEM Program Coordinators are responsible for developing, maintaining, reviewing, updating, and distributing emergency plans/procedures, as well as coordinating plans/procedures with other response organizations.

The one-time training regimens for these individuals that support Franklin County Emergency Management (FCEM) are listed in the below table.

Franklin County Emergency Management Training Regimens		
FCEM	Required	Recommended
<b>FCEM - Director</b>	IS-29, 100, 200, 700, 800, ICS-300, 400, AWR-352, AWR-317, MGT-445, MGT-453, E/L/K0146, E/L/K0105, E/L/K0191, E/L/K2200, ISP Courses, PDS Courses. CodeRED Training Courses.	AWR-928, AWR-929, AWR-314, AWR-316, AWR-317, AWR-318, AWR-327, AWR-351, IS-235, E/L/K2300.
<b>FCEM – Deputy Director</b>	IS-29, 100, 200, 700, 800, ICS-300, 400, AWR-352, AWR-317, MGT-445, MGT-453, E/L/K0146, E/L/K0105, E/L/K0191, E/L/K2200, ISP Courses, PDS Courses. CodeRED Training Courses.	AWR-928-W, AWR-929, AWR-314, AWR-316, AWR-317, AWR-318, AWR-327, AWR-351, IS-235, E/L/K2300, CHDS REP Early Career Program.
<b>FCEM – Program Coordinator(s)</b>	IS-29, 100, 200, 700, 800, ICS-300, 400, AWR-352, AWR-317, MGT-445, MGT-453, E/L/K0146, E/L/K0105, E/L/K0191, E/L/K2200, ISP Courses, PDS Courses. CodeRED Training Courses.	AWR-928-W, AWR-929, AWR-314, AWR-316, AWR-317, AWR-318, AWR-327, AWR-351, IS-235, AWR-140, PER-243, PER-332, PER-345, PER-354, PER-355, E/L/K2300, CHDS REP Early Career Program.
<b>FCEM – Executive Assistant</b>	IS-29, 100, 200, 700, 800. ICS-300, 400. E/L/K2200. CodeRED Training Courses	E/L/K0105, E/L/K2300.
<b>FCEM – Volunteers</b>	IS-100, 200, 700, 800	Any related FEMA IS and/or AWR Courses

Table 19: Franklin County Emergency Management Training Regimens

These courses will be completed as available. If the required courses in Table 19 are updated or changed, then the FCEM REP staff will review to determine if it is necessary to take the new version of the required courses again.

## 17.2 Periodic Review (P.4, P.10)

Annual reviews are conducted, and as needed, updates completed to the plan, and any related MOU, maps, and charts. These reviews will be documented using email correspondence and/or updating the MOUs to reflect content and date changes. These communications/MOUs will be submit and documented in the quarterly reports. These reviews will also utilize the latest data available (KLD CGS ETE, census data, state/county records, etc.). Corrective actions identified in After-Action Reports (AARs)/Improvement Plans (IPs), or through other means, are to be incorporated and documented by staff and are coordinated with other response partners and agencies/organizations listed within this plan (see Chapter 2.5). A “Record of Changes” is located within the beginning section of this plan and the “footer” will be update. All plans have been maintained/preserved on a server.

Contact information is reviewed and updated on an annual basis. (P.10)

## 17.3 Distribution of Emergency Plans (P.5)

The plan and any updates are available to the public and all participating agencies (see Table 3 in Chapter 3.1 of this plan) on the Franklin County Emergency Management website <https://franklinem.org>. Any notifications of plan changes/updates will be made via email with read receipt.

FCEM’s annual review is certified in the Annual Letter of Certification (ALC) to the FEMA Region 10. Notification lists are to be kept current as changes occur and updated not less than quarterly. Telephone contact lists are kept separate from the main portion of the plan and are listed within Annex D - Implementing Procedures (IP).

## 17.4 Supporting Plans and Procedures (P.6, P.7)

### **Supporting plans:**

#### ***Benton-Franklin Counties Mass Casualty Incident (MCI) Plan***

#### ***City of Pasco Fire Department Standard Operating Guidelines (SOG) for Response to Radiological Emergencies***

The City of Pasco Fire Department maintains its own set of plans and procedures to respond to radiological emergencies. The interface with other offsite response organizations is a key part of these documents.

#### ***Columbia Basin Operations Area Emergency Alert System (EAS) Plan***

#### ***Community Wildfire Protection Plan (CWPP)***

This plan for Franklin County, Washington, is the result of analyses, professional collaboration, and assessments of wildfire risks and other factors focused on reducing wildfire threats to people, structures, infrastructure, and unique ecosystems in Franklin County. The CWPP is approved by the Franklin County Commissioners, then a steering committee will begin further refining proposed project boundaries, feasibility, and public outreach as well as seeking funding opportunities.

## **DOE Radiological Plan**

### ***Facility Plans and Procedures***

Energy Northwest's Columbia Generating Station maintains its own set of plans and procedures to respond to onsite emergencies. The interface with offsite response organizations is a key part of these documents.

### ***Franklin County Area School Evacuation Plans listed***

#### **Franklin County Comprehensive Emergency Management Plan**

An all-hazard plan that is disseminated by the Franklin County Emergency Management Executive Board. This plan is an all-hazards approach to emergency and disaster situations likely to occur in the county, as described in the [Franklin County Hazard Identification and Vulnerability Analysis \(HIVA\)](#) Appendix 7 of the [FC CEMP](#). The Comprehensive Emergency Management Plan is required by law and is the basis for an integrated system of Emergency Management in Franklin County, in accordance with the requirements of [RCW 38.52](#) and [WAC 118](#).

#### **Franklin County Hazard Mitigation Plan (HMP)**

An all-hazard plan that seeks to inform and educate citizens, provide training, and resource coordination and ultimately reduce the vulnerability of Franklin County citizens through comprehensive disaster planning and mitigation. The plan is coordinated by the Franklin County Hazard Mitigation Steering Committee. This Plan satisfies the requirements for a local natural hazard mitigation plan under 44 CFR Part 201.6, in addition this plan integrated the FEMA's Natural Hazard Mitigation Plan with the Community Wildfire Protection Plan as outlined in the Healthy Forest Restoration Act.

### ***Lourdes Health Network Procedure for the Care of Radiation Accident Patients Radiological Response Plan***

This plan outlines the process/procedures for treatment and care of patients contaminated during a radiological accident.

### ***Neighboring Plume and Ingestion County Emergency Plans***

Along with Franklin, plans for each of other seven participating Washington counties (Adams, Benton, Grant, Kittitas, Klickitat, Walla Walla, and Yakima) potentially impacted by a radiological release from CGS, provide guidance for those counties' jurisdictions. (P.6.i., P.6.ii.)

#### **Washington State Comprehensive Emergency Management Plan**

The Comprehensive Emergency Management Plan (CEMP) is an all-hazards plan which identifies the general emergency management concepts and responsibilities of state agencies. It includes the 15 National Response Frameworks Emergency Support Functions (ESFs) plus 1 state established ESFs, and 2 Annexes. The ESF on the Defense Support to Civil Authorities (ESF-20) and 2 Annexes, Terrorism and Catastrophic Event have specific application to this Plan. Washington EMD maintains this plan.

#### **Washington Restoration Framework**

The Washington Restoration Framework (WRF) outlines the partnerships and organizational structures necessary to successfully manage a flexible and scalable recovery. The WRF clarifies responsibilities and processes to ensure disaster recovery activities are coordinated to address community needs following an incident or disaster of any type and magnitude. The WRF and associated annexes describe specific roles, responsibilities, and programs of state agencies and other key stakeholders based on existing authorities, resources, and statutory requirements. The WRF also provides a framework for state, local, tribal and whole community coordination and cooperation supporting pre-disaster recovery planning guidance and post-disaster recovery efforts. Washington EMD maintains this plan.

***Washington State Department of Agriculture Radiological Emergency Plan***

The Washington State Department of Agriculture Radiological Emergency Plan and Implementation Procedures include specific guidance for Washington State Department of Agriculture (WSDA) personnel and provide up-to-date information on the agricultural communities around Hanford Site and the Columbia Generating Station. Food producers, processors, dairies, and commercial farms are also included.

***Washington State Department of Health Radiological Response Plan***

The Washington State Department of Health, Office of Radiation Protection, Radiological Response Plan provides detailed instructions and guidance for responding to radiological emergencies at Columbia Generating Station, the United States Department of Energy- Hanford Site and other non-fixed nuclear facility events. Topics covered include notification systems, specific actions for each site, accident assessment, field operations, Emergency Worker Assistance Centers, and Protective Action Guides.

***Washington State Fire Resource Mobilization Plan***

Under [RCW 43.43.961](#), the Fire Service Resource Mobilization Plan is implemented to provide personnel, equipment, and other logistical resources when a wildland fire or other emergency exceeds the firefighting capacity of local jurisdictions.

Plan maintenance is the responsibility of each independent agency and their internal policy and procedures.

Franklin County Emergency Operations Center Plans and Procedures establish the procedures to be used for all-hazards incidents. Specific procedures are provided for each position within the EOC. These procedures include the process for bringing the EOC to full operational status regardless of the conditions that warranted the activation. Procedures specific to the Command and General Staff of the EOC include general and specific guidance on EOC section-specific functions and tasks. Some of the procedures have tasks or responsibilities specific to implementing the Radiological Emergency Preparedness (REP) Program for a Columbia Generating Station (CGS) incident. Below is an overview of the Implementing Procedures contained in Annex D which is DO NOT DISSEMINATE:

IP S-1	Edwin Markham Elementary School Evacuation	IP O-0	Operations/Support Coordinator
IP S-2	Country Christian Center Evacuation	IP O-1	Fire Coordinator

IP S-3	Big River Country School Evacuation	IP O-2	Law Enforcement Coordinator
IP S-4	Basin City Elementary School Evacuation	IP O-3	Franklin County Public Works
		IP O-4	Transportation Coordinator
IP E-1-1	EWAC Coordinator	IP RR-0	Recovery and Reentry Actions
IP E-1-2	EWAC Assistant Coordinator	List	
IP E-1-3	Administrative Assistant	IP RR-1	Temporary Emergency Worker
IP E-1-4	Facility Manager	IP RR-2	Access Control Point Staff
IP E-1-5	EWAC Guide	IP RR-3	EWAC Administrative Assistant
IP E-1-7	Vehicle Decontamination		
IP E-1-8	Public Information Officer		
IP E-1-9	Radiological Monitors		
IP E-1-11	Amateur Radio Operators		
IP E-1-12	EWAC Set-up		
IP E-1-13P	Personnel Portal Monitor Set-up		
IP E-1-13V	Vehicle Portal Monitor Set-up		
IP D-0	Franklin County Emergency Management Director	IP X-0	Washington State Patrol: Access Control Points
IP D-1	Emergency Chairman	IP-1	Emergency Worker Training Program
IP D-2	Public Information Officer	IP-2	Inventory and Inspection of Emergency Worker Kits
IP D-3	Legal Advisor	IP-3	Inventory and Inspection of Radiation Detection Equipment
IP D-3-1	Legal Advisor- Proclamation	IP-4	Tone Alert Radio (TAR) Maintenance and Database
IP D-4	Franklin County Sheriff	IP-5	Columbia River Evacuation
IP D-5	Benton/Franklin Health District Health Officer		
IP EOF-REP	Franklin County EOF Representative		
IP EW-0	Emergency Worker Kit Instructions		
IP EW-1	EWAC (Class III) Emergency Worker Kit Instructions		
IP J-0	Franklin County Spokesperson at the Energy Northwest JIC		
IP J-1	JIC PIO Staff		
IP S-0	EOC Message Controller		
IP S-1	Radio Operators		
IP S-2	Messengers		
IP S-3	Security Staff		
IP S-4	EOC Recorder		
IP S-5	Geographic Information Specialist (GIS)		
IP S-6	Red Cross Liaison		

IP S-7	Washington State Patrol	
IP S-8	Washington State EMD Liaison	
IP S-9	Facility Representative	
IP S-10	WA State Department of Agriculture	
IP S-11	Washington State National Guard	

(P.7.i)

The Implementing Procedures Crosswalk per 03/02/2022 agreement with FEMA Region 10: due to the sensitive and protected information contained within the FCEM REP Plan Implementing Procedures and Access and Functional Needs, those documents along with the Implementing Procedures crosswalk will be withheld from the plan and available for review in the FCEM EOC. (P.7.ii)



## **Annex H**

### **Acronyms and Definitions**

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CGS .....	Columbia Generating Station
CNF .....	Columbia Generating Station Notification Form
COP .....	Common Operating Picture
EAS .....	Emergency Alert System
ENW .....	Energy Northwest, Energy Northwest, Energy Northwest
EOC .....	Emergency Operations Center
EPA .....	Environmental Protection Agency, Environmental Protection Agency
EPZ .....	Emergency Planning Zone, Emergency Planning Zone
FCEM .....	Franklin County Emergency Management
ICS .....	Incident Command System
JIC .....	Joint Information Center
MAC .....	Multi-Agency Coordination Group
NRC .....	Nuclear Regulatory Commission
PAG .....	Protective Action Guidelines
PAR .....	Protective Action Recommendation
PIO .....	Public Information Officer
REP .....	Radiological Emergency Preparedness
SECOMM .....	See, Southeast Communications
TDD .....	Telecommunications Device for the Deaf
TTY .....	Teletype
WSDOT .....	Washington State Department of Transportation
WSP .....	Washington State Patrol

**Absorbed dose:** when ionizing radiation passes through living tissue, some of its energy is imparted to the tissue, which absorbs it. The amount of ionizing radiation absorbed per unit mass of the irradiated tissue is called the absorbed dose. It is measured in rads and rems.

**Access control:** all activities accomplished for the purpose of controlling entry or reentry into an area that has either been evacuated or is under a sheltering protective action decision to minimize the radiation exposure of individuals because of radiological contamination. This function is needed to prevent the general public from entering restricted areas (sheltered and/or evacuated) and permitting only emergency workers with essential missions and limited members of the general public to enter.

**Access and functional needs (AFN):** Those actions, services, accommodations, and programmatic, architectural, and communication modifications that a covered entity must undertake or provide to afford individuals with disabilities a full and equal opportunity to use and enjoy programs, services, activities, goods, facilities, privileges, advantages, and accommodations in the most integrated setting, in light of the exigent circumstances of the emergency and the legal obligation to undertake advance planning and prepare to meet the disability-related needs of individuals who have disabilities as defined by the ADA Amendments Act of 2008, P.L. 110- 325, and those associated with them. Access and functional needs may include modifications to programs, policies, procedures, architecture, equipment, services, supplies, and communication methods. Examples of “access and functional needs” services may include a reasonable modification of a policy, practice, or procedure or the provision of auxiliary aids and services to achieve effective communication, such as: (1) an exception for service animals in an emergency shelter where there is a no pets policy; (2) the provision of way-finding assistance to someone who is blind to

orient to new surroundings; (3) the provision of transferring and toileting assistance to an individual with a mobility disability; and (4) the provision of an interpreter to someone who is deaf and seeks to fill out paperwork for public benefits.

**Accident assessment:** the evaluation of the actual and potential consequences of a radiological incident.

**Accident Response Group (ARG):** Department of Energy response group. A team of scientists, engineers, and technicians that is trained, organized, and equipped to respond to a nuclear weapons accident/incident.

**Action levels:** see trigger/action levels.

**Activated:** an emergency coordination center or other facility is considered activated as soon as notification of an incident is received and the Director/Commissioner/responsible Representative makes the determination to activate the facility. The facility is not considered *operational* until it is ready to carry out full emergency operations with key decision makers in place.

**Activation of personnel:** the process by which emergency response personnel are notified of an incident and instructed to report for duty.

**Acute exposure:** an exposure to radiation that occurs over a short period of time, usually less than an hour.

**Adequate:** as used in reviews of radiological emergency response plans/procedures, adequate means that the plan/procedure contents are consistent and in full compliance with the requirements delineated in the NUREG-0654/FEMA-REP-1 Planning Standards and Evaluation Criteria or alternative approaches approved by FEMA.

**Administration/Finance Section:** as applied to an exercise planning team organized according to ICS principles, the team members providing grant management and administrative support throughout exercise development. This group is also responsible for the registration process and coordinates schedules for the exercise planning team, the exercise planning team leader, participating agencies, and the host community or communities.

**Advisory Team (A-Team):** an emergency response group within the Federal Radiological Preparedness Coordinating Committee tasked with providing protective action recommendations to State and local governments on behalf of its member agencies. The Advisory Team is incorporated into the National Response Framework and is comprised of the individuals from represented agencies who have been activated to respond as members of the Advisory Team during a radiological incident.

**Aerial Measuring System (AMS):** a Department of Energy asset consisting of an integrated remote-sensing capability for rapidly determining radiological and ecological conditions of large areas of the environment. In conjunction with modern laboratory and assessment techniques, state-of-the-art airborne equipment is used for extremely low-level gamma radiation detection, high-altitude photography, airborne gas and particulate sampling, and multi-spectral photography and scanning.

**After-Action Meeting (AAM):** as soon as possible after completion of the draft After-Action Report (AAR), the lead evaluator, members of the evaluation team, and other members of the exercise planning

team conduct an AAM to present, discuss, and refine the draft AAR, and to develop an Improvement Plan. This meeting is a chance to present the AAR to participating entities in order to solicit feedback and make necessary changes. A list of corrective actions is generated identifying what will be done to address the recommendations, who (what agency or person) is responsible, and the timeframe for implementation.

**After-Action Report / Improvement Plan (AAR/IP):** the main product of the evaluation and improvement planning process is the AAR/IP. The AAR/IP has two components: an AAR, which captures observations of an exercise and makes recommendations for post-exercise improvements; and an IP, which identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion. The lead evaluator and the exercise planning team draft the AAR and submit it to meeting participants prior to the After-Action Meeting (AAM). The draft AAR is completed first and distributed to meeting participants for review no more than 30 days after exercise conduct. The final AAR/IP is an outcome of the AAM. Final REP AAR/IPs are published no more than 90 days after exercise conduct. Even though the AAR and IP are developed through different processes and perform distinct functions, the final AAR and IP are printed and distributed jointly as a single AAR/IP following an exercise. However, sensitive material may be included in appendices that are not released to the public.

**Agreement State:** a State that has entered into an agreement under the Atomic Energy Act of 1954, as amended, in which the Nuclear Regulatory Commission has relinquished to such States the majority of its regulatory authority over source, by-product, and special nuclear material in quantities not sufficient to form a critical mass.

**Airborne radioactivity:** any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors, or gases.

**Air sampler:** a device used to collect a sample of radioactive particulates suspended in the air.

**ALARA:** acronym meaning “as low as reasonably achievable.”

**Alert:** licensee emergency classification level indicating that events are in process or have occurred that involve an actual or potential substantial degradation in the level of plant safety or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Releases are expected to be limited to small fractions of the Environmental Protection Agency protective action guide exposure levels.

**Alerting of personnel:** transmission of a signal or message that places personnel on notice that an incident has developed that may require that they report for emergency duty.

**Alerting the public:** activating an attention-getting warning signal through such means as sirens, tone alert radios, route alerting, and speakers on cars, helicopters, and boats.

**Alert system:** the hardware system(s) used to get the attention of the public within the plume emergency planning zone. An alert system may include a combination of sirens; tone activated radios; vehicles (including boats and airplanes) that used loud speakers/sirens, and other equipment that provides an alert signal.

**Alpha particle:** a positively charged particle ejected spontaneously from the nuclei of some radioactive elements. It is identical to a helium nucleus that has a mass number of 4 and an electrostatic charge of plus 2. It has low- penetrating power and short range. The most energetic alpha particle will generally fail to penetrate the skin. Alpha is hazardous when an alpha-emitting isotope is introduced into the body. Alpha particles are the least penetrating of the three common types of radiation (alpha, beta, and gamma) and can be stopped by a piece of paper (cannot penetrate skin).

**Alternate Emergency Coordination Center:** an emergency coordination's center outside the emergency planning zone to which an emergency response organization may relocate if they must evacuate the "home emergency coordination's center" due to possible radioactive exposure.

**Area Requiring Corrective Action (ARCA):** an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety. Correction of ARCAs is verified before or during the next biennial exercise at that site.

**Assessment:** the evaluation and interpretation of radiological measurements and other information to provide a basis for decision- making. Assessments can include projections of offsite radiological impact.

**Atom:** the smallest particle of an element that cannot be divided or broken up by chemical means. It consists of a central core called the nucleus, which contains protons and neutrons. Electrons revolve in orbits in the region surrounding the nucleus.

**Atomic energy:** energy released in nuclear reactions, more appropriately called "nuclear energy." Of particular interest is the energy released when a neutron initiates the breaking up or fissioning of an atom's nucleus into smaller pieces (fission), or when two nuclei are joined together under millions of degrees of heat (fusion).

**Background radiation:** the level of naturally occurring radiation in the environment. Sources include air, water, soil, potassium-40 in the body and cosmic radiation from the sun. The usually quoted individual background radiation exposure in man's natural environment is an average of 125 millirem per year.

**Beta particle:** a charged particle emitted from a nucleus during radioactive decay, with a mass equal to 1/1827 that of a proton. A negatively charged beta particle is identical to an electron. A positively charged beta particle is called a positron. Large amounts of beta radiation may cause skin burns, and beta emitters are harmful if they enter the body. Most beta particles can be stopped by aluminum foil.

**Body burden:** the amount of radioactive material present in the body of a human or an animal.

**Boiling water reactor (BWR):** a nuclear reactor in which water, used both as coolant and moderator, is allowed to boil in the reactor vessel. The resulting steam is used directly to drive a turbine.

**Breeder reactor:** a nuclear reactor that produces or "breeds" more fissionable material than it consumes. The reactor is built with a core of fissionable plutonium-239, surrounded by a blanket of uranium-238. As the plutonium fissions, neutrons bombard the uranium converting the uranium blanket to more plutonium-239.

**Btu:** a British thermal unit. The amount of heat required to change the temperature of 1 pound of water 1 degree Fahrenheit at sea level.

**Buffer zone:** an area adjacent to a restricted zone, to which residents may return, but for which protective measures are recommended to minimize exposure to radiation.

**Buffer zone (medical facilities):** an area (within a hospital or other medical facility) adjacent to the radiological emergency area (restricted zone) for which protective measures are recommended to minimize both exposure to radiation and the spread of radiological contamination to radiologically clean areas of the facility.

**Calibration:** the check or correction of the accuracy of a measuring instrument to ensure proper operational characteristics.

**Cask:** a heavily shielded container used to store and/or ship radioactive materials. Lead and steel are common materials used in the manufacture of casks.

**Chain-of-custody form:** the documentation of the transfer of samples from one organization and individual to another with respect to the name of the organization and individual and dates of acceptance and/or transfer of samples.

**Chain reaction:** a fission chain reaction occurs when a fissionable nucleus absorbs a neutron and fissions, releasing additional neutrons. These in turn can be absorbed by other fissionable nuclei, releasing more neutrons. A chain reaction is achieved when this process becomes self-sustaining.

**Check source:** a radioisotope with a known, relatively fixed activity level used to determine the responsiveness of survey instruments.

**Chronic exposure:** exposure to small doses of radiation over an extended period of time.

**Cladding:** the outer jacket of nuclear fuel elements. It prevents corrosion of the fuel and the release of fission products into the coolant. Aluminum or its alloys, stainless steel and zirconium are common cladding materials.

**Cobalt-60 (Co-60):** a radioactive isotope of cobalt formed from natural cobalt-59 by neutron activation in reactors. It is used for medical and industrial applications.

**Cognizant Federal Agency (CFA):** the Federal agency that owns, authorizes, regulates, or is otherwise deemed responsible for the radiological activity causing the emergency and that has the authority to take action on site.

**Cognizant Federal Agency Official (CFAO):** lead official designated by the Cognizant Federal Agency to manage its response at the site of a radiological emergency.

**Command Staff:** as applied to an exercise planning team organized according to ICS principles, the team members responsible for coordinating all exercise planning activities. Within this group is the exercise planning team leader, who assigns exercise activities and responsibilities, provides guidance, establishes

timelines, and monitors the development process. The safety controller and the liaison coordinator report directly to the exercise planning team leader.

**Commercial Mobile Alert System (CMAS):** CMAS (also known as Wireless Emergency Alerts (WEA) or Personal Localized Alerting Network (PLAN)) is a new public safety system that allows customers who own an enabled mobile device to receive geographically- targeted, text-like messages alerting them of imminent threats to safety in their area. The new technology ensures that emergency alerts will not get stuck in highly congested user areas, which can happen with standard mobile voice and texting services. CMAS was established pursuant to the Warning, Alert and Response Network (WARN) Act. CMAS enables government officials to target emergency alerts to specific geographic areas through cell towers (e.g., lower Manhattan), which pushes the information to dedicated receivers in CMAS-enabled mobile devices. CMAS complements the existing Emergency Alert System (EAS) which is implemented by the FCC and FEMA at the federal level through broadcasters and other media service providers. Wireless companies volunteer to participate in CMAS. CMAS is the result of a unique public/private partnership between the FCC, FEMA and the wireless industry with the singular objective of enhanced public safety. Participating wireless carriers were required to deploy CMAS by April 7, 2012.

**Commercial nuclear power plant (NPP):** facility licensed by the Nuclear Regulatory Commission to use a nuclear reactor to produce electricity for sale to the general public. While there are many types of nuclear facilities, FEMA's responsibility for offsite planning and preparedness and the guidance in the REP Program Manual are applicable only to commercial nuclear power plants.

**Committed dose:** the dose that will be received over a period of 50 years from the ingestion or inhalation of a particular quantity of a radionuclide or a specific mix of radionuclides.

**Committed dose equivalent (CDE):** the dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an individual during the 50-year period following ingestion.

**Committed effective dose equivalent (CEDE):** the sum of the 50-year committed doses to individual organs from inhalation (or ingestion) of radionuclides, where the individual organ doses have been weighted so that the associated risk of fatal cancer can be added to the risk of fatal cancer from whole-body dose.

**Common Alerting Protocol (CAP):** is a digital format for exchanging emergency alerts that allows a consistent alert message to be disseminated simultaneously over many different communications systems.

**Common Operating Picture (COP):** A common operating picture is a single identical display of relevant information shared by more than one Command. A COP facilitates collaborative planning and combined execution and assists all echelons to achieve situational awareness.

**Concepts and Objectives (C&O) Meeting:** the formal beginning of the exercise planning process. It is held to ensure that exercise planners agree upon the already-identified type, scope, capabilities, objectives, and purpose of the exercise. For less complex exercises and for entities with limited resources, the C&O Meeting can be conducted in conjunction with the Initial Planning Meeting (IPM); however, when exercise scope dictates, the C&O Meeting is held first. Representatives from the sponsoring agency or organization, the exercise planning team leader, and senior officials typically attend the C&O Meeting to

identify an overall exercise goal, develop rough drafts of exercise capabilities and objectives, and identify exercise planning team members.

**Congregate care (CC):** the provision of temporary housing and basic necessities for evacuees.

**Congregate care center (CCC):** a facility for temporary housing, care, and feeding of evacuees.

**Containment:** the provision of a gas-tight shell or other enclosure around a reactor that confines fission products and prevents their release to the environment in an accident.

**Contaminated:** the condition resulting from the adhesion of radioactive particulates to the surface of structures, areas, objects, or personnel.

**Contaminated injured individuals:** individuals who are: (1) contaminated with radioactive material that cannot be removed by the simple methods described in NUREG-0654/FEMA- REP-1, Evaluation Criteria J.12 and K.5.b; or (2) contaminated and otherwise physically injured. Individuals exposed to high levels of radiation may be injured but not contaminated.

**Contamination:** refers to radioactive materials not in their intended containers. Whether the contamination is considered “fixed” or “loose” depends on the degree of effort required to unfix or remove the contamination from a surface.

**Contextual inject:** a controller-introduced message to a player to help build the exercise operating environment. For example, if the exercise is designed to test information-sharing capabilities, a Master Scenario Events List inject can be developed to direct a controller to select an actor to portray a suspect. The inject could then instruct the controller to prompt another actor to approach a law enforcement officer and inform him/her that this person was behaving suspiciously.

**Contingency inject:** a controller message introduced verbally to a player if players are not performing the actions needed to sustain exercise play. This ensures that play moves forward, as needed, to adequately test performance of activities. For example, if a simulated secondary device is placed at an incident scene during a terrorism response exercise, but is not discovered, a controller may want to prompt an actor to approach a player to say that he/she witnessed suspicious activity close to the device location. This prompts the responder’s discovery of the device, and result in subsequent execution of the desired notification procedures.

**Control cell:** exercise personnel who facilitate interfaces with nonparticipating groups, such as ORO officials and persons with disabilities and access/functional needs.

**Control rod:** a rod containing a material that readily absorbs neutrons (such as boron). It is used to control the power of a nuclear reactor. By absorbing neutrons, a control rod slows the fission chain reaction by preventing neutrons from causing further fission.

**Control room:** the area in a nuclear power plant from which most of the plant power production and emergency safety equipment can be operated by remote control.



**Controlled area:** a defined area in which the occupational exposure of personnel to radiation or radioactive material is under the supervision of an individual in charge of radiation protection.

**Controller:** the individual directing the flow of scenario events in order to ensure that the conduct of an exercise is conducted in accordance with the agreed-upon exercise objectives and the extent of play.

**Controller/Evaluator (C/E) briefing:** a pre-exercise overview for controllers, evaluators, and exercise administrative staff. The briefing summarizes the C/E Handbook (or the Controller/Staff Instructions and Evaluation Plan) and focuses on explaining the roles and responsibilities of controllers and evaluators. This is the time to address any changes in the exercise and answer final questions. It is generally 1-2 hours in length and is conducted the day before an operations-based exercise.

**Controller/Evaluator (C/E) Handbook:** an exercise overview and instructional manual for controllers and evaluators. A supplement to the Exercise Plan, it contains more detailed information about the scenario, and describes controllers' and evaluators' roles and responsibilities. Because the C/E Handbook contains information on the scenario and exercise administration, it is distributed only to those individuals specifically designated as controllers or evaluators. Larger, more complex exercises may use a separate Controller/Staff Instructions and Evaluation Plan in place of the C/E Handbook.

**Controller injects:** the introduction of events, data, and information into exercises to drive the demonstration of objectives.

**Coolant:** a substance, usually water, circulated through a nuclear reactor to remove or transfer heat.

**Cool down:** the gradual decrease in reactor fuel rod temperature caused by the removal of heat from the reactor coolant system.

**Cooling tower:** a heat exchanger designed to aid in the cooling of water that was used to cool exhaust steam exiting the turbines of a power plant. Cooling towers transfer exhaust heat into the air instead of into a body of water.

**Coordinate:** to bring into common action so as not to unnecessarily duplicate or omit important actions (does not involve direction of one agency by another).

**Core:** the central portion of a nuclear reactor containing the fuel elements, moderator, neutron poisons, and support structures.

**Core Capabilities:** distinct critical elements necessary to achieve the specific mission areas of prevention, protection, mitigation, response, and recovery. Capabilities provide a common vocabulary describing the significant functions required to deal with threats and hazards that must be developed and executed across the whole community to ensure national preparedness.

**Core melt accident:** a reactor accident in which the fuel core melts because of overheating.

**Corrective action:** corrective actions are the concrete, actionable steps outlined in Improvement Plans that are intended to resolve preparedness gaps and shortcomings experienced in exercises or real-world events.

**Corrective action plan (CAP):** an element of improvement planning through which corrective actions from the After-Action Report/Improvement Plan are prioritized, tracked, and analyzed continuously until they have been fully implemented and validated.

**Counting:** using an instrument to detect individual particles or gamma rays which interact with the detector on the instrument. For example, ambient radiation can be counted, or, alternatively, the radiation emitted by specific samples can be counted in units of counts per minute (cpm) or counts per second (cps).

**Criticality:** a term used in reactor physics to describe the state when the number of neutrons released by fission is exactly balanced by the neutrons being absorbed (by the fuel and poisons) and escaping the reactor core. A reactor is said to be “critical” when it achieves a self-sustaining nuclear chain reaction.

**Cumulative dose (radiation):** the total dose resulting from repeated exposure to radiation of the same body region, or of the whole body.

**curie (Ci):** the basic unit to describe the intensity of radioactivity in a sample of material. One curie is equal to 37 billion disintegrations (nuclear transformations) per second. So, in 1 curie, 37 billion atoms decay in 1 second. Several commonly used fractions of the curie include:

- millicurie: 1/1,000 of a curie, (one-thousandth of a curie, abbreviated mCi)
- microcurie: 1/1,000,000 of a curie, (one-millionth of a curie, abbreviated  $\mu$ Ci)
- nanocurie: 1/1,000,000,000 of a curie, (one-billionth of a curie, abbreviated nCi)
- picocurie: 1/1,000,000,000,000 of a curie (one-trillionth of a curie, abbreviated pCi)

**Day care center:** a specialized program or facility that provides care for children from infants through preschool age, usually within a group framework, and dependent children or adults, either as a substitute for or an extension of home care. Day care centers may be licensed or unlicensed.

**Debrief:** a forum for planners, facilitators, controllers, and evaluators to review and provide feedback after the exercise is held. It is a facilitated discussion that allows each person an opportunity to provide an overview of the functional area they observed and document strengths and areas for improvement. The exercise planning team leader facilitate debriefs, and results are captured for inclusion in the After-Action Report/Improvement Plan. (NOTE: Other sessions, such as a separate debrief for hospitals during an operations-based exercise, may be held as necessary.) A debriefing is different from a hot wash, in that a hot wash is intended for players to provide feedback.

**Decay (radioactive):** the decrease in the radiation intensity of any radioactive material with respect to time.

**Decontamination:** the process of making any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it.

**Decontamination station:** a building or location suitably equipped and organized where personnel and material are cleansed of chemical, biological, or radiological contaminants.

**Deficiency:** an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant. Deficiencies must be corrected within 120 days of the exercise.

**Demonstration Criterion:** one of the 34 specific demonstration standards outlined in the FEMA REP Program Manual for offsite response organization response capability that are evaluated during a REP exercise.

**Depleted uranium:** uranium having a percentage of uranium-235 smaller than the 0.7% found in natural uranium. It is obtained from spent (used) fuel elements or as byproduct tails or residues from uranium isotope separation.

**Derived intervention levels (DILs):** concentration derived from the intervention level of dose at which the Food and Drug Administration recommends consideration of protective measures. DILs correspond to the radiation concentration in food throughout the relevant time period that, in the absence of any intervention, could lead to an individual receiving a radiation dose equal to the protective action guide or in international terms the intervention levels of dose.

**Derived response level (DRL):** the calculated concentration of a particular radionuclide in a particular medium (e.g., food) that will produce a dose equal to a protective action guide.

**Design and development:** building on the exercise foundation, consists of identifying capabilities, tasks, and objectives; designing the scenario; creating documentation; coordinating logistics; planning exercise conduct; and selecting an evaluation and improvement methodology.

**Direction and control:** the management of emergency functions within a particular context (e.g., an emergency operations center) through leadership and use of authority.

**Direct-reading dosimeter (DRD):** a small ionization detection instrument that indicates radiation exposure directly. An auxiliary charging device is usually necessary. DRDs can be read in real time by the user. A DRD is also referred to as a "pocket dosimeter."

**Dose:** the quantity of energy absorbed from ionization per unit mass of tissue. The rad is the unit of absorbed dose.

**Dose equivalent:** (1) A term used to express the amount of effective radiation when modifying factors have been considered. (2) The product of absorbed dose multiplied by a quality factor multiplied by a distribution factor. It is expressed numerically in rem. (3) The product of the absorbed dose in rad, a quality factor related to the biological effectiveness of the radiation involved and any other modifying factors.

**Dose limits for emergency workers:** the allowable accumulated dose during the entire period of the

emergency. Action to avoid exceeding the limit is taken based on actual measurements of integrated gamma exposure. In contrast, protective action guides are trigger/action levels of projected dose at which actions are taken to protect the public. These actions are taken prior to the dose being received.

**Dose rate:** the radiation dose delivered per unit time. The dose rate may be expressed numerically in rads per second or rads per hour.

**Dosimeter:** a portable device such as an optically stimulating luminescence or direct-reading ionization chamber used for measuring and registering the total accumulated exposure to ionizing radiation.

**Dosimetry:** the measurement of radiation doses. It applies to both the devices used (dosimeters) and to the techniques.

**Drill:** an event involving organizational responses to a simulated accident to develop, test, and monitor specialized emergency skills that constitute one or more components of emergency plans/procedures.

**Early phase:** (also referred to as the plume or emergency phase) the period at the beginning of a nuclear incident when immediate decisions for effective use of protective actions are required and must therefore usually be based primarily on the status of the nuclear power plant and the prognosis for worsening conditions. When available, predictions of radiological conditions in the environment based on the condition of the source or actual environmental measurements may also be used. Precautionary actions may precede protective actions based on the protective action guides. This phase lasts hours to several days and ends when the radioactive release ends.

**Effective dose equivalent (EDE):** the sum of the products of the dose equivalent to each organ on a weighting factor, where the weighting factor is the ratio of the risk of mortality from delayed health effects arising from irradiation of a particular organ or tissue to the total risk of mortality from delayed health effects when the whole body is irradiated uniformly to the same dose. **Electron:** a stable, negatively charged elementary particle of matter. Electrons orbit the positively charged nucleus of the atom.

**Element:** one of the 103 known chemical substances that cannot be broken down further without changing its chemical properties. Some examples include hydrogen, nitrogen, gold, lead, and uranium.

**Emergency:** an unexpected event during the operation of a nuclear power plant that has a significant effect on the safety of the facility, personnel or the public.

**Emergency Action and Coordination Team (EACT):** the Department of Energy senior management team at Department of Energy headquarters that coordinates the initial National Response Framework response to a radiological emergency.

**Emergency Alert System (EAS):** a system of radio and television stations responsible for providing official government instructions to the public (formerly the Emergency Broadcast System).

**Emergency Classification Level (ECL):** classifications used by the licensee to classify incidents. The four ECLs are Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency.

**Emergency Information and Coordination Center (EICC):** the FEMA 24-hour national emergency center from which the Emergency Support Team operates. Emergency Information and Coordination Center communications link the Senior Federal Official, FEMA Regional and headquarters staff, and other Federal departments and agencies at the national level with one another.

**Emergency information:** material designed to improve public knowledge or understanding of an emergency.

**Emergency instructions:** information provided to the general public during an emergency pertaining to protective action recommendations for actions such as evacuation and sheltering.

**Emergency Operations Facility (EOF):** a facility that is the primary base of emergency operations for the Licensee in a radiological incident. An onsite operations facility provided by the NRC Licensee to facilitate the management of an overall emergency response. Utility and State officials, and a very limited number of Federal personnel may be accommodated.

**Emergency Coordination Center (ECC):** a facility that is the primary base of emergency operations for an offsite response organization in a radiological emergency.

**Emergency phase:** see “early phase.”

**Emergency Planning Zone (EPZ):** a geographic area surrounding a commercial nuclear power plant for which emergency planning is needed to ensure that prompt and effective actions can be taken by offsite response organizations to protect the public health and safety in the event of a radiological accident. The plume pathway EPZ is approximately 10 miles in radius, while the ingestion pathway EPZ has a radius of approximately 50 miles.

**Emergency protective actions:** protective actions to isolate food to prevent its introduction into commerce and to determine whether condemnation or other disposition is appropriate.

**Emergency response planning area:** see “planning area.”

**Emergency Support Team (EST):** the FEMA Headquarters’ team that carries out notification, activation, and coordination procedures from the FEMA Emergency Information and Coordination Center. The EST is responsible for Federal agency headquarters coordination, staff support of the FEMA Administrator, and support of the Senior Federal Official.

**Emergency worker (EW):** individual who has an essential mission to protect the health and safety of the public who could be exposed to ionizing radiation from the plume or from its deposition. Some examples of emergency workers are: radiation monitoring personnel; traffic control personnel; fire and rescue personnel, including ambulance crews; medical facilities personnel; emergency coordination center personnel; personnel carrying out route alerting procedures; and essential services or utility personnel; and evacuation vehicle (e.g., bus, van, etc.) drivers. Note that evacuation vehicle drivers who will be transporting individuals or groups out of the emergency planning zone and who are not expected to return to the emergency planning zone are not considered “Emergency Workers.”

**Essential emergency functions:** these include communications, direction and control of operations, alert and notification of the public, accident assessment, information for the public and media, radiological monitoring, protective response, and medical and public health support.

**Evacuation (Citizen Evacuation):** a population protection strategy involving orderly movement of people away from an actual or potential hazard, and providing reception centers for those without their own resources for temporary relocation.

**Evacuation Time Estimate (ETE):** an estimate, contained in emergency plans/procedures, of the time that would be required to evacuate general and persons with disabilities and access/functional needs within the plume pathway emergency planning zone under emergency conditions.

**Evaluation:** the process of observing exercise performance to document strengths and opportunities for improvement in an entity's preparedness and response capability. Evaluation is the first step in the improvement process.

**Evaluation module:** the former term for a tool used by evaluators to document exercise performance. The current terminology for this tool is Exercise Evaluation Guide.

**Evaluation team:** a group of individuals trained to observe and record player actions. These individuals are familiar with the exercising entity's plans, policies, procedures, and agreements.

**Evaluator:** a qualified individual who observes, measures, and assesses performance, captures issues, and analyzes exercise results. Evaluators assess and document players' performance against established emergency plans/procedures and Demonstration Criteria. Evaluators note the actions/decisions of players without interfering with exercise flow.

**Exception area:** an area located approximately 5 to 10 miles from a nuclear power plant and specifically designated in an offsite response organization's plans/procedures for which FEMA has granted an exception to the requirement for the capability to complete alert and notification of the public within 15 minutes. Most exception areas are recreation areas or similar low-population within the emergency planning zone. Offsite response organizations must have the capability to complete alert and notification of the public in approved exception areas within 45 minutes.

**Exclusion area:** the area surrounding a nuclear reactor in which the facility operator has the authority to determine all activities, including exclusion or removal of personnel and property from the area. A specific area off-limits (expressed in miles) from a nuclear power plant.

**Exercise:** see Radiological Emergency Preparedness (REP) Exercise.

**Exercise Evaluation Guides (EEGs):** documents that support the exercise evaluation process by providing evaluators with consistent standards for observation, analysis, and After-Action Report/Improvement Plan development. Each EEG is linked to a core capability.

**Exercise issue:** a problem in organizational exercise performance that is linked with specific NUREG-0654/FEMA-REP-1 Planning Standards and applicable Evaluation Criteria. There are two categories of exercise issues: Deficiencies and Areas Requiring Corrective Action.

**Exercise Plan (ExPlan):** general information document that helps operations-based exercises run smoothly. The ExPlan is published and distributed prior to the start of exercise and provides a synopsis of the exercise. In addition to addressing exercise objectives and scope, the ExPlan assigns activities and responsibilities for successful exercise execution. It enables participants to understand their roles and responsibilities in exercise planning, execution, and evaluation. The ExPlan is intended for use by exercise players and observers—therefore, it does not contain detailed scenario information that may reduce the realism of the tasks to be performed. Players and observers review all elements of the ExPlan prior to exercise participation.

**Exercise Planning Team:** group of individuals responsible for all aspects of an exercise, including exercise planning, conduct, and evaluation. The planning team determines exercise capabilities, tasks, and objectives; tailors the scenario to the entity's needs; and develops documents used in exercise simulation, control, and evaluation. The exercise planning team is ideally comprised of representatives from each major participating jurisdiction and agency, but should be kept to a manageable size. While entities may find it advantageous to include team members with previous exercise planning experience, membership can be modified to fit the type or scope of an exercise. Planning team members are ideal selections for controller and evaluator positions during the exercise because advanced scenario knowledge renders them ineligible to participate as players. An exercise planning team leader manages the exercise planning team, which can be structured using the principles of the ICS, with Command Staff, Planning Section, Logistics Section, Administration/Finance Section, and Operations Section.

**Exercise Planning Team Leader:** individual who oversees the exercise planning team; develops the exercise project management timeline and the exercise project management assignment list; assigns exercise responsibilities; provides overall guidance; and monitors the development process.

**Exercise Program Management:** the functions required for an entity to sustain a variety of exercises targeted toward preparedness priorities on an ongoing basis. It includes project management, budgeting, grant management, staff hiring, funding allocation, and expenditure tracking. Program management functions cyclically. First, a Multi-Year TEP is developed in consideration of an entity's preparedness priorities. Next, specific exercises are carried out according to the multi-year plan's timelines and milestones. Finally, Improvement Plan corrective actions identified through exercises are taken into account when developing priorities for the next multi-year plan. Responsibilities for these tasks are complementary and require that all relevant parties collaborate to successfully administer exercises.

**Exposure:** the absorption of radiation or ingestion of a radionuclide. The exposure at a given point is a measurement of radiation in relation to its ability to produce ionization. The unit of measurement of the exposure is the roentgen. A measure of radiation dose received by a person, usually broken down and used to refer to whole-body exposure compared with exposure to the hands only.

**Exposure rate:** the amount of gamma radiation that an individual would receive in 1 hour as measured in air (typically expressed in units of microrem per hour, millirem per hour or rem per hour).

**Extent of play:** the level of play vs. simulation at an emergency response exercise. Each REP Demonstration Criterion contains a "default" extent of play that evaluators and response organizations use to define parameters for the expected performance under that criterion.

**Extent-of-Play Agreement:** a document negotiated during the exercise planning process that customizes the default performance expectations found in the Assessment Area Demonstration Criteria. The Extent-of-Play Agreement may include identification of the Demonstration Criteria that will or will not be evaluated during the exercise, entities responsible for demonstrating specific criteria, equipment (including vehicles to be used), personnel to be deployed, facilities to be activated, etc.

**Extremities:** the hands and forearms and, with restrictions, the head, feet, and ankles. (Permissible radiation exposures in these regions are generally greater than in the whole body because they contain less blood-forming material and have smaller volumes for energy absorption.)

**Facility:** any building, center, room(s), or mobile unit(s) designed and equipped to support emergency operations.

**Federal or other support organizations:** Federal agencies such as FEMA, Department of Energy, the Nuclear Regulatory Commission, or any other governmental, quasi-governmental, or private organizations (e.g., American Red Cross, Civil Air Patrol, Amateur Radio Emergency Services, and Radio Amateur Civil Emergency Services, cooperating State compact radiological monitoring or sampling personnel, and national or university laboratories) that may provide assistance in radiological emergencies.

**Federal Coordinating Officer (FCO):** the Federal official appointed by the President upon declaration of a major disaster or emergency under Public Law 93-288 to coordinate the overall Federal response.

**Federal Emergency Management Agency (FEMA):** the agency responsible for establishing Federal policies for and coordinating all civil defense and civil emergency planning, management, mitigation, and assistance functions of executive agencies. FEMA assists State, local, and Tribal agencies in their emergency planning. Its primary role is one of coordinating Federal, State, local, Tribal, and volunteer response actions.

**Federal Radiological Emergency Response Plan (FRERP):** a former plan for coordinating Federal response to any type of peacetime radiological emergency requiring significant Federal response. Issued in 1996 (61 FR 20944), it superseded the Interagency Radiological Assistance Plan and the Federal Radiological Monitoring and Assessment Plan. The FRERP has been superseded by the National Response Framework.

**Federal Radiological Monitoring and Assessment Center (FRMAC):** a center usually located at an airport near the scene of a radiological emergency from which the Department of Energy Offsite Technical Director conducts the National Response Framework response. This center need not be located near the onsite or Federal-State operations centers as long as its operations can be coordinated with them.

**Federal Radiological Monitoring and Assessment Plan (FRMAP):** a former plan to provide coordinated radiological monitoring and assessment assistance to the offsite response organizations in response to radiological emergencies. The FRMAP was superseded in 1996 by the Federal Radiological Emergency Response Plan. The Federal Radiological Emergency Response Plan has been superseded by the National Response Framework.



**Federal Radiological Preparedness Coordinating Committee (FRPCC):** the National level coordination mechanism to provide technical assistance to offsite response organizations (see 44 CFR Part 351).

**Federal Response Center (FRC):** the on-scene focal point established by the Senior FEMA Official, as required, for coordinating the Federal response to an incident. Representatives of other Federal, State, local, Tribal, and volunteer agencies will be located in the center.

**Feed water:** water supplied to the reactor pressure vessel (in a boiling water reactor) or the steam generator (in a pressurized water reactor) that removes heat from the reactor fuel rods by boiling and becoming steam. The steam becomes the driving force for the plant turbine generator.

**Field Command Post (FCP):** a center, either mobile or fixed, set up in a location convenient to the accident site, to facilitate emergency response, especially, for example, accident assessment activities such as direction of the field monitoring teams.

**Field Team Coordinator (FTC):** the individual who manages the functions of field teams and coordinates data with the dose assessment group located in emergency coordination centers and facilities.

**Field Monitoring Team (FMT):** includes groups used to detect and monitor radiation in the environment (e.g., measuring the concentration of radiation in the air, water, vegetation, soil, etc.).

**Final Planning Meeting (FPM):** the final forum for the exercise planning team to review the process and procedures for exercise conduct, final drafts of all exercise materials, and all logistical requirements. During the FPM, there are no major changes made to either the design or the scope of the exercise, nor to any supporting documentation. The FPM ensures all logistical requirements have been arranged, all outstanding issues have been identified and resolved, and all exercise products are ready for printing.

**Fission:** the splitting of an atomic nucleus into two approximately equal parts accompanied by the release of large amounts of energy and one or more neutrons.

**Fission gases:** those fission products that exist in the gaseous state. Primarily the noble gases (e.g., krypton, xenon, radon).

**Fixed nuclear facility (FNF):** a stationary nuclear installation that uses or produces radioactive materials in its normal operations. Fixed nuclear facilities include commercial nuclear power plants and other fixed facilities.

**Fixed contamination:** contamination that remains after loose contamination has been removed by decontamination.

**Fixed (reproducible) geometry:** a method of measuring levels of radioactivity in samples by using a standard size or volume of samples held at a fixed distance from the measuring instrument.

**Food chain:** the pathway of any material through the environment to edible plants, animals and ultimately to humans.

**Forward emergency operations center:** if the State emergency operations center is a significant distance from the plant site, the plans/procedures may indicate that a near-site or forward emergency operations center will be established at the time of an accident.

**Forward Command Post (FCP):** a location near the affected area used to direct the activities of State field personnel performing emergency tasks in support of local government response. This location may also be used for location for field team coordination.

**Forward Operations Post:** a location in or near the affected area used to coordinate the monitoring and sampling activities of the Radiological Emergency Response Teams.

**Forward Staging Area (FSA):** location near the incident site for collection and preparation of resources for deployment.

**Fuel cycle:** the series of steps involved in supplying fuel for nuclear power reactors. It includes mining, fabrication of fuel elements and assemblies, their use in a reactor, reprocessing spent fuel and refabrication into new fuel elements.

**Fuel element:** a rod or other form into which nuclear fuel is fabricated for use in a nuclear reactor.

**Full participation exercise:** per 44 CFR 350.2(j), a joint exercise in which: (1) State, local, and Tribal organizations, licensee emergency personnel, and other resources are engaged in sufficient numbers to verify the capability to respond to the actions required by the accident/incident scenario; (2) the integrated capability to adequately assess and respond to an accident at a commercial nuclear power plant is tested; and (3) the implementation of the observable portions of State, local, and Tribal plans/procedures is tested.

**Full-Scale Exercise:** an exercise that engages all ORO entities in real-time hands-on response activities including all of those specified in the Demonstration Criteria extent-of-play sections. A site's qualifying exercise is full-scale, as well as at least one exercise in every 8-year cycle.

**Functional Exercise:** an exercise that sufficiently engages organizations to test their abilities to respond to the scenario, but participation is less than full-scale. Most REP biennial joint exercises are functional exercises because they simulate some response capabilities or demonstrate them out of sequence from the scenario, and the exercise may not require participation of all offsite entities that would respond in a real radiological emergency.

**Functional Needs Support Services (FNSS):** Services that enable children and adults to maintain their usual level of independence in a general population shelter. FNSS includes reasonable modifications to policies, practices, and procedures, durable medical equipment (DME), consumable medical supplies (CMS), personal assistance services (PAS), and other goods and services as needed. Children and adults requiring FNSS may have physical, sensory, mental health, and cognitive and/or intellectual disabilities affecting their ability to function independently without assistance. Others who may benefit from FNSS include women in late stages of pregnancy, elders, and those needing bariatric equipment.

**Fusion:** the formation of a heavier nucleus from two lighter ones, with the release of energy.

**Gamma rays:** the most penetrating of the three types of ionizing radiation, gamma rays are electromagnetic radiation like light, radio waves and microwaves. Similar to X-rays, but usually more powerful, they have no mass; they are only energy. Gamma rays are best stopped or shielded against by dense material such as concrete or lead.

**Geiger-Mueller (G-M) detector:** a type of radiation detector that can be used to measure the gamma, or beta plus gamma radiation depending on whether the detector is covered by a beta shield.

**General Emergency (GE):** licensee emergency classification level indicating that events are in process or have occurred that involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can reasonably be expected to exceed Environmental Protection Agency protective action guide exposure levels offsite for more than the immediate site area.

**Groundshine:** gamma and/or beta radiation from radioactive material deposited on the ground.

**Half-life:** the time required for the activity of a given radioactive substance to decrease to half of its initial value due to radioactive decay. The half-life is a characteristic property of each radioactive species and is independent of its amount or condition. The effective half-life of a given isotope on the body is the time in which the quantity in the body will decrease to half as a result of both radioactive decay and biological elimination. Half-lives vary from millionths of a second to billions of years.

**Health physics:** the science of recognizing, evaluating and controlling health hazards from ionizing radiation.

**Health physics technician (HPT):** an individual trained in radiation protection.

**High exposure rate:** an exposure rate greater than 2.5 milliroentgens per hour.

**High levels of radiation exposure:** doses of 100 rem or greater.

**High-level waste:** materials from nuclear operations that are no longer useful and have radioactivity concentrations of hundreds to thousands of curies per gallon or cubic foot.

**Homeland Security Exercise Evaluation Program (HSEEP):** a capabilities- and performance-based exercise program that provides standardized policy, doctrine, and terminology for the design, development, conduct, and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs.

**Homeland Security Presidential Directive-5 (HSPD-5):** an Executive-Branch-issued policy requiring the Department of Homeland Security to coordinate with other Federal departments and agencies, as well as State, local, and Tribal governments to establish the National Response Framework and the National Incident Management System.

**Homeland Security Presidential Directive-8 (HSPD-8):** an Executive-Branch-issued policy drafted to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards

preparedness goal; establishing mechanisms for improved delivery of Federal preparedness assistance to State and local governments; and outlining actions to improve the capabilities of Federal, State, and local entities. HSPD-8 has been superseded by Presidential Policy Directive-8 (PPD-8).

**Host/support jurisdiction:** a geographical area that is at least 5 miles, and preferably 10 miles, beyond the boundaries of the 10-mile plume pathway emergency planning zone (i.e., 15-20 miles from the commercial nuclear power plant) where functions such as congregate care, radiological monitoring, decontamination, and registration are conducted.

**Host regional office:** the FEMA Regional Office that has program jurisdiction for a site because of the location of a commercial nuclear power plant within its regional borders.

**Hostile action:** as defined in Nuclear Regulatory Commission Bulletin 2005-02, *Emergency Preparedness and Response Actions for Security-Based Events*, a hostile action is “an act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.”

**Hot spot:** region in a contaminated area in which the level of radioactive contamination is considerably greater than in neighboring regions.

**Hot wash:** a facilitated discussion held immediately following an exercise among exercise players from each functional area. It is designed to capture feedback about any issues, concerns, or proposed improvements players may have about the exercise. The hot wash is an opportunity for players to voice their opinions on the exercise and their own performance. This facilitated meeting allows players to participate in a self-assessment of the exercise play and provides a general assessment of how the entity performed in the exercise. At this time, evaluators can also seek clarification on certain actions and what prompted players to take them. Evaluators take notes during the hot wash and include these observations in their analysis. The hot wash should last no more than 30 minutes.

**Implementing procedure:** instructions used by personnel that provide a detailed description, including checklists, of the operations that are to be conducted by either a specific group of individuals or a designated position. Implementing procedures are also referred to as standard operating guidelines.

**Improvement Plan (IP):** for each task, lists the corrective actions that will be taken, the responsible party or agency, and the expected completion date. The IP is included at the end of the After-Action Report.

**Inadequate:** as used in reviews of radiological emergency response plans/procedures, inadequate means the plan/procedure contents do not meet the intent of a particular NUREG-0654/FEMA-REP-1 Planning Standard and/or Evaluation Criterion.

**Incident:** an occurrence, natural or man-made, that requires a response to protect life or property. Incidents can include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

**Incident Command Post (ICP):** the field location where the primary response functions are coordinated. The ICP may be co-located with other incident facilities.

**Incident Command System (ICS):** a standardized management tool for meeting the demands of small or large emergency or non-emergency situations.

**Ingestion Exposure Pathway Emergency Planning Zone (EPZ):** a geographic area, approximately 50 miles in radius surrounding a commercial nuclear power plant, in which it has been estimated that the health and safety of the general public could be adversely affected through the ingestion of water or food which has been contaminated through exposure to radiation primarily from the deposition of radioisotopes after a radiological accident. The duration of such exposures could range in length from hours to months.

**Ingestion Pathway exercise:** an exercise involving ingestion exposure pathway protective action decision-making and implementation. A State fully participates in the ingestion pathway portion of exercises at least once every 8 years. In States with more than one site, the State rotates this participation from site to site.

**Ingestion phase:** see “intermediate phase.”

**Initial Planning Meeting (IPM):** typically the first step in the planning process and lays the foundation for the exercise. Its purpose is to gather input from the exercise planning team on the scope; design requirements and conditions (such as assumptions and artificialities); objectives; level of participation; and scenario variables (e.g., location, threat/hazard selection), and Master Scenario Events List. During the IPM, the exercise planning team decides on exercise location, schedule, duration, and other details required to develop exercise documentation.

**Injects:** events, typically planned through entries on the Master Scenario Events List that controllers must simulate, including directives, instructions, and decisions. Exercise controllers provide injects to exercise players to drive exercise play towards the achievement of objectives. Injects can be written, oral, televised, and/or transmitted via any means (e.g., fax, phone, e-mail, voice, radio, or sign). See also contextual injects and contingency injects.

**Institutionalized individuals:** individuals who reside in institutions, such as nursing homes or correctional facilities, who may need to depend on others for assistance with protective actions. Institutionalized individuals may or may not have disabilities and access/functional needs.

**Integrated Public Alert and Warning System (IPAWS):** a comprehensive, coordinated, integrated system that can be used by authorized public officials to deliver effective alert messages to the American public. IPAWS is the nation's next-generation infrastructure of alert and warning networks and ensures the President can alert and warn the public under any condition. IPAWS will provide Federal, State, territorial, tribal, and local warning authorities the capabilities to alert and warn their communities of all hazards impacting public safety and well-being via multiple communication pathways.

**Interagency Radiological Assessment Plan (IRAP):** former Federal response plan published in 1965, revised in 1975. Superseded by the Federal Radiological Monitoring Assistance Plan, Federal Radiological Emergency Response Plan, and the National Response Framework.

**Intermediate phase:** the period beginning after the utility has verified that the release has been terminated. Reliable environmental measurements are available for use as a basis for decisions on additional protective actions. It extends until these additional protective actions are terminated. This phase may overlap the late phase and may last from weeks to many months. The intermediate phase encompasses REP post-plume activities associated with both ingestion and relocation.

**Internal radiation:** the nuclear radiation resulting from radioactive substances in the body. Some examples are iodine-131 found in the thyroid gland, and strontium-90 and plutonium-239 found in bone.

**Iodine (I):** an element of the periodic table. Only one stable isotope exists, the rest are radioactive and artificially created. The most common, iodine-131 and iodine-125, are used for medical treatment of the thyroid gland and in research.

**Ion:** an atom or molecule with a negative or positive electrical charge.

**Ionization:** the process of adding or removing electrons from atoms or molecules, thereby creating ions. High temperatures, electrical discharges or nuclear radiation can cause ionization.

**Ionizing radiation:** any radiation that displaces electrons from atoms or molecules, thereby producing ions. Alpha, beta and gamma radiation are examples. Ionizing radiation may damage skin and tissue.

**Irradiation:** exposure to radiation.

**Isotope:** nuclides having the same number of protons in their nuclei and the same atomic number, but differing in the number of neutrons and atomic mass number. Some isotopes of a particular element may be radioactive while the others are not.

**Joint Information Center (JIC):** a central point of contact for all news media at the scene of the incident. News media representatives are kept informed of activities and events via public information officials from all participating Federal, State, and local agencies, which, ideally, are collocated at the JIC.

**Joint Information System (JIS):** a structure that integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, accurate, accessible, timely, and complete information during a crisis or incident operations. The mission of the joint information system is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans/procedures and strategies on behalf of the Incident Commander; advising the incident command concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

**Just-in-time training:** instructions provided to personnel immediately prior to performing the assigned task or function.

**Key staff:** those emergency personnel, sufficient in numbers and functions, necessary to carry out emergency operations as set forth in the plans/procedures.

**KI (potassium iodide):** see potassium iodide.

**Late phase:** the period beginning when recovery action designed to reduce radiation levels in the environment to acceptable levels for unrestricted use are commenced, and ending when all recovery actions have been completed. This period may extend from months to years. REP post-plume activities associated with return and recovery occur during the late phase.

**Lead Agency Official (LAO):** the designated official on scene from each participating Federal agency authorized to direct that agency's response.

**Lessons Learned:** knowledge and experience (both positive and negative) derived from observations and historical study of actual operations, training, and exercises. Exercise After-Action Report/Improvement Plans identify lessons learned and highlight best practices, and should be submitted to FEMA for inclusion in the lessons learned /best practices Website, [www.llis.gov](http://www.llis.gov), which serves as a national network for generating, validating, and disseminating lessons learned and best practices.

**Letter of Agreement (LOA):** a document executed between two or more parties outlining specific agreements relating to the accomplishment of an action. REP letters of agreement may cover personnel, equipment, or other types of emergency support, and may take the form of letters, contracts, purchase orders, or other procurement mechanisms.

**Licensed material:** source material, special nuclear material, or by-product material received, possessed, used, or transferred under a general or special license issued by the NRC or a State.

**Licensee:** the utility or organization that has applied for or has received from the Nuclear Regulatory Commission (1) a license to construct or operate a commercial nuclear power plant, (2) a possession-only license for a commercial nuclear power plant, with the exception of licensees that have received an NRC-approved exemption to 10 CFR § 50.54(q) requirements, (3) an early site permit for a commercial nuclear power plant, (4) a combined construction permit and operating license for a commercial nuclear power plant, or (5) any other NRC license that is now or may become subject to requirements for offsite radiological emergency planning and preparedness activities.

**Limited response:** response to a request for radiological assistance that involves limited Department of Energy or other agency resources and does not require the formal field management structure.

**Local government:** the government of a town, city, county, or region at a local level by locally elected politicians.

**Logistics Section:** as applied to an exercise planning team organized according to ICS principles, the team members providing the supplies, materials, facilities, and services that enable the exercise to function smoothly without outside interference or disruption. This group consists of two subsections: service and support. The service section provides transportation, barricading, signage, food and drinks, real-life medical capability, and exercise-site perimeter security. The support section provides communications, purchasing, general supplies, very important personnel (VIP)/observer processing, and recruitment/management of actors.

**Low-level waste:** wastes containing types and concentrations of radioactivity that require little or no shielding against personnel exposure.

**Master Scenario Events List (MSEL):** a chronological timeline of expected actions and scripted events that controllers inject into exercise play to generate or prompt player activity. It ensures necessary events happen so that all objectives are met. Larger, more complex exercises may also employ a Procedural Flow, which differs from the MSEL in that it only contains expected player actions or events. The MSEL links simulation to action, enhances exercise experience for players, and reflects an incident or activity meant to prompt players to action. Each MSEL record contains a designated scenario time; an event synopsis; the name of the controller responsible for delivering the inject; and, if applicable, special delivery instructions, the task and objective to be demonstrated, the expected action, the intended player, and a note-taking section.

**Maximally exposed individual:** a hypothetical individual who receives the greatest possible projected dose in the area of highest radiation levels over a specified period of time.

**May:** The term *may* denotes an option, neither requirement nor recommendation. See also *shall* and *should*.

**Measuring:** refers to counting to detect radiation levels or determining other parameters, such as the energy of radiation or physical characteristics of samples, such as the volume of an air sample.

**Media center:** a facility staffed by public information officers from multiple emergency response organizations for the purpose of providing a single designated point of contact with the news media and to facilitate exchange and coordination of information among public information officers from different organizations. This type of facility is also referred to as a Public Information Center, a Joint Information Center, a Public Affairs Center, or an Emergency News Center.

**Medical Services Hospital:** designated hospitals with staff trained and capable of treating members of the general public who may be injured and/or considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials.

**Medical Services Drill:** a drill in which offsite response organizations demonstrate the ability of the transportation services and medical facilities to handle a contaminated individual without spreading contamination.

**Met:** the status of a REP exercise Demonstration Criterion indicating that the participating offsite response organization performed all activities for the criterion to the level required in the Extent-of-Play Agreement, with no Deficiencies or Areas Requiring Corrective Action assessed in the current exercise for that criterion and no unresolved prior Areas Requiring Corrective Action.

**Meteorological Unified Dose Assessment Center (MUDAC):** an area within or near the facility which houses the personnel responsible for the coordination of radiological monitoring teams, collection of radiological monitoring data, calculation of dose projections and the recommendation of protective actions for the emergency planning zones.



**micro:** A prefix that divides a basic unit by 1 million. It is represented by the Greek letter “mu” (“μ”).

Example: 1 micrometer = 1 μm = 1/1,000,000 meters ( $1 \times 10^{-6}$  m).

**microcurie (μCi):** a one-millionth part of a curie (see curie).

**Midterm Planning Meeting (MPM):** an operations-based exercise planning meeting used to discuss exercise organization and staffing concepts; scenario and timeline development; and scheduling, logistics, and administrative requirements. It is also a session to review draft documentation (e.g., scenario, Exercise Plan, Controller/Evaluator Handbook, Master Scenario Events List).

**Milestone:** a date at which FEMA recommends that a specified task in the planning, development, conduct, and documentation of exercises be completed. Milestones are measured by the number of calendar days before or after the date of a REP exercise. Some milestones are dictated by regulations.

**milli:** A prefix that divides a basic unit by one thousand. It is represented by the Greek letter “m.”

Example: 1 millimeter = 1 mm = 1/1,000 meters ( $10^{-3}$  m).

**millicurie (mCi):** a one-thousandth part of a curie (see curie).

**millirem (mrem):** a one-thousandth part of a rem (see rem).

**milliroentgen (mR):** a one-thousandth part of a roentgen (see roentgen).

**mrem/yr:** amount of radiation received in 1 year (see rem).

**Mobility impaired:** those without transportation, including those without their own cars, those who are unable to drive and those who need assistance, any of whom will need transportation assistance to evacuate.

**Mobilized organization:** an organization that has completed the activation process and is able to carry out the essential emergency functions, as required by scenario events and as set forth in emergency response plans/procedures.

**Monitor and prepare:** a protective action that includes reuniting with family members, preparing to shelter or evacuate, monitoring information channels, and keeping off the road (to reduce traffic congestion and allow those who are told to evacuate to do so).

**Monitoring:** the act of detecting the presence of radiation and the measurement of radiation levels, usually with a portable survey instrument.

**Monitoring and decontamination facility:** a temporary facility established outside the plume emergency planning zone for the purpose of monitoring and decontaminating emergency workers and their vehicles and equipment used in the plume and/or areas contaminated by the plume.

**Multi-Year Training and Exercise Plan (TEP):** the foundational document guiding a successful exercise program. The multi-year plan provides a mechanism for long-term coordination of training and

exercise activities toward an entity's preparedness goals. This plan describes the program's training and exercise priorities and associated capabilities, and aids in employing the building-block approach for training and exercise activities. Within the Multi-Year TEP, the multi-year schedule graphically illustrates training and exercise activities that support the identified priorities. The schedule is color-coded by priority and presents a multi-year outlook for task and priority achievement. As training and exercises are completed, the document can be annually updated, modified, and revised to reflect changes to the priorities and new capabilities that need to be assessed. The Multi-year TEP and schedule are produced through the work completed at the Training and Exercise Planning Workshop (TEPW). The TEPW focuses on discussion of capabilities-based planning, overview of the National Priorities, review of the entity's priorities, and analysis of previous training and exercises. After this information is synthesized, participants develop the plan and schedule for their entity.

**nano:** a prefix that divides a basic unit by one billion ( $10^9$ ). It is represented by the Greek letter "n."

Example: 1 nanocurie = 1 nCi =  $1/1,000,000,000$  Ci ( $1 \times 10^{-9}$  Ci)

**nanocurie (nCi):** one-billionth part of a curie (see curie).

**Narrative:** a body of text, prepared by the exercise evaluator, to describe an organization's performance under the Demonstration Criterion and document in narrative form the events that transpired during the exercise. The narrative also identifies and describes pertinent exercise issues (Deficiencies, Areas Requiring Corrective Action, or Plan Issues), and recommends appropriate corrective actions for each issue identified by the evaluator.

**National Atmospheric Release Advisory Center (NARAC):** a Department of Energy asset capable of providing a computer-generated model of the most probable path of the radioactive contamination released at a radiological accident site.

**National Exercise Schedule (NEXS):** a compilation of all national-level, Federal, State, and local exercises. The National Exercise Schedule provides basic information on each planned exercise including the exercise name, location, date, major participants, and points of contact. It also serves as a management tool and reference document for exercise planning and enables exercise visibility to planners and leadership.

**National Incident Management System (NIMS):** a set of principles that provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.

**Neutron:** an uncharged particle found in the nucleus of every atom heavier than hydrogen. Neutrons sustain the fission chain reaction in a reactor.

**Noble gases:** the chemically inert radioactive gases that are released during an accident at a nuclear power plant.

**Non-participating organizations:** offsite response organizations that are not participating in emergency planning and preparedness for incidents at a commercial nuclear power plant.

**Not Demonstrated:** term applied to the status of a REP exercise Demonstration Criterion indicating that, for a justifiable reason, the jurisdiction or functional entity did not perform activities under the Demonstration Criterion as specified in the Extent-of-Play Agreement or at the frequency required in the FEMA REP Program Manual. In general, an organization may justify not demonstrating a criterion because of (1) the offsite response organization's response to a real-life emergency during the time that the exercise was being conducted or (2) extenuating circumstances, such as a fire, flood, or other emergency, at the facility that was to be demonstrated.

**Notification and mobilization of personnel:** the transmission of messages to emergency personnel informing them of an incident and directing them to report for emergency duty at their assigned duty stations.

**Notification of Unusual Event (NOUE):** licensee emergency classification level indicating that unusual events are in process or have occurred that indicate a potential degradation in the level of plant safety or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected, unless further degradation of safety systems occurs.

**Notifying the public:** distributing an instructional message, either through the Emergency Alert System or some other system.

**Nuclear Weapon Accident Response Procedures (NARP) Manual:** Department of Defense and Defense Nuclear Agency Manual.

**Nuclear radiation:** the particulate and electromagnetic radiation emitted from atomic nuclei in various nuclear processes. The important types of nuclear radiation (from the weapons standpoint) are alpha and beta particles, gamma rays and neutrons. All nuclear radiations are ionizing radiations, but the reverse is not true.

**Nucleus:** the dense, central, positively charged core of an atom. All nuclei contain protons and neutrons except the nucleus of hydrogen, which has a single proton.

**Nuclide:** a general term referring to all known isotopes, both stable (279) and unstable (about 5,000), of the chemical elements.

**NUREG:** a Nuclear Regulatory Commission (NRC) nuclear regulatory publication.

**Objective:** formerly, one of the 33 areas of ORO capability defined in FEMA-REP-14 and FEMA-REP-15 that are evaluated during a REP exercise. Objectives have been replaced by the Assessment Areas and associated Sub-elements and Demonstration Criteria.

**Observer:** observers do not directly participate in the exercise; rather, they observe selected segments of the exercise as it unfolds, while remaining separated from player activities. Observers view the exercise from a designated observation area and are asked to remain within the observation area during the exercise. A dedicated group of exercise controllers should be assigned to manage these groups.

**Offsite:** beyond the boundaries of the owner-controlled area around a commercial nuclear power plant.

**Offsite Response Organization (ORO):** any State, local, and Tribal government; supporting private industry and voluntary organizations; and Licensee offsite response organizations (that are formed when State, local, and Tribal governments fail to participate in the REP Program) that are responsible for carrying out emergency functions during a radiological emergency.

**On-scene:** the area surrounding a site that is, or potentially could be, impacted by an incident. This area includes both onsite and offsite areas.

**Onsite:** the owner-controlled area of a commercial nuclear power plant.

**Onsite personnel:** Licensee or contract personnel working at commercial nuclear power plants.

**Operational:** status of a facility (e.g., emergency coordination center, emergency operations facility, media center, assistance center, emergency worker center, laboratory, etc.) when all key decision makers, as identified in plans/procedures, are at their duty stations and capable of performing all emergency functions assigned to that facility.

**Operationally mobilized organization:** an organization that has completed the activation process required by events and their emergency response plans/procedures. Operational mobilization is achieved when all key personnel are at their duty stations.

**Operations Section:** as applied to an exercise planning team organized according to ICS principles, the team members providing most of the technical or functional expertise for the participating entities. This group develops scenarios, selects evaluation tools, and has personnel with the expertise necessary to serve as evaluators.

**Optically Stimulated Luminescence (OSL):** A non-self-reading device for measuring radiation exposure which is a more accurate than a direct reading dosimeter and constitutes a legal record of an *Emergency Worker's* actual radiation exposure received during the duration of an accident.

**Out of sequence demonstration:** demonstration of criteria not conducted in conjunction with the scenario timeline. For the purposes of demonstrating required criteria, activities conducted during the exercise week may be considered in-sequence as negotiated as part of the Extent-of-Play Agreement.

**Partial Participation Exercise:** as set forth in 44 CFR 350.2(k), the engagement of State, local, and Tribal personnel in an exercise sufficient to adequately test direction and control functions for protective action decision-making related to the emergency action levels and communication capabilities among affected offsite response organizations and the licensee.

**Participants:** players, controllers, evaluators, and staff involved in conducting an exercise.

**Particulate radiation:** radiation in the form of particles (e.g., neutrons, electrons, alpha and beta particles) as opposed to electromagnetic radiation.

**Persons with disabilities and access/functional needs:** individual(s) within a community that may have additional needs before, during, and after an incident in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. Individual(s) in need of additional response assistance may include those who have disabilities (sensory, motor skills, mental/emotional); who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited or no English-speaking proficiency; or who are transportation-disadvantaged.

**pico:** a prefix that divides a basic unit by one trillion ( $10^{-12}$ ). It is represented by the letter “p.” For example, 1 picocurie = 1 pCi =  $1/1,000,000,000,000$  Ci ( $1 \times 10^{-12}$  Ci).

**picocurie (pCi):** one-trillionth part of a curie (see curie).

**Plan Issue:** an identified inadequacy in the organization’s emergency plan/procedures, rather than in the organization’s performance. Plan Issues are required to be corrected through the revision of the appropriate plans/procedures during the next annual plan review and update, submitted for FEMA review, and reported in the State’s Annual Letter of Certification.

**Planning Area:** a pre-designated geographic subdivision of the plume exposure pathway EPZ. In some plans/procedures, it may be referred to as an Emergency Response Planning Area or an equivalent term.

**Planning Meetings:** the exercise planning team holds planning meetings as forums to design and develop exercises. The scope, type, and complexity of an exercise determines the number of meetings necessary to successfully conduct an exercise. These milestones of the exercise planning process are typically comprised of the Initial Planning Meeting (IPM), the Midterm Planning Meeting (MPM), and the Final Planning Meeting (FPM).

**Planning Section:** as applied to an exercise planning team organized according to ICS principles, the team members responsible for compiling and developing all exercise documentation. To accomplish this effectively, the Planning Section also collects and reviews policies, plans, and procedures that will be validated during the exercise. During the exercise, the Planning Section may be responsible for developing simulated actions by agencies not participating in the exercise and setting up a Simulation Cell for exercises that necessitate one (such as Functional Exercises).

**Plans/Procedures:** an organization’s documented concept of operations and implementing procedures for managing its internal response to emergencies and coordinating its external response with other organizations. The term *plans/procedures* as used in this manual includes radiological emergency preparedness/response plans, associated implementing procedures such as Standard Operating Guides, and other supporting and referenced materials, all of which are subject to review. The generic term *plans/procedures* is used specifically for flexibility. Procedures may be either incorporated in the main plans or into separate procedural documents at the discretion of the offsite response organization.

**Player:** players have an active role in preventing, responding to, or recovering from the risks and hazards presented in the exercise scenario, by either discussing (in a discussion-based exercise) or performing (in an operations-based exercise) their regular roles and responsibilities. Players initiate actions that will respond to and/or mitigate the simulated emergency.

**Plume:** generally a gaseous atmospheric release from a nuclear power plant, in an accident or emergency, which may contain radioactive noble gases and volatile solids. While emergency plans/procedures must recognize the very low probability that particulates could be released in a serious accident, primary emphasis is given to the development of protective actions against the release of noble gases and volatiles such as radioiodines. This cloud is not visible to the eye, but can be measured, or “seen” with radiation measurement equipment.

**Plume phase:** see “early phase.”

**Plume dose projections:** estimates of dosage to the public from exposure to the plume, over a period of time, in the absence of any protective actions.

**Plume Exposure Pathway:** (1) For planning purposes, the area within approximately a 10- mile radius of a commercial nuclear power plant site. (2) A term describing the means by which whole body radiation exposures occur as a result of immersion in a plume release. The area in which plume exposures are likely is described in NUREG-0396 as an area extending out approximately 10 miles from the reactor site and forming roughly a “keyhole” shape, with the keyhole oriented downwind. In the plume emergency planning zone, actions may be required to protect the public from the effects of whole-body external exposure to gamma radiation from the plume and from deposited materials and inhalation exposure from the passing radioactive plume’s released materials. The duration of exposure in this mode could range from hours to days in the case of particulate deposition.

**Plume Exposure Pathway Emergency Planning Zone:** a geographic area approximately 10 miles in radius surrounding a commercial nuclear power plant within which the health and safety of the general public could be adversely affected by direct whole body external exposure to gamma radiation from deposited materials as well as inhalation exposure from the passing radioactive plume during a radiological accident. The duration of such exposures could range in length from hours to days.

**Plutonium (Pu):** an element of the periodic table that is an artificially-produced fissile material. The Pu-239 isotope is used primarily in nuclear weapons.

**Population dose projection:** projection made by a Federal agency under the Federal Radiological Monitoring and Assistance Plan pertaining to the levels of radiation to which the population within the emergency planning zone will be exposed.

**Portal monitor:** a radiation monitor consisting of several radiation detectors arranged in a fixed position within a frame that forms a passageway for individuals being monitored.

**Post-emergency phase:** the Environmental Protection Agency term for the period beginning after the utility determines that the release has terminated, and the responsible offsite response organization determines that public safety is ensured by appropriate protective actions in accordance with applicable protective action guides and that valuable property has been protected. See also “post-plume phase.”

**Post-plume phase:** includes REP activities (ingestion, relocation, reentry, and return) that occur after a release has been terminated. These activities can be demonstrated in an exercise with the plume phase or separately.

**Potassium-40 (K-40):** a naturally occurring radioactive isotope of potassium, which is an element of the periodic table. It is a beta and gamma emitter and has an exceedingly long half-life. The average person receives about 20 millirems a year from the K-40 in his/her body.

**Potassium iodide (KI):** a prophylactic compound commonly referred to as a radioprotective drug containing a stable (i.e., non-radioactive) form of iodide that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.

**Potential dose:** the radiation dose that could result from a particular set of plant conditions, not based on estimated or measured releases or environmental levels.

**Precautionary protective actions:** any preventive or emergency protective actions implemented without the verification of radionuclide measurements by field monitoring or laboratory analysis.

**Pre-operational exercise:** an exercise conducted prior to the issuance of a full-power license of a commercial nuclear power plant by the Nuclear Regulatory Commission.

**Presidential Policy Directive-8 (PPD-8):** On March 30, 2011, PPD-8 on National Preparedness was signed. This directive replaces Homeland Security Presidential Directive (HSPD)-8 (National Preparedness), issued December 17, 2003, and HSPD-8 Annex I (National Planning), issued December 4, 2007, which are hereby rescinded, except for paragraph 44 of HSPD-8 Annex I. Individual plans developed under HSPD-8 and Annex I remain in effect until rescinded or otherwise replaced.

**Pressure vessel:** a strong-walled container housing the core of most types of power reactors.

**Pressurized water reactor (PWR):** a power reactor in which heat is transferred from the core to the heat exchanger by water kept under high pressure. The primary system is pressurized to allow the water to reach high temperatures without boiling. Steam is generated in a secondary circuit.

**Preventive protective actions:** protective actions to prevent or reduce contamination of milk, food, and drinking water such as covering water sources and providing dairy cows with stored feed. Preventive protective actions also include washing, brushing, scrubbing, or peeling fruits and vegetables to remove surface contamination.

**Primary coolant:** water used to cool and carry heat away from the core of a pressurized water reactor. Heat is transferred from the primary coolant to a secondary loop using a heat exchanger, producing steam to drive the turbine.

**Principal Federal Official (PFO):** pursuant to the Homeland Security Act of 2002 and HSPD- 5, the Secretary of Homeland Security is the principal Federal official for all domestic incidents requiring multiagency Federal response. The Secretary may elect to designate a single individual to serve as his or her primary representative to ensure consistency of Federal support as well as the overall effectiveness of the Federal incident management. When appointed, such an individual serves in the field as the Principal Federal Official for the incident.

**Projected dose:** the estimated or calculated amount of radiation dose to an individual from exposure to the plume and/or deposited materials, over a period of time, in the absence of protective action.

**Protective Action Decision (PAD):** measures taken in anticipation of, or in response to, a release of radioactive material to the environment. The purpose of PADs is to provide dose savings by avoiding or minimizing the radiation exposure received by individuals, thereby minimizing the health risks resulting from radiation exposure. Sheltering and evacuation are the two PADs relied upon for limiting the direct exposure of the general public within the plume exposure emergency planning zone. Preventive and emergency PADs are two categories of PADs relied upon for limiting exposure from contaminated food and water in the ingestion exposure emergency planning zone.

**Protective Action Guide (PAG):** projected dose to an individual in the general population that warrants the implementation of protective action. The Food and Drug Administration and Environmental Protection Agency have recommended specific protective action guides in terms of the level of projected dose that warrants the implementation of evacuation and sheltering, relocation, and limiting the use of contaminated food, water, or animal feed.

**Protective Action Recommendation (PAR):** advice to the State on emergency measures it should consider in determining action for the public to take to avoid or reduce their exposure to radiation.

**Protective response:** implementation of a protective action, including authority to request Federal assistance and to initiate other protective actions.

**Proton:** a positively charged atomic particle. Protons, along with neutrons, are the prime components of atomic nuclei. The atomic number of an atom is equal to the number of protons in its nucleus.

**Public instruction:** instructions (warning messages) that are protective action recommendations for the public. Instructions are given by a public official and delivered directly to the public via the notification system (i.e., Emergency Alert System radio). Message content and timeliness are very important. Messages are repeated by the notification system at least every 15 minutes until updated by public authorities. If applicable, public instructions are coordinated with other authorities.

**Public information:** information delivered to the media via press conferences, interviews, technical briefings, printed media releases, and telephonic distribution of printed releases. Information needs to be current, accurate, and timely. All printed releases are coordinated with other authorities before distribution to the media. Ideally, information released in news conferences, briefings, and interviews is coordinated before release. If pre-coordination does not occur, then post-notification of other authorities of critical points discussed in interviews, conferences, etc., is necessary.

**rad:** radiation absorbed dose, the basic unit of absorbed dose radiation. One rad represents the absorption of 100 ergs of nuclear (or ionizing) radiation per gram of the absorbing material or tissue (see roentgen).

**Radiation Safety Officer:** a health physicist or other individual experienced in radiation protection who advises medical facility staff regarding the hazards associated with high levels of radiation.

**Radiation sickness:** the complex of symptoms characterizing the disease known as radiation injury, resulting from excessive exposure of the whole body (or large part) to ionizing radiation.



**Radioactivity:** the spontaneous decay or disintegration of an unstable atomic nucleus, usually accompanied by the emission of ionizing radiation, generally alpha or beta particles, often accompanied by gamma rays from the nuclei of an unstable isotope.

**Radioisotope:** an unstable isotope of an element that decays or disintegrates spontaneously, emitting radiation. Approximately 5000 natural and artificial radioisotopes have been identified.

**Radiological Assistance Program (RAP) team:** a team dispatched to the site of a radiological incident by the Department of Energy Regional Office responding to the incident.

**Radiological emergency:** a type of radiological incident that poses an actual or potential hazard to public health or safety or loss of property.

**Radiological emergency area:** an area established either on an ad hoc basis or pre-identified in a medical facility for monitoring, decontamination, and treatment of contaminated injured individuals, and for contamination control.

**Radiological Emergency Preparedness (REP) Exercise:** an event involving organizational responses to a simulated commercial nuclear power plant incident with radiological and other offsite consequences. The purpose of an exercise is to test the integrated capabilities of involved offsite response organizations to implement emergency functions set forth in offsite response organization radiological emergency response plans/procedures.

**Radiological Emergency Response Plan (RERP):** a detailed plan that describes and coordinates the emergency response organizations, responsibilities, and capabilities of utilities, offsite response organizations, and private organizations to ensure public health and safety during an incident in which there is a potential for radiological release.

**Radiological Emergency Preparedness (REP) Program:** the FEMA program that administers emergency preparedness for all commercial nuclear sites.

**Radiological Emergency Response Team (RERT):** a team located near the affected area that coordinates all field teams and sampling activities.

**Radiological survey:** the directed effort to determine the distribution of radiological material and dose rates in an area.

**Radiology:** that branch of medicine dealing with the diagnostic and therapeutic applications of radiant energy, including x-rays and radioisotopes.

**Radionuclide:** a radioactive isotope of a particular element.

**Range of Reading Sticker:** indicates the acceptable range of readings that the meter indicates when it is response checked using a standard test source. If the response check results in readings that fall outside of the range specified on the sticker, the instrument is removed from service and not used for recording activity levels.

**Rapidly-escalating incident:** an incident that develops potential or actual severe core damage within a short time. Such an incident results in an initial declaration of or rapid escalation (within 30 minutes) to a Site Area Emergency or General Emergency.

**Reasonable Assurance:** a determination that State, local, Tribal, and utility offsite plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial nuclear power plants.

**Reasonable time: (usage specific to backup alert and notification of the public)** the responsible offsite response organization personnel/representatives demonstrate appropriate actions with a recommended goal of 45 minutes, taking into account but not limited to the effects of weather, topography, population density, and existing organization resources.

**Reception center (RC):** see Reception/relocation center.

**Reception/relocation center (RC):** a pre-designated facility located outside the plume exposure pathway emergency planning zone (at a minimum 15 miles from the nuclear power plant) at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception/relocation center is also referred to as a registration center or public registration and decontamination center.

**Recommendation(s):** as used in the Homeland Security Exercise Evaluation Program, the identification of areas for improvement as noted during an exercise and listed in all After-Action Report/Improvement Plans.

**Recommended:** (as used in this document) a Federally-approved approach for meeting the intent of regulatory requirements.

**Recovery:** the process of reducing radiation exposure rates and concentrations of radioactive material in the environment to acceptable levels for return by the general public for unconditional occupancy or use after the emergency phase of a radiological emergency.

**Recovery plan:** a plan developed by the State to restore the affected area with Federal assistance if needed.

**Recovery worker:** an individual who is permitted to enter the restricted zone under controlled conditions to perform work or to retrieve valuable property.

**Reentry:** the provisions for the return of the public after evacuation, when the radiation risk has been reduced to acceptable levels.

**Reentry recommendation:** advice provided to the State by the Cognizant Federal Agency in conjunction with the Senior Federal Official and appropriate Federal departments and agencies concerning offsite response organization guidance or recommendations that may be issued to the public for returning to an area affected by a radiological emergency.

**Regional Office Support Team (ROST):** a FEMA Regional team that supports the Emergency Response Team. The Regional Office Support Team facilitates deployment of the Emergency Response Team; interfaces with the Emergency Support Team at FEMA Headquarters, with other regional departments or agencies, and with State, local, or Tribal agencies and organizations during deployment; provides regional support during deployment; and assists with recall of the Emergency Response Team.

**Regional Radiological Assistance Committee (RAC):** a committee of representatives from a number of Federal agencies which have agreed to assist the FEMA Region in providing technical assistance to offsite response organizations and to evaluate radiological emergency response plans/procedures and exercises on the basis of their special authorities, missions, and expertise.

**Regional Response Force (RRF):** force identified in the Nuclear Accident Response Capabilities Listing (at the Joint Nuclear Accident Coordinating Center) belonging to Department of Defense or Department of Energy installations, facilities, or activities within the US and its territories. The Regional Response Force may be tasked with taking emergency response actions necessary to maintain command and control onsite pending arrival of the Service or Agency Response Force. Functions with which the Regional Response Force may be tasked, within its capabilities, are: (1) rescue operations; (2) accident site security; (3) firefighting; (4) initial weapon emergency safing; (5) radiation monitoring; (6) establishing command, control and communications; and (7) public affairs activities.

**Release:** escape of radioactive materials into the environment.

**Relocation:** the removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure.

**Relocation center (RC):** see Reception/relocation center.

**rem:** The unit of dose of any ionizing radiation that produces the same biological effect as a unit of absorbed dose of ordinary x-rays. A unit of dose for measuring the amount of ionizing radiation energy absorbed in biological tissue.

**Remedial exercise:** an exercise that tests deficiencies of a previous joint exercise that are considered significant enough to potentially impact the public health and safety. A remedial exercise is conducted within 120 days after the biennial REP exercise for the purpose of demonstrating remedial actions to correct one or more deficiencies.

**Re-occupancy:** the return of households and communities to relocation areas during the cleanup process, at radiation levels acceptable to the community.

**REP Branch Chief:** FEMA Headquarters individual responsible for implementation of the national Radiological Emergency Preparedness Program.

**Residual contamination:** contamination that remains after steps have been taken to remove it. These steps may consist of nothing more than allowing the contamination to decay naturally.

**Responsible offsite response organization (responsible ORO):** an organization designated in emergency response plans/procedures as that organization responsible for a specific emergency function.

**Responsible school official:** the school official participating in an exercise or drill, who is responsible for implementing school emergency procedures according to the plan.

**Restricted zone:** an area of controlled access from which the population has been evacuated, relocated or sheltered-in-place.

**Return:** Reoccupation of areas cleared for unrestricted residence/use by previously evacuated or relocated populations.

**roentgen (r):** a unit of exposure of gamma (or X-ray) radiation in field dosimetry. One roentgen is essentially equal to one rad (see “rad”). A unit for measuring the amount of radiation energy imparted to a volume of air. The roentgen can be used only to measure X- rays or gamma rays.

**roentgen equivalent man/mammal (rem):** one rem is the quantity of ionizing radiation of any type which, when absorbed by man or other mammals, produces a physiological effect equivalent to that produced by the absorption of 1 roentgen of X-ray or gamma radiation.

**Rumors:** information circulated by individuals and organizations during an emergency that may or may not be true. (Usually, rumors originate and are spread on an ad hoc, not official basis.)

**Sampling:** collecting specimens of materials (e.g., particles or radioiodine in the air, animal feed, vegetation, water, soil, or milk) at field locations.

**Scenarios:** time-based simulations of emergency incidents postulated to allow the demonstration of response capabilities.

**Schools:** in the context of the REP Program, the term “schools” refers to public and private schools, and licensed or government supported preschools and day care centers.

**Scram (Safety Control Rod Axe Man):** the sudden shutdown of a nuclear reactor, usually by rapid insertion of the control rods. Emergencies or deviations from normal reactor operation cause the reactor to automatically scram.

**Senior FEMA Official (SFO):** official appointed by the director of FEMA, or his representative, to direct the FEMA response at the scene of a radiological emergency.

**Service animal:** dogs that are individually trained to do work or perform tasks for people with disabilities. Examples of such work or tasks include guiding people who are blind, alerting people who are deaf, pulling a wheelchair, alerting and protecting a person who is having a seizure, reminding a person with mental illness to take prescribed medications, calming a person with Post Traumatic Stress Disorder (PTSD) during an anxiety attack, or performing other duties. Service animals are working animals, not pets. The work or task a dog has been trained to provide must be directly related to the person’s disability. Dogs whose sole function is to provide comfort or emotional support do not qualify as service animals under the ADA.<sup>99</sup>

**Shall (Must and Require):** mandatory items originating in regulatory material including NUREG-0654/FEMA-REP-1 and the CFR.

**Shelter-In-Place:** a protective action that includes going indoors listening to an Emergency Alert System radio or television station, closing all windows and doors, closing exterior vents, turning off heating and air conditioning equipment using outside air, planning for possible evacuation, and livestock precautions.

**Shield:** material used to reduce or stop radiation.

**Should (Suggest and Recommend):** guidance outlining a Federally-approved means of meeting the intent of the REP regulations. The term *may* denotes an option, neither requirement nor recommendation.

**Site Area Emergency (SAE):** licensee emergency classification level indicating that events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Releases are not expected to exceed Environmental Protection Agency protective action guide exposure levels beyond the site boundary.

**Special facility:** includes schools, licensed day care centers, hospitals, nursing homes, certain types of industrial plants that may require a lengthy shutdown period, etc., within the plume emergency planning zone that need to be considered separately from the general population when planning for an incident or accident at a nuclear power plant.

**Special nuclear material:** by law, includes plutonium, uranium-233, and uranium containing more than the natural concentration of uranium-235.

**Spent fuel:** nuclear reactor fuel that has been irradiated to the extent that it can no longer effectively sustain a chain reaction.

**Standard Operating Guideline (SOG):** see implementing procedures

**State Coordinating Officer (SCO):** an official designated by the governor of an affected State to work with the Cognizant Federal Agency Official and Senior FEMA Official in coordinating the response efforts of Federal, State, local, Tribal, volunteer, and private agencies.

**State Emergency Operations Center (SEOC):** State central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management at a strategic level during an emergency, and ensuring the continuity of operation of a company, political sub division or other organization.

**Strontium:** a high-energy beta source that can be used as an energy source for satellites, remote weather stations and navigation buoys. Four naturally stable and 12 unstable isotopes of strontium exist. The most common unstable isotope is strontium-90, a product of nuclear fallout that has a half-life of 28 years.

**Substantial change:** a change in plans/procedures, equipment, or facilities that has a direct effect or impact on emergency response operations. Examples of substantial changes include: changing emergency

planning areas, modifying the size or configuration of an emergency coordination center, adding more function to a center, or changing the equipment available for use in a center.

**Support jurisdiction:** see host/support jurisdiction

**Survey meter:** a portable instrument used in radiological monitoring to detect and measure ionizing radiation.

**Tabletop Exercise:** a discussion-based exercise that may test single or multiple scenarios and outcomes. OROs may use tabletop exercises to assess key elements in decision-making and implementation.

**Thyroid exposure:** exposure of the thyroid gland to radiation from radioactive isotopes of iodine that have been either inhaled or ingested.

**Timeline:** the tabular illustration, in an After- Action Report, of the time at which significant events occurred at all participating offsite response organizations in a biennial REP exercise.

**Timely (timely manner):** the responsible offsite response organization personnel/representatives demonstrate appropriate actions with a sense of urgency and without undue delay.

**Total effective dose equivalent (TEDE):** the sum of the deep dose equivalent (for external exposures) and for committed effective dose equivalent (for internal exposures).

**Traffic control:** all activities accomplished for the purpose of facilitating the evacuation of the general public in vehicles along specific routes.

**Training and Exercise Plan (TEP):** is the foundation document guiding a successful exercise program. The TEP articulates overall exercise program priorities and outlines a schedule of training and exercise activities designed to meet those priorities. The TEP is the result of a Training and Exercise Planning Workshop (TEPW).

**Training and Exercise Planning Workshop (TEPW):** usually conducted in order to create a Multi-Year Training and Exercise Plan (TEP). During the workshop, participants review priority preparedness capabilities and coordinate exercise and training activities that can improve those capabilities. As a result of the workshop, the Multi-Year TEP outlines multi-year timelines and milestones for execution of specific training and exercise activities.

**Transient persons:** non-residents. Persons who do not permanently reside in the plume exposure pathway emergency planning zone, but may be present during an emergency.

**Transuranic elements:** all elements above uranium on the periodic table — those with an atomic number greater than 92. All transuranics are produced artificially and are radioactive.

**Trigger/Action levels:** is a designated value whereby an individual is directed to perform a specific action. Also, the threshold for contamination levels that trigger the need for decontamination established in the plans/procedures.

**Tritium:** the one radioactive isotope of hydrogen. A small percentage of natural hydrogen is tritium, but the primary source of tritium is nuclear reactors. It has a half-life of 12 years, but will remain in the body only a few days if taken internally. It is not considered a major health hazard since it is a very weak beta emitter and not harmful unless consumed in very large quantities.

**Trusted agent/confidential representative:** individuals on the exercise planning team who are trusted to not reveal scenario details to players prior to exercise conduct.

**Uranium:** an element of the periodic table. There are two primary isotopes: uranium-238, which accounts for 99 percent of all uranium; and uranium-235, the fissionable isotope that sustains the fission reaction in a nuclear reactor.

**Vapor:** the gaseous form of substances that are normally in liquid or solid form.

**Whole-body exposure:** an exposure of the body to radiation, in which the entire body rather than an isolated part is irradiated. Where a radioisotope is uniformly distributed throughout the body tissues, rather than being concentrated in certain parts, the irradiation can be considered as a whole-body exposure.

**X-ray:** a penetrating form of electromagnetic radiation that is used in medical and industrial applications.

#### **THE FOLLOWING ARE THE ABBREVIATIONS AND ACRONYMS FROM REP PROGRAM MANUAL**

A atomic mass  
A ampere  
A activity of isotope  
AAM After-Action Meeting  
AAR After-Action Report  
AAR/IP After-Action Report/Improvement Plan  
AC alternating current  
ACP access control point  
ADA American Disabilities Act  
AEC U.S. Atomic Energy Commission  
AECB U.S. Atomic Energy and Control Board  
AEOD analysis and evaluation of operation data  
AGL above ground level  
ALARA as low as reasonably achievable  
ALC Annual Letter of Certification  
AMA American Medical Association  
AMS Aerial Measuring System  
AMTOR Amateur Telegraphy over Radio  
A&N alert and notification  
ANI American Nuclear Insurers  
ANL Argonne National Laboratory  
ANS Alert and Notification System  
ANSI American National Standards Institute

**Anti-Cs** anti-contamination clothing  
**APR** air-purifying respirator  
**ARC** American Red Cross  
**ARCA** Area Requiring Corrective Action  
**ARES** Amateur Radio Emergency Services  
**ARG** Accident Response Group  
**ARM** aerial radiological monitor  
**ASLB** U.S. Atomic Safety and Licensing Board  
 $\alpha$  alpha particle  
 $\beta$  beta particle  
 $\beta^+$   $\beta^+$  particle (positron)  
 $\beta^-$   $\beta^-$  particle (electron)  
**Ba** barium  
**BEIR** biological effects of ionizing radiation  
**Btu** British thermal unit  
**BWR** boiling water reactor  
**CAP** Civil Air Patrol  
**CAP** Corrective Action Program  
**CAP** Common Alerting Protocol  
**CA** Cooperative Agreement  
**CC** congregate care  
**CCC** congregate care center  
**CD** Civil Defense  
**CD V** Civil Defense Victoreen  
**CDC** U.S. Centers for Disease Control and Prevention (HHS)  
**CDE** committed dose equivalent  
**CDRG** Catastrophic Disaster Response Group  
**C&O** Concepts and Objectives (Meeting)  
**C/E** Controller and Evaluator  
**CEDE** committed effective dose equivalent  
**CEM** Certified Emergency Manager  
**CEMP** Comprehensive Emergency Management Plan  
**CFA** Cognizant Federal Agency  
**CFAO** Cognizant Federal Agency Official  
**cfm** cubic feet per minute  
**CFR** Code of Federal Regulations  
**CHEMTREC** Chemical Transportation Emergency Center  
**Ci** curie  
**CMAS** Commercial Mobile Alert System  
**CNSNS** Commission for Nuclear Safety and Safeguards  
**CPG** Comprehensive Preparedness Guide  
**cpm** counts per minute  
**CRCPD** Conference of Radiation Control Program Directors  
**CSEPP** Chemical Stockpile Emergency Preparedness Program  
**Cs** cesium  
**DAC** Disaster Application Center  
**DBA** design-basis accident  
**DECON** decontamination



**DFO** Disaster Field Office  
**DHEW** U.S. Department of Health, Education, and Welfare  
**DHS** U.S. Department of Homeland Security  
**DIL** derived intervention level  
**DIR** Disaster-Initiated Review  
**DNA** U.S. Defense Nuclear Agency  
**DOC** U.S. Department of Commerce  
**DOD** U.S. Department of Defense  
**DOE** U.S. Department of Energy  
**DOH** U.S. Department of Health  
**DOI** U.S. Department of the Interior  
**DOL** U.S. Department of Labor  
**DOS** U.S. Department of State  
**DOT** U.S. Department of Transportation  
**DPM** disintegrations per minute  
**DRD** direct-reading dosimeter  
**DRL** derived response levels  
**DRP** Division of Radiation Protection (DOH Division)  
**DRSS** Division of Radiation Safety and Safeguards  
**DSO** Director of Site Operations (NRC)  
**E 911** Enhanced 9-1-1  
**EAB** Exclusion Area Boundary  
**EACT** Emergency Action and Coordination Team  
**EAL** Emergency Action Level  
**EAS** Emergency Alert System [formerly Emergency Broadcast System (EBS)]  
**EBS** Emergency Broadcast System [replaced by the Emergency Alert System (EAS)]  
**ECC** Emergency Communications Center  
**ECCS** emergency core cooling system  
**ECL** Emergency Classification Level  
**ED** Exercise Day  
**EDE** effective dose equivalent  
**EEG** Exercise Evaluation Guide  
**EEM** Exercise Evaluation Methodology (obsolete term)  
**EENET** Emergency Educational Network  
**EICC** Emergency Information Coordination Center (FEMA)  
**EIS** Emergency Information System  
**EM** emergency management  
**EMI** Emergency Management Institute (FEMA)  
**EMPO** Emergency Medical Preparedness Office  
**EMS** Emergency Medical Services  
**EMT** Emergency Medical Technician  
**EO** Emergency Office  
**E.O.** Executive Order of the President  
**ECC** Emergency Coordination Center (State, Tribal or local government)  
**EOF** Emergency Operations Facility (utility)  
**EOP** Emergency Operations/Operating Plan or Procedure  
**EOP** extent of play  
**EOV** emergency operations vehicle

**EP** Emergency Preparedness  
**EPA** U.S. Environmental Protection Agency  
**EPD** electronic personnel dosimeter  
**EPG** Exercise Preparation Guide  
**EPO** Environmental Protection Officer  
**EPZ** Emergency Planning Zone  
**ER** emergency room  
**ERC** Emergency Response Coordinator  
**ERDA** Energy Research and Development Administration  
**ERPA** Emergency Response Planning Area  
**ERPG** Emergency Response Guidelines  
**ERPS** Effluents Radiation Protection Section  
**ERT** Emergency Response Team  
**ERT-A** Emergency Response Team – Advance  
**ESF** Emergency Support Function  
**ESP** Early Site Permit  
**EST** Emergency Support Team (FEMA)  
**ETA** estimated time of arrival  
**ETE** Evacuation Time Estimate  
**ETS** Evacuation Time Study  
**EW** emergency worker  
**EWAC** emergency worker and assistance center  
**EWCC** emergency worker center  
**EWMDS** emergency worker monitoring and decontamination station  
**ExPlan** Exercise Plan  
**FAA** Federal Aviation Administration  
**FBI** Federal Bureau of Investigation  
**FCC** U.S. Federal Communications Commission  
**FCO** Federal Coordinating Officer  
**FCP** Field/Forward Command Post  
**FDA** U.S. Food and Drug Administration  
**FECC** Federal Emergency Communications Coordinator  
**FEMA** Federal Emergency Management Agency  
**FFE** Federal Field Exercise  
**FMT** Field Monitoring Team  
**FNF** fixed nuclear facility  
**FNSS** Functional Needs Support Services  
**FOC** Forward Operations Center  
**FPC** Federal Preparedness Coordinator  
**FPM** Final Planning Meeting  
**FR** Federal Register  
**FRC** Federal Regional Center  
**FRC** Federal Response Center  
**FRERP** Federal Radiological Emergency Response Plan  
**FRMAC** Federal Radiological Monitoring and Assessment Center  
**FRMAP** Federal Radiological Monitoring and Assistance Plan  
**FRMT** Field Radiological Monitoring Team  
**FRPCC** Federal Radiological Preparedness Coordinating Committee

**FRSSB** Facilities Radiological Safety and Safeguards Branch  
**FSA** Forward Staging Area  
**FSAR** Final Safety Analysis Report  
**FTC** Field Team Coordinator  
**FTS** Federal Telecommunications System  $\gamma$  gamma ray (photon)  
**GE** General Emergency  
**GCF** ground concentration factor  
**Ge (Li)** lithium drifted germanium  
**GIS** geographic information system  
**GM** Guidance Memorandum  
**G-M** Geiger-Mueller (radiation detector)  
**GMT** Greenwich Mean Time (a.k.a. UTC or Zulu)  
**GPS** global positioning system  
**GSA** U.S. General Services Administration  
**H<sub>2</sub>** hydrogen (molecular)  
**H<sub>2</sub>O** water  
**HAB** hostile action-based  
**HAZMAT** hazardous materials  
**HEAR** Hospital Emergency Administrative Radio  
**HEPA** high-efficiency particulate air (filters)  
**HF** high frequency  
**HF** hydrogen fluoride  
**HHS** U.S. Department of Health and Human Services  
**HOO** Headquarters Operations Officer (NRC)  
**HP** health physicist  
**HPSI** high pressure safety injection  
**HPT** health physics technician  
**HSEEP** Homeland Security Exercise and Evaluation Program  
**HSPD** Homeland Security Presidential Directive  
**HUD** U.S. Department of Housing and Urban Development  
**HQ** headquarters  
**I** iodine  
**I** exposure intensity  
**IAEA** International Atomic Energy Agency  
**IC** Incident Commander  
**ICPAE** Interagency Committee for Public Affairs in Emergencies  
**ICP** Incident Command Post  
**ICS** Incident Command System  
**IDLH** immediately dangerous to life or health  
**IEP** Ingestion Exposure Pathway  
**IMAAC** Interagency Modeling and Atmospheric Assessment Center  
**INEEL** Idaho National Engineering and Environmental Laboratory  
**INPO** Institute for Nuclear Power Operations  
**IP** implementing procedure  
**IP** Improvement Plan  
**IPAWS** Integrated Public Alert and Warning System  
**IPM** Initial Planning Meeting  
**IRAC** Interagency Radiological Assistance Committee

**IRAP** Interagency Radiological Assistance Plan (replaced with FRMAP)

**IRZ** Immediate Response Zone

**IS** Independent Study

**ISCORS** Interagency Steering Committee on Radiation Standards

**JIC** Joint Information Center

**JIS** Joint Information System

**JNC** Joint News Center

**JOC** Joint Operations Center

**JPIC** Joint Public Information Center

**KI** potassium iodide

**kV** kilovolt

**kW** kilowatt

**kWh** kilowatt hour

**lbf** pound force

**LANL** Los Alamos National Laboratory

**LAO** Lead Agency Official

**LD** lethal dose

**LEPC** Local Emergency Planning Committee

**LERN** Law Enforcement Radio Net

**LFA** Lead Federal Agency

**LLEA** Local Law Enforcement Agency

**LLNL** Lawrence Livermore National Laboratory

**LOA** Letter of Agreement

**LOCA** loss of coolant accident

**LPN** licensed practical nurse

**LPZ** low population zone

**LWR** light water reactor

**MAC** Monitoring and Analysis Coordinator

**MAELU** Mutual Atomic Energy Liability Underwriters

**MERRT** Medical Emergency Radiological Response Team

**MERS** Mobile Emergency Response Support

**MET** meteorological

**MHz** megahertz

**MIC** Media Information Center

**MOA** Memorandum of Agreement

**MOU** Memorandum of Understanding

**MPC** maximum permissible concentration

**MPM** Midterm Planning Meeting

**mR** milliroentgen/millirem

**mR/h** milliroentgen per hour

**mRem** millirem

**MRV** mobile response vehicle

**MS-1** Medical Services (term from retired guidance memorandum)

**MSEL** Master Scenario Events List

**MSHA** U.S. Mine Safety and Health Administration

**MT** metric ton

**MW** megawatt

**MWH** megawatt hour

**MUDAC** Meteorological and Unified Dose Assessment Center

**μ** micro

**μCi** microcuries

**NAAQS** National Ambient Air Quality Standards

**NAERG** North American Emergency Response Guidebook

**NaI(Tl)** sodium iodide doped with thallium (scintillator)

**NARAC** National Atmospheric Release Advisory Center (DOE)

**NARP** Nuclear Accident Response Plan (or Procedures)

**NASA** National Aeronautics and Space Administration

**NAWAS** National Warning System

**NCC** National Coordinating Center for Telecommunications

**NCP** National Contingency Plan

**NCRP** National Council on Radiation Protection and Measurements

**NCS** National Communications System

**NDA** National Defense Area

**NEI** Nuclear Energy Institute

**NEMA** National Emergency Management Association

**NEP** National Exercise Program

**NESC** National Exercise Simulation Center

**NESP** National Environmental Studies Project (NUMARC)

**NETC** National Emergency Training Center (FEMA)

**NEXS** National Exercise Schedule

**NFPA** National Fire Protection Association

**NGO** non-governmental organization

**NIFC** National Interagency Fire Center

**NIMS** National Incident Management System

**NIOSH** U.S. National Institute for Occupational Safety and Health

**NIST** U.S. National Institute of Standards & Technology [formerly National Bureau of Standards (NBS)]

**NMSS** Nuclear Materials Safeguards and Security

**NOAA** U.S. National Oceanic and Atmospheric Administration

**NOUE** Notification of Unusual Event

**NPD** National Preparedness Directorate

**NPP** nuclear power plant

**NPS** U.S. National Park Service

**NRC** U.S. Nuclear Regulatory Commission

**NRF** National Response Framework

**NRIA** Nuclear/Radiological Incident Annex (NRF)

**NRT** National Response Team

**NSA** National Security Area

**NTS** Nevada Test Site

**NTSB** U.S. National Transportation Safety Board

**NUMARC** Nuclear Management and Resources Council

**NUREG** NRC nuclear regulatory publication

**NUREG-0654** NUREG-0654/FEMA-REP-1, Revision 1, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*, November 1980

**NVLAP** National Voluntary Laboratory Accreditation Program

**NWS** U.S. National Weather Service

**OAR** Office of Air and Radiation  
**OCRWM** Office of Civilian Radioactive Waste Management  
**OFA** Other Federal Agencies  
**OEM** Office of Emergency Management  
**OMB** Office of Management and Budget  
**OOS** Out of Sequence  
**ORIA** Office of Radiation and Indoor Air (EPA)  
**ORNL** Oak Ridge National Laboratory  
**ORO** Offsite Response Organization  
**OSC** Operational Support Center  
**OSC** On-Scene Coordinator/Commander  
**OSL** Optically Stimulated Luminescence  
**OSHA** U.S. Occupational Safety and Health Administration  
**OST** Operation Support Team  
**PA** Public Address  
**PA** Public Affairs  
**PAs** Protective Actions  
**PAD** Protective Action Decision  
**PAG** Protective Action Guide  
**PAO** Public Affairs Officer  
**PAR** Protective Action Recommendation  
**PAZ** Protective Action Zone  
**PFO** principal Federal official  
**PEL** permissible exposure limit  
**PHS** Public Health Service  
**PIC** pressurized ion chamber  
**PIO** Public Information Officer  
**PKEMRA** Post-Katrina Emergency Management Reform Act  
**PL** Public Law  
**POR** Point of Review  
**PPE** personal protective equipment  
**ppm** parts per million  
**PRD** Permanent Record Dosimeter  
**psi** pounds per square inch  
**psia** pounds per square inch absolute  
**psig** pounds per square inch gage  
**Pu** plutonium  
**PWR** pressurized water reactor  
**PZ** Precautionary Zone  
**§** Part (see CFR)  
**Q** release rate of activity  
**Q<sub>i</sub>** isotopic release rate  
**Q<sub>r</sub>** total activity released  
**R** roentgen  
**R/h** roentgen per hour  
**Ra** radium  
**RA** Regional Administrator  
**RAC** Regional Assistance Committee

**RAC AC** Regional Assistance Committee Advisory Council  
**RACES** Radio Amateur Civil Emergency Services  
**rad** radiation absorbed dose  
**RADLAB** radiological laboratory  
**RAM** radioactive material  
**RAP** Radiological Assistance Program (DOE)  
**RASCAL** Radiological Assessment System for Consequence Analysis  
**RC** reception/relocation center  
**RCC** reception and congregate care  
**RCF** release conversion factor  
**RCS** reactor coolant system  
**RCT** Response Coordination Team  
**RDO** Radiological Defense Officer  
**RDO** Regional Duty Officer  
**REA** Radioactive Emergency Area  
**REDAM** Radiological Emergency Dose Assessment Model  
**REL** recommended exposure limit  
**rem** roentgen equivalent man/mammal  
**REP** Radiological Emergency Preparedness  
**RERO** Radiological Emergency Response Operations  
**RERP** Radiological Emergency Response Plan  
**RERT** Radiological Emergency Response Team  
**RF** radio frequency  
**RG** Review Guide  
**R/h** roentgens per hour  
**RIS** Regulatory Issue Summary  
**RM** Radiological Monitor  
**RMT** Radiological Monitoring Team  
**RO** Radiological Officer  
**ROST** Regional Office Support Team  
**rpm** revolutions per minute  
**RPT** radiation protection technician  
**RRAC** Regional Radiological Assistance Committee  
**RRCC** Regional Response Coordination Center  
**RRF** Regional Response Force  
**RRT** Radiological Response Team  
**RRT** Regional Response Team  
**RX** reactor  
**SAA** State Administrative Agency  
**SAE** Site Area Emergency  
**SAR** search and rescue  
**SAR** Safety Analysis Report  
**SARA** Superfund Amendments and Reauthorization Act of 1986  
**SAV** Staff Assistance Visit  
**SBA** U.S. Small Business Administration  
**SCBA** self-contained breathing apparatus  
**SCO** State Coordinating Officer  
**SEOC** State Emergency Operations Center

**SECOMM** South East Communications  
**SERF** Standard Exercise Report Format  
**SFO** senior FEMA official (FRERP)  
**SGTR** steam generator tube rupture  
**SGTS** standard gas treatment system  
**SME** subject matter expert  
**SOG** standard operating guidelines  
**Sr** strontium  
**SRD** self-reading dosimeter  
**SRF** Service or Agency Response Force  
**SRSC** Strategic Review Steering Committee  
**SRV** safety relief valve  
**SSA** Senior State Advisor  
**SSE** safe shutdown earthquake  
**ST-DOSE** source term to dose  
**SWAT** special weapons and tactics  
**TEPW** Training and Exercise Planning Workshop  
**TBA** thyroid blocking agent (see KI)  
**TCP** traffic control point  
**TDD** telecommunications device for the deaf  
**TEDE** total effective dose equivalent  
**TEP** Training and Exercise Plan  
**TH** technological hazards  
**THD** Technological Hazards Division (FEMA)  
**TL** Team Leader  
**TMI** Three Mile Island Generating Station  
**TSC** Technical Support Center  
**TSP** total suspended particulates  
**TTC** Technical Training Center  
**TTX** Tabletop Exercise  
**U** uranium  
**μCi** microcurie  
**UHF** ultra high frequency  
**UO<sub>2</sub>F<sub>2</sub>** uranyl fluoride  
**US&R** urban search & rescue  
**USACE** U.S. Army Corps of Engineers  
**USC** United States Code  
**USCG** U.S. Coast Guard  
**USDA** U.S. Department of Agriculture  
**UTC** Coordinated Universal Time (a.k.a. GMT or Zulu)  
**V** volt  
**VA** U.S. Veterans Administration  
**VFD** Volunteer Fire Department  
**VFR** visual flight rules  
**VHF** very high frequency  
**VOAD** Voluntary Organization Active in Disaster  
**W** watt  
**WB** whole body



**WP** Warning Point

**Wt** weight

**Z** atomic number

**Z** Zulu (a.k.a. UTC or GMT)

**Zr** zirconium

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
A.1.i	A description of all federal, state, local, tribal, and private-sector organizations comprising the overall offsite response; and	- Chapter (Ch) 2.2 - Ch 2.7 - Ch 3.2	- N/A
A.1.ii	A list of all principal and supporting organizations.	- Ch 2.2 Table 1 - Ch 2.7 - Ch 3.2	- N/A
A.1.a.i	A description of each organization's operational role in an emergency and their relationship to the overall response effort.	- Ch 2.4 - Ch 2.7 - Ch 3.2	- N/A
A.1.b.i	An illustration of each organization and its relationship to the total emergency response effort.	- Ch 2.5, Figure 4	- N/A
A.1.c.i	The individual, by title/position, in charge of the emergency response; and	- Ch 2.3	- IP D-1 Chairperson
A.1.c.ii	The individual, by title/position, coordinating response activities under the authority of the individual in charge.	- Ch 2.3	- IP D-1 Chairperson
A.2.i	The legal authority to assign lead responsibility for emergency preparedness to a particular agency;	- Ch 2.6 - Ch 2.7	- IP D-1 Chairperson
A.2.ii	The legal authority to delegate responsibility and authority for preparedness and response; and	- Ch 2.6	- IP D-1 Chairperson
A.2.iii	The legal authority to declare a "state of emergency" (or "state of disaster emergency") and what special powers may ensue.	- Ch 2.6	- IP D-1 Chairperson - IP D-3 Legal
A.3.i	Identification of key individuals, by title/position, with emergency response roles;	- Ch 2.7 - Ch 3.1	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
A.3.ii	A description of the identified key individuals' assigned functions by functional areas; and	- Ch 2.7 - Ch 3.1	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
A.3.iii	A visual representation of individuals' assigned functions by functional area.	- Ch 2.7 - Ch 3.1	- N/A
A.4.i	A list of support organizations and the type of assistance, including capabilities and resources they will provide;	- Ch 2.6 - Ch 2.7 - Ch 3.3 - Annex E	- N/A
A.4.ii	(Or reference) Applicable written agreements between the licensee and ORO, including arrangements for NPP site access, if appropriate;	- Ch 2.6 - Ch 3.3 - Annex E	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
A.4.iii	Written agreements annotate the services to be provided through the agreement and how those services will be activated;	<ul style="list-style-type: none"> <li>- Ch 2.6</li> <li>- Ch 3.3</li> <li>- Annex E</li> </ul>	- N/A
A.4.iv	Written agreements by reference or in a suitable appendix; and	<ul style="list-style-type: none"> <li>- Ch 2.6</li> <li>- Ch 3.3</li> <li>- Annex E</li> </ul>	- N/A
A.4.v	A statement that written agreements are reviewed annually to verify their validity, including developing new written agreements and updating signatories as necessary.	<ul style="list-style-type: none"> <li>- Ch 2.6</li> <li>- Ch 3.3</li> <li>- Annex E</li> </ul>	- N/A
A.5.i	The individual(s), by title/position, responsible for ensuring continuity of resources in support of 24-hour operations;	<ul style="list-style-type: none"> <li>- Ch 2.2</li> <li>- Ch 3.3</li> <li>- Annex F</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-1 Chairperson</li> <li>- IP D-2 EOC PIO</li> <li>- IP D-3 Legal</li> <li>- IP D-4 Sheriff</li> <li>- IP D-5 Health Officer</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> </ul>
A.5.ii	A reference to a roster that identifies at least two shifts of key staff, by title/position;	<ul style="list-style-type: none"> <li>- Ch 2.2</li> <li>- Ch 3.3</li> <li>- Annex F</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-1 Chairperson</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> </ul>
A.5.iii	The individual(s), by title/position, responsible for maintaining the roster, how it will be maintained, and where the roster is located; and	<ul style="list-style-type: none"> <li>- Ch 2.2</li> <li>- Ch 3.3</li> <li>- Annex F</li> </ul>	- N/A
A.5.iv	The shift period and provisions for outgoing staff to brief the incoming staff on the status of the emergency and response activities occurring.	<ul style="list-style-type: none"> <li>- Ch 2.2</li> <li>- Ch 3.3</li> <li>- Annex F</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-1 Chairperson</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> </ul>
<b>B</b>	<b><i>Onsite Emergency Organization</i></b>	<b><i>Licensee Only</i></b>	
C.1.i	Whether an ORO liaison(s) will be provided to the licensee's emergency operations facility (EOF), and if so, the individual(s), by title/position, that would be dispatched;	<ul style="list-style-type: none"> <li>- Ch 4.1</li> </ul>	- IP D-0 EOC Manager
C.1.ii	The emergency response support role the liaison(s) will be fulfilling while at EOF; and	<ul style="list-style-type: none"> <li>- Ch 4.1</li> </ul>	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
C.1.iii	The resources, if any, the OROs will provide to the licensee's EOF.	- Ch 4.1	- N/A
<b>C.2</b>	<b>Provisions made for additional emergency response support and resources are described and include the following (:)</b>	- Ch 4.2	
C.2.a.i	The individual(s), by title/position, authorized to request emergency response support and resources.	- Ch 4.2	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> </ul>
C.2.b.i	A process for identifying potential shortfalls in capabilities and resources;	- Ch 4.2	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> <li>- IP S-6 Red Cross</li> </ul>
C.2.b.ii	The organization(s) from which emergency response support and/or resources may be requested;	<ul style="list-style-type: none"> <li>- Ch 2.7</li> <li>- Ch 4.2</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> </ul>
C.2.b.iii	Circumstances under which the emergency response support and/or resources would be needed;	- Ch 4.2	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> </ul>
C.2.b.iv	The process for requesting needed emergency response support and/or resources;	- Ch 4.2	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> <li>- IP O-1 Fire Coordinator</li> <li>- IP O-2 Law Coordinator</li> <li>- IP O-3 FC Public Works</li> <li>- IP O-4 Transportation</li> </ul>
C.2.b.v	Categories of capabilities and/or resources expected to be provided;	- Ch 4.2	- IP O-0 Operations
C.2.b.vi	The amount of time expected for emergency response support and/or resources to be available once requested; and	- Ch 4.2	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <span style="color: red;">Red is Licensee Only</span>		Plan Reference	Associated Implementing Procedure Title
C.2.b.vii	How incoming emergency response support and/or resources will integrate with response efforts.	- Ch 4.2	- N/A
C.2.c.i	Provisions to allow ORO organizations, including mutual aid/supplemental support and resources, access to the NPP;	- Ch 4.1 - Ch 4.2	- N/A
C.2.c.ii	Identification of means for granting access to personnel from each organization who are authorized site access resources; and	- Ch 4.1 - Ch 4.2	- N/A
C.2.c.iii	Provisions for coordination between in-bound response resources and evacuation efforts.	- Ch 4.1 - Ch 4.2	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations - IP O-1 Fire Coordinator - IP O-2 Law Coordinator - IP O-3 FC Public Works - IP O-4 Transportation
C.2.d.i	A list of external organizations that have agreed to provide requested emergency response support to the NPP, as well as the type of support they will provide.	- Ch 4.1 - Ch 4.2	- N/A
C.3.i	Identification of principal organizations;	- Ch 2.7 - Ch 4.3	- N/A
C.3.ii	Roles and responsibilities of principal organizations based on their authorities;	- Ch 2.7 - Ch 4.3	- N/A
C.3.iii	A description of how coordination and integration between principal organizations will occur; and	- Ch 4.3	- N/A
C.3.iv	Whether a representative(s) from another organization will be provided to ORO operational centers (e.g., a county emergency operations center [EOC]) to act as a liaison(s), and if so, identification of the individual(s), by title/position, that would be dispatched.	- Ch 4.3	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations - IP O-1 Fire Coordinator - IP O-2 Law Coordinator - IP O-3 FC Public Works - IP O-4 Transportation
C.4.i	The laboratories qualified to analyze samples of potentially contaminated materials;	- Ch 4.4 - WA State, DOH/ORP Responsibility	- N/A
C.4.ii	A description of the radiochemical and analytical capabilities of each laboratory;	- Ch 4.4 - Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
C.4.iii	The laboratories' locations and expected availability of each laboratory to provide services; and	<ul style="list-style-type: none"> <li>- Ch 4.4</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
C.4.iv	The number of samples the laboratories would be able to process in a given period.	<ul style="list-style-type: none"> <li>- Ch 4.4</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
C.5	<i>Describe arrangements for integrating Licensee's response with NRC</i>		
D.1, D.1.a	<i>EALs Developed</i>		
D.1.b.i	Reference the standard ECLs;	<ul style="list-style-type: none"> <li>- Ch 1.2</li> <li>- Ch 5.1</li> <li>- Ch 5.2</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-1 Chairperson</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> </ul>
D.1.b.ii	Acknowledgment that the ECL system will form the basis for determining the level of response to an incident that will be coordinated with the licensee; and	<ul style="list-style-type: none"> <li>- Ch 5.1</li> <li>- Ch 5.2</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-1 Chairperson</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> </ul>
D.1.b.iii	Agreement on the initial ECL scheme and an annual review of the scheme.	<ul style="list-style-type: none"> <li>- Ch 5.1</li> <li>- Ch 5.2</li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
D.2	<i>The capability to assess, classify, and declare the emergency condition within 15 minutes after the availability of indications to NPP operators that an EAL has been met or exceeded is described</i>		
D.3	<i>A summary of emergency response measures to be taken for each ECL is provided. The detailed emergency response measures are described in implementing procedures</i>		
D.4.i	The minimum emergency response measures to be taken to protect the public at each ECL, given the offsite conditions at the time of the emergency.	<ul style="list-style-type: none"> <li>- Ch 5.1</li> <li>- Ch 5.2</li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
E.1.i	The agreed upon process for direct and prompt notification to both response organizations and the designated offsite 24-hour warning point;	<ul style="list-style-type: none"> <li>- Ch 6.1</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> </ul>

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
E.1.ii	A statement that the agreed upon notification process is aligned with the emergency classification and action level scheme as described in D.1.b;	- Ch 6.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.1.iii	The process for when the initial notification originates from an entity other than the licensee; and	- Ch 6.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.1.iv	The agreed upon process for disseminating subsequent notifications from the licensee and/or ORO to other offsite organizations.	- Ch 6.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.1.a.i	Method for verifying the initial notification from the licensee to the 24-hour warning point, if applicable;	- Ch 6.1 - Ch 6.2 - Table 7	- IP D-0 EOC Manager IP D-2 EOC PIO
E.1.a.ii	Provisions for notifying all appropriate response organizations, including specific notifications made at each ECL;	- Ch 6.1 - Ch 6.2 - Ch 6.3	- IP D-0 EOC Manager - IP O-0 Operations
E.1.a.iii	The individual(s), by title/position, responsible for notifying emergency response personnel within their organization; and	- Ch 6.1 - Ch 6.2 -	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
E.1.a.iv	Individual(s), by title/position, responsible for disseminating subsequent notifications.	- Ch 6.1 - Ch 6.2 -	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.1.b	<i>The capability to notify responsible OROs within 15 minutes and the NRC within 60 minutes is described.</i>		
E.2.i	A statement that the ANS is capable of meeting the 15-minute design objective;	- Ch 6.1 - Ch 6.3	- N/A
E.2.ii	A description of the physical means of alert and notification, including the system(s) used to alert and notify the general public, persons with disabilities and access/functional needs, and exception areas (if applicable), and their respective point(s) of activation;	- Ch 6.1 - Ch 6.3 - Ch 6.6	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
E.2.iii	A description of the administrative means of alert and notification, including(:)	- Ch 6.1 - Ch 6.3	
E.2.iii (a)	Title of the organizations or individuals responsible for: (1) making the decision to activate the ANS and (2) activating the system; and	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager (1,2) - IP D-2 EOC PIO (2)

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
E.2.iii (b)	ANS activation procedures and associated time needed to implement these procedures.	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP-4 Columbia River Sirens</li> <li>- IP C-1 River Siren &amp; EAS Activation</li> <li>- IP C-2 Weekly Siren &amp; EAS Test</li> <li>- IP C-3 River Siren Annual Test</li> </ul>
E.2.iv	List of broadcast stations and/or other systems (e.g., Integrated Public Alert and Warning System [IPAWS], National Weather Service (NWS), tone alert radios, route alerting) used to provide emergency instructions to the public;	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> </ul>
E.2.v	Describe the broadcast stations' or systems' capability to participate in the public notification process;	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	- N/A
E.2.vi	If broadcast stations are used to activate the system, a description of individual responsibilities from each broadcast station and system, and documentation agreed upon commitments (e.g., MOUs and/or LOAs) to honor their responsibilities in a radiological incident;	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	- N/A
E.2.vii	Identification of the broadcast station and system points of contact, by title/position, who are accessible 24 hours a day, 7 days a week and identification of an alternate station if the selected station does not have backup power supply;	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> <li>- IP O-0 Operations</li> </ul>
E.2.viii	Provisions for special news broadcasts to disseminate supplemental information to the emergency alert system (EAS) message; and	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> </ul>
E.2.ix	The interval for broadcasting official information statements.	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> </ul>
E.3.i	Initial notification templates to capture the ECL, whether a release is taking place, any populations and areas that may potentially be affected, and whether protective measures may be necessary; and	<ul style="list-style-type: none"> <li>- Ch 6.1</li> <li>- Ch 6.3</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP D-2 EOC PIO</li> </ul>



Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
E.3.ii	Provisions as to what information is to be included in follow-up notifications from the NPP to offsite authorities.	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.4.i	EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast;	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.4.ii	The process for selecting, modifying, approving, and releasing EAS messages;	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.4.iii	The methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes);	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.4.iv	Provisions for follow-up messages; and	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.4.v	Provisions for foreign language translations of EAS messages and special news broadcasts, if required.	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.5.i	A description of how supplemental information is provided periodically to inform the public throughout an incident;	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.5.ii	A description of supplemental topics/messages that may be disseminated; and	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
E.5.iii	A description of the method for disseminating supplemental information.	- Ch 6.1 - Ch 6.3	- IP D-0 EOC Manager - IP D-2 EOC PIO
F.1	Each principal response organization establishes redundant means of communication and addresses the following provisions (:)	- Ch 6.2 - Ch 7.1	
F.1.a.i	A description of the system used to ensure continuous availability to receive and transmit notifications; and	- Ch 6.2 - Ch 7.1	- IP D-0 EOC Manager - IP D-2 EOC PIO

Planning Standards (PS) / To Meet the Intent (MTI) Statements <span style="color: red;">Red is Licensee Only</span>		Plan Reference	Associated Implementing Procedure Title
F.1.a.ii	A description of the equipment used for notifying and communicating with the organization's personnel and other response organizations. The equipment described must include at least two independent communication links.	- Ch 6.2 - Ch 7.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
F.1.b.i	Provisions for a minimum of two independent communication methods between all applicable organizations requiring communications within the plume and ingestion exposure pathway EPZs; and	- Ch 7.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
F.1.b.ii	Organizational titles and alternates for both ends of the communication links.	- Ch 7.1 - Ch 7.2	- IP D-0 EOC Manager - IP D-2 EOC PIO
F.1.c.i	A general description of how emergency personnel are alerted and activated; and	- Ch 7.1 - Ch 7.2	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
F.1.c.ii	Lists of names and contact information of emergency personnel to alert or activate based on the ECL.	- Ch 7.1 - Ch 7.2	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
F.2.i	A description of at least two independent communication methods among the fixed and mobile medical support facilities, applicable EOCs, and the licensee.	- Ch 7.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
F.3.i	A description of the test method and periodicity (e.g., monthly, quarterly or annually) for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2.	- Ch 7.3	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP-4 Columbia River Sirens - IP C-1 River Siren & EAS Activation - IP C-2 Weekly Siren & EAS Test - IP C-3 River Siren Annual Test
G.1.i	A description of public information material(s) (e.g., brochure, utility bill insert, current technology used for disseminating public information) distributed annually to the general public within the plume exposure pathway EPZ, including the dissemination method(s) used to reach all residences;	- Ch 8.1	- N/A
G.1.ii	Provisions for identifying individuals who need evacuation assistance and how personally identifiable information (PII) will be protected;	- Ch 8.1	- IP O-0 Operations

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
G.1.iii	A description of public information material(s) (e.g., visitor brochure) targeted to transient populations, including dissemination method(s);	- Ch 8.1	- N/A
G.1.iv	Provisions for providing accessible public information for those with access and functional needs within the plume exposure pathway EPZ; and	- Ch 8.1	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
G.1.v	Mechanisms for translating public information for non-English speaking populations within plume exposure pathway EPZ.	- Ch 8.1	- IP D-0 EOC Manager - IP D-2 EOC PIO
G.2.i	The physical location(s) for briefing and interacting with the media;	- Ch 8.3	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff
G.2.ii	A physical description of the media briefing facility(ies);	- Ch 8.3	- IP JIC-1 JIC PIO Staff
G.2.iii	A description of the organization's capability to answer media telephone inquiries; and	- Ch 8.3	- N/A
G.2.iv	The mechanism for coordination between the team of personnel designated to answer media calls and the organization's spokesperson(s)/Public Information Officer(s) (PIO(s)), as well as POCs located at other facilities supporting the joint information center (JIC).	- Ch 8.3	- IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff - IP S-0 Message Controller
G.3.i	Identification of the individual(s), by title/position, to serve as news media point(s) of contact and spokesperson(s)/ PIO(s) at designated media briefing location(s);	- Ch 8.4	- IP D-0 EOC Manager - IP D-2 EOC PIO
G.3.ii	If operating remotely from the EOC, a description of how the exchange of information between the EOC and other media briefing location(s) will be coordinated;	- Ch 8.4	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff
G.3.iii	The process for identified individual(s) to obtain, verify, and coordinate approval in advance of disseminating information to the public and/or media; and	- Ch 8.4	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff
G.3.iv	Procedures for control and authorization of releasing sensitive information.	- Ch 8.4	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
G.3.a.i	Provisions for the timely exchange, discussion, and coordination of information among all designated spokespersons/PIOs, including those at different locations.	- Ch 8.3 - Ch 8.4 - Ch 12.3	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff
G.4.i	A description of the capability to effectively receive and manage numerous, simultaneous responses to public inquiries, and address inaccurate information;	- Ch 8.5	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff - IP S-0 Message Controller
G.4.ii	The method(s) for publicizing all the available communication channels, including dedicated telephone number(s) and other platforms, for public inquiries;	- Ch 8.5	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff - IP S-0 Message Controller -
G.4.iii	Provisions for monitoring public inquiries and media messaging to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain; and	- Ch 8.5	- IP JIC-1 JIC PIO Staff
G.4.iv	If an ORO sends a delegate or relies on another organization to answer public inquiries, identify which organization provides or coordinates the public inquiries and the method for contacting that organization.	- Ch 8.5	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP JIC-1 JIC PIO Staff - IP S-0 Message Controller
G.5.i	Provisions for an annual media briefing or other information exchange means to acquaint news media with emergency plans, the media's role during an incident response, and other radiological incident response topics;	- Ch 8.2 - Ch 8.3	- N/A
G.5.ii	A description of each informational item provided in the media kits; and	- Ch 8.2	- IP JIC-1 JIC PIO Staff -
G.5.iii	Means of distributing media kits.	- Ch 8.2	- IP JIC-1 JIC PIO Staff -
H.1	<i>A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.</i>		
H.2	<i>An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.</i>		

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<i>H.3</i>	<i>An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.</i>		
<i>H.3.a</i>	<i>For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.</i>		
<i>H.4</i>	<i>An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.</i>		
<i>H.5</i>	<i>A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.</i>		
H.6.i	A description of, or reference to, the location and layout of the EOC;	- Ch 9.1	- IP S-0 Message Controller - IP S-3 Security
H.6.ii	The organization and official, by title/position, responsible for maintaining the operational readiness of the EOC;	- Ch 9.1	- IP D-0 EOC Manager
H.6.iii	A list of facility equipment necessary to support EOC operations;	- Ch 9.1	- IP D-0 EOC Manager - IP O-0 Operations - IP S-0 Message Controller - IP S-3 Security
H.6.iv	Access control details into the facility;	- Ch 9.1	- IP O-0 Operations - IP S-3 Security
H.6.v	Backup power capability to the facility, if available; and	- Ch 9.1	- N/A
H.6.vi	A description of, or reference to, the location and layout of the alternate EOC, if applicable.	- Ch 2.5 - Ch 9.1	- N/A
<i>H.7</i>	<i>Onsite monitoring systems</i>		
<i>H.8</i>	<i>Provisions are made to acquire data from offsite monitoring and analysis equipment</i>		

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
H.9.i	A description of radiological monitoring equipment, by type and amount, that is located at or stored near the NPP, or will be brought in by the ORO; and	- Ch 9.1 - Ch 9.2 - Ch 9.3	- N/A
H.9.ii	A list of fixed radiological monitoring stations near the NPP.	- Ch 9.1 - Ch 9.2	- N/A
<i>H.10</i>	<i>Instrumentation is provided to obtain current meteorological information</i>		
H.11.i	Quantities of instruments, equipment, and supplies necessary to ensure that procedures in the plan can be performed; and	- Ch 9.1 - Ch 9.2 - Ch 9.3	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
H.11.ii	Backup emergency equipment and supply reserves/replacements.	- Ch 9.1 - Ch 9.2 - Ch 9.3	- N/A
H.11.a.i	The organization(s) responsible for testing and maintenance of all emergency equipment.	- Ch 9.1 - Ch 9.2 - Ch 9.3	- N/A
H.11.b.i	Specifics for maintaining and conducting calibration and operational checks of emergency equipment;	- Ch 9.1 - Ch 9.2 - Ch 9.3 -	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
H.11.b.ii	Tests to be performed on each type of equipment and who will complete those tests; and	- Ch 9.1 - Ch 9.2 - Ch 9.3 -	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
H.11.b.iii	Documentation methods for all testing and maintenance procedures performed.	- Ch 9.1 - Ch 9.2 - Ch 9.3	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
H.12.i	The number and contents of emergency kits by location and general category; and	- Ch 9.2	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
H.12.ii	The quantity of each item per kit.	- Ch 9.2	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
H.13.i	Organization(s) responsible for assessing radiological data;	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
H.13.ii	The location(s) for the receipt and analysis for compiling and analyzing all field monitoring data, including the means used by FMTs to relay information to the identified location(s); and	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
H.13.iii	The coordination and analysis of sample media, including procedures for transporting samples and transferring the data from the laboratory to the identified location(s).	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
<i>I.1</i>	<i>Capabilities for performing radiological assessment for all reactor core and spent fuel pool sources, individually and collectively, including response to events occurring simultaneously at all units on the NPP site, are described. These capabilities include:</i>	- WA State, DOH/ORP Responsibility	
<i>I.1.a</i>	<i>Methods for determining the magnitude and isotopic composition of an ongoing release of radioactive material through waterborne or airborne release pathways, or estimating these parameters for a potential release.</i>	- WA State, DOH/ORP Responsibility	
<i>I.1.b</i>	<i>A radiological assessment model for airborne releases that provides estimates of offsite radiation exposures and contamination levels using a dispersion model that is representative of the plant release points, topographical features, and meteorological regimes at the NPP site.</i>	- WA State, DOH/ORP Responsibility	

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<i>I.1.c</i>	<i>A capability to coordinate and implement in-field radiological assessments by FMTs and provisions to assess the data obtained.</i>	- WA State, DOH/ORP Responsibility	
I.2.i	Methods and locations for sampling drinking water; and	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.2.ii	Supporting laboratory procedures that demonstrate the capability to detect radioisotopes at derived response levels (DRLs) for the most sensitive population.	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
<i>I.3</i>	<i>The capability and responsibility for monitoring the following parameters, which provide input to radiological assessments during an emergency, are described:</i>	- WA State, DOH/ORP Responsibility	
<i>I.4</i>	<i>The methods and responsibility for determining the source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are described.</i>	- WA State, DOH/ORP Responsibility	
<i>I.4.a</i>	<i>The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.</i>	- WA State, DOH/ORP Responsibility	
I.5.i	The organizations responsible for FMT activities; and	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.5.ii	The capabilities and resources of FMTs.	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.i	The process for activating and notifying FMTs;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.ii	The composition of FMTs (e.g., organizations involved, number of teams [two or more], number of members on each team);	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.iii	Means of transportation available for FMTs (e.g., four-wheel drive vehicles);	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A



Planning Standards (PS) / To Meet the Intent (MTI) Statements <span style="color: red;">Red is Licensee Only</span>		Plan Reference	Associated Implementing Procedure Title
I.6.iv	Estimated deployment times to reach monitoring or sampling locations, if applicable;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.v	Staging area location(s) that may be used as initial deployment points for FMTs;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.vi	The individual, by title/position, responsible for directing FMTs to proper locations for monitoring and air sampling;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.vii	The process for obtaining centerline and plume-edge measurements;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.viii	Monitoring, sampling, and communications equipment used by FMTs;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.ix	Procedures for field monitoring, sample collection, and field sample analysis and the calculations to be used to characterize the plume, specifically those used to determine radioiodine concentrations;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.x	The laboratories designated to analyze specific samples (specific radioisotopes), including associated estimated delivery and analysis times, transportation and temporary storage arrangements, and procedures for chain-of-custody records; and	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.6.xi	Requirements for FMT members' radiological exposure control.	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.7.i	The capability to collect air samples within the plume exposure pathway EPZ and perform analysis that will detect radioiodine concentrations as low as 10-7 $\mu$ Ci/cc under field conditions;	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.7.ii	The process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count; and	- Ch 10.1 - WA State, DOH/ORP Responsibility	- N/A
I.7.iii	Calculations that use factors consistent with the ORO specific procedures to calculate airborne radioiodine concentrations.	- Ch 10.1	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements Red is Licensee Only		Plan Reference	Associated Implementing Procedure Title
		- WA State, DOH/ORP Responsibility	
I.8.i	A description of personnel and equipment that will be involved in dose assessment;	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.ii	A description of dose assessment computer software, including documentation and data input procedures, that will be used;	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.iii	Alternate calculation methods that may be used (e.g., hand calculations);	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.iv	Information/variables to run the model, including proper units of measure;	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.v	Means for obtaining initial information (e.g., from licensee monitors or inventory estimates);	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.vi	A description of how field data will verify and modify model results; and	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.8.vii	Procedures for comparing dose results with those of other organizations that perform dose assessments.	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.9.i	Planned use of outside resources, to locate and track the plume, including taking measurements and collecting air samples from or near the plume's peak concentration, if applicable.	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.10.i	Methods of integrating monitoring and analytical augmentation and support from other state, licensee, educational and research facilities, and government and private organizations; and	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A
I.10.ii	Procedures and responsibilities for integrating Federal agency monitoring, analysis, and data management support.	- Ch 9.5 - WA State, DOH/ORP Responsibility	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.1	<i>The means and time required to alert, notify, and provide a range of protective actions for onsite individuals and individuals who may be in areas controlled by the licensee (including members of the public) during a radiological incident are described.</i>		
J.1.a	<i>Provisions are made for evacuation of onsite non-essential personnel at an SAE or General Emergency (GE).</i>		
J.2.i	A description of assistance provided to licensees during an onsite evacuation or a statement that no assistance is required;	- Ch 11.1	- N/A
J.2.ii	The offsite location where onsite individuals will be transported;	- Ch 11.1	- N/A
J.2.iii	Alternative offsite location(s) and evacuation route(s) for use during inclement weather, when there is high traffic density, and/or during potential radiological conditions; and	- Ch 11.1	- N/A
J.2.iv	Provisions for coordinating arrangements with other OROs to expedite evacuation of onsite personnel.	- Ch 11.1	- N/A
J.3	<i>Provisions for radiological monitoring and decontamination, if necessary, of personnel evacuated from the NPP site are described.</i>		
J.4	<i>The capability to account for all individuals inside the NPP Protected Area following declaration of an SAE or GE is described.</i>		
J.5	<i>Provisions are made for personal radiological protection for individuals arriving or remaining onsite during the incident.</i>		
J.6.i	The rationales used to make initial and subsequent PARs;	- Ch 11.3 - Ch 11.4	- N/A
J.6.ii	The basis and methodology used in developing PARs, including references to applicable Federal guidance; and	- Ch 11.3 - Ch 11.4	- N/A
J.6.iii	The basis and methodology used in developing PARs involving radioprotective drugs, including references to applicable Federal guidance.	- Ch 11.3 - Ch 11.4 - Ch 11.8	- N/A
J.7.i	A site-specific protective action strategy or decision-making process that is coordinated between the licensee and OROs;	- Ch 11.5	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.7.ii	References to current Federal guidance and methodologies used in developing the protective action strategy or decision-making process; and	- Ch 11.5	- N/A
J.7.iii	Specific information from the evacuation time estimate (ETE) study used to develop protective action strategies.	- Ch 11.5	- N/A
J.8.i	The latest ETE information to plan for an evacuation.	- Ch 11.5	- N/A
<i>J.8.a</i>	<i>Incorporated either by reference or in their entirety into the emergency plan.</i>	<i>Licensee Only</i>	
J.8.b.i	A reference or summary of the latest ETE analysis used for evacuation planning;	- Ch 11.5	- N/A
J.8.b.ii	Time estimates for evacuation of various sectors or evacuation areas;	- Ch 11.5	- N/A
J.8.b.iii	Time estimates for movement of populations in specific areas, particularly for individuals with access and functional needs;	- Ch 11.5	- N/A
J.8.b.iv	Evacuation routes and traffic capacities of evacuation routes; and	- Ch 11.5	- N/A
J.8.b.v	Potential use of alternate evacuation routes.	- Ch 11.5	- N/A
J.9.i	Process for communicating PARs to designated OROs responsible for making PADs.	- Ch 11.4 -	- IP D-0 EOC Manager
J.10.i	Clear and legible maps, charts, and other pertinent plume exposure pathway EPZ information necessary to support emergency response.	- Ch 11.6 - Figures 6-9	- N/A
J.10.a.i	Clear, legible maps of all evacuation routes, evacuation areas, reception/relocation centers in host jurisdictions, and shelter areas/congregate care centers.	- Ch 11.6 - Figures 6-9	- N/A
J.10.b.i	Clear, legible maps, charts, or other information showing population distribution around the NPP site by evacuation areas.	- Ch 11.6	- N/A
J.11.i	The process for considering PARs provided;	- Ch 11.3 - Ch 11.4	- IP D-0 EOC Manager

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.11.ii	Procedures for making PADs and the rationale for initial and subsequent PADs;	- Ch 11.3 - Ch 11.4	- N/A
J.11.iii	Procedures for implementing protective actions based upon PAGs that are consistent with EPA recommendations; and	- Ch 11.3 - Ch 11.4	- N/A
J.11.iv	The process to ensure coordination of PADs with all appropriate jurisdictions.	- Ch 11.3 - Ch 11.4	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations
J.11.a.i	The means to protect those with impaired mobility because of institutionalization or other confinement (e.g., children in schools or licensed day cares and persons in nursing homes, hospitals, and correctional facilities);	- Ch 11.7	- IP O-0 Operations
J.11.a.ii	Methods for determining the number and location, by evacuation area, of residents, in the plume exposure pathway EPZ who may need assistance, including the type of assistance required;	- Ch 11.7	- IP O-0 Operations
J.11.a.iii	The means for notifying residents needing assistance;	- Ch 11.7	- IP O-0 Operations
J.11.a.iv	Reference lists of documented individuals requiring assistance in an evacuation of the plume exposure pathway EPZ and process for keeping the list(s) up-to-date;	- Ch 11.7	- N/A
J.11.a.v	Process for evacuating identified residents and for sheltering those who cannot be moved; and	- Ch 11.7	- IP O-0 Operations
J.11.a.vi	Transportation needs or resources for these groups, including types and quantities of vehicles.	- Ch 11.7	- IP O-1 Fire Coordinator
J.11.b.i	The individual(s), by title/position, with the authority to make decisions regarding the use of radioprotective drugs during an emergency;	- Ch 11.8	- IP D-5 Health Officer
J.11.b.ii	The criteria and decision-making processes for recommending the use of radioprotective drugs;	- Ch 11.8	- IP D-5 Health Officer

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.11.b.iii	Groups who may be advised to take radioprotective drugs;	- Ch 11.8	- IP D-5 Health Officer
J.11.b.iv	A description of the adequate supply of radioprotective drugs for each individual in the plume exposure pathway EPZ, including quantities, storage locations, and means of distribution;	- Ch 9.3 - Ch 9.4 - Ch 11.8	- N/A
J.11.b.v	A description of the adequate maintenance, shelf-life extensions, and timely replacement of radioprotective drugs; and	- Ch 9.3 - Ch 11.8	- IP-2 Inventory/Inspection of EW Kits - IP-3 Inventory/Inspection of Radiation Detection Equipment
J.11.b.vi	Means for communicating a recommendation to take radioprotective drugs to emergency workers, institutionalized persons, and (if included as an option in the plans/procedures) the general public.	- Ch 11.8	- IP D-5 Health Officer
J.11.c.i	A statement identifying which version of the ETE study the evacuation plan and procedures are based on;	- Ch 11.5 - Ch 11.9	- N/A
J.11.c.ii	Means for controlling traffic to assure a safe and efficient evacuation; and	- Ch 11.9	- N/A
J.11.c.iii	The resources and equipment necessary to control traffic control.	- Ch 11.9	- N/A
J.11.d.i	Locations of all reception centers and host schools for evacuees and students by name and address;	- Ch 11.10	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations - IP O-4 Transportation - IP S-6 Red Cross
J.11.d.ii	Organizations responsible for managing reception centers and staffing requirements for each center;	- Ch 11.10	- N/A
J.11.d.iii	Provisions and arrangements for the radiological monitoring of evacuees, service animals, pets, and evacuee vehicles;	- Ch 11.10	- IP O-1 Fire Coordinator
J.11.d.iv	Arrangements for managing students at reception centers and/or host schools;	- Ch 11.10	- IP O-4 Transportation - IP S-1 Edwin Markham - IP S-2 Country Christian - IP S-3 Big River - IP S-4 Basin City
J.11.d.v	Identified hospitals, correctional facilities, and nursing homes that will receive evacuees; and	- Ch 11.10	- IP O-0 Operations

Planning Standards (PS) / To Meet the Intent (MTI) Statements <span style="color: red;">Red is Licensee Only</span>		Plan Reference	Associated Implementing Procedure Title
J.11.d.vi	Arrangements for congregate care based on historical need.	- Ch 11.10	- N/A
J.11.e.i	Means for initial and ongoing control of access to evacuated areas;	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.11.e.ii	Organization(s) responsible for providing access control and staffing TCPs and ACPs;	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.11.e.iii	Maps identifying pre-selected TCPs/ACPs (may be incorporated by reference);	- Ch 11.9	- IP O-2 Law Enforcement - IP O-3 Public Works - IP S-7 WA State Patrol
J.11.e.iv	Equipment and resources needed (e.g., cones or barricades);	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.11.e.v	Procedures and responsibilities for controlling ingress and egress to other areas affected by an incident; and	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works - IP RR2 ACP Staff
J.11.e.vi	Procedures for providing TCP/ACP staff with the status of emergency response activities.	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.11.f.i	Resources available (e.g., personnel and equipment) to clear impediments to use of evacuation routes and emergency response in areas affected by incidents;	- Ch 11.9	- N/A
J.11.f.ii	The potential need to use alternate routes because of traffic impediments, including procedures for implementing alternate evacuation routes; and	- Ch 11.9	- N/A
J.11.f.iii	The individual(s), by title/position, responsible for directing resources and rerouting traffic.	- Ch 11.9	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.11.g.i	Precautionary protective actions that may be taken;	- Ch 11.2	- IP D-0 EOC Manager - IP D-2 EOC PIO
J.11.g.ii	The ECLs at which a precautionary protective action may be taken; and	- Ch 11.2	- IP D-0 EOC Manager - IP D-2 EOC PIO
J.11.g.iii	Methods used to implement precautionary protective actions.	- Ch 11.2	- IP D-0 EOC Manager - IP D-2 EOC PIO

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.12.i	The organization and individual(s), by title/position, with the authority to make decisions in the ingestion exposure pathway EPZ;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- IP D-0 EOC Manager</li> <li>- IP O-0 Operations</li> </ul>
J.12.ii	Planned ingestion protective actions and the rationale for the selection of actions;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.iii	The methodology used to designate the areas of concern where monitoring and sampling will be implemented;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.iv	The methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 9.5</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.v	The analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 9.5</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.vi	The location and means of obtaining up-to-date information on licensed agribusiness facilities within the ingestion exposure pathway EPZ;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.vii	The ability to obtain information on facilities outside the ingestion exposure pathway EPZ at risk for receiving potentially contaminated products, including names and telephone numbers for points of contact;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.viii	The location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 11.11</li> <li>- WA State, DOH/ORP Responsibility</li> </ul>	- N/A
J.12.ix	The DILs that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs;	<ul style="list-style-type: none"> <li>- Ch 1.6</li> <li>- Ch 2.7, DOH-ORP Duties</li> <li>- Ch 11.11</li> </ul>	- N/A



Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
		- WA State, DOH/ORP Responsibility	
J.12.x	The availability of suitable maps, including GIS maps, for recording various data; and	- Ch 1.6 - Ch 2.7, DOH- ORP Duties - Ch 11.11	- IP S-5 EOC GIS
J.12.xi	The means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products.	- Ch 1.6 - Ch 11.10 - Ch 11.11 - WA State, DOH/ORP Responsibility	- IP S-10 WS Dept. of AG
J.13.i	The radiological capabilities to monitor evacuees, service animals, vehicles, and possessions;	- Ch 11.10 - WA State, DOH/ORP Responsibility	- IP E-1-9 RAD Monitor
J.13.ii	Decontamination procedures, including the triggers/action levels that indicate the need for decontamination activities and procedures for medical attention referral;	- Ch 11.10 - WA State, DOH/ORP Responsibility	- IP E-1-9 RAD Monitor
J.13.iii	Contamination control measures, such as safety requirements, decontamination site layout, and decontamination protocol;	- Ch 11.10 - WA State, DOH/ORP Responsibility	- IP E-1-9 RAD Monitor
J.13.iv	The physical layout of the area, with diagrams that show the flow and layout of operations, including a description of the means for separating contaminated, uncontaminated, and unscreened individuals, vehicles, service animals, and pets; and	- Ch 11.10 - WA State, DOH/ORP Responsibility	- N/A
J.13.v	The processes for registering evacuees, service animals, and pets in host/support jurisdictions, including documentation of monitoring for referral to temporary care facilities.	- Ch 11.10 - WA State, DOH/ORP Responsibility	- N/A
J.14.i	General plans for the removal or continued exclusion of individuals from restricted areas; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.ii	Relocation plans are developed when the decision for removal or continued exclusion of individuals from restricted areas.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- IP O-0 Operations

Planning Standards (PS) / To Meet the Intent (MTI) Statements Red is Licensee Only		Plan Reference	Associated Implementing Procedure Title
J.14.a.i	Organization(s) with the responsibility for making decisions on relocation;	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.a.ii	The rationale used to determine areas for relocation; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- IP O-0 Operations
J.14.a.iii	The process for notifying individuals who are being relocated.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.b.i	The process used to identify areas where the projected first-year dose will exceed the 2 rem relocation PAG; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.b.ii	The process for identifying the need for buffer zones, as well as their establishment when warranted.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.c.i	Priorities for relocation; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.c.ii	Designation of intervals to continually assess projected doses from the relocation areas.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.d.i	Establishment of access control/check points around the relocation area;	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- IP O-0 Operations - IP O-2 Law Enforcement - IP O-3 Public Works
J.14.d.ii	Processes for identifying those who are authorized to enter relocation areas;	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.d.iii	Methods to provide exposure and contamination control to those authorized to enter relocation areas; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.d.iv	Establishment of monitoring and decontamination stations at points of egress in the buffer zone around relocation areas.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
J.14.e.i	Methods for monitoring and decontamination of individuals who are being relocated from areas not previously evacuated.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.f.i	Physical and economic assistance for those who are relocated; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
J.14.f.ii	Provisions for physical, economic, and financial assistance of individuals being relocated.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
<i>K.1</i>	<i>The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects (:)</i>		
<i>K.1.a</i>	<i>Onsite emergency exposure guidelines for emergency workers consistent with their assigned duties and current Federal guidance and the conditions under which the guidelines apply.</i>		
<i>K.1.b</i>	<i>The capability to evaluate emergency worker dose (i.e., the sum of the effective dose equivalent and the committed effective dose equivalent) at the time of exposure when direct measurement is not feasible.</i>		
<i>K.1.c</i>	<i>The capability to monitor and assess the radiation doses received by emergency workers for the duration of the incident.</i>		
<i>K.1.d</i>	<i>The capability to implement onsite contamination control measures.</i>		
<i>K.1.e</i>	<i>The capability to decontaminate emergency workers, equipment, and vehicles.</i>		
<i>K.1.f</i>	<i>Appropriate radiation protection briefings for repair teams that are being dispatched into the plant and FMTs being sent onsite and offsite, the scope of which is consistent with the expected risk to the team.</i>		
<i>K.1.g</i>	<i>The process for NPP site access and dosimetry issuance to personnel from OROs arriving to assist with the onsite response.</i>		
K.2.i	(Or reference) The occupational dose limits in accordance with the regulation applicable to their organization;	- Ch 12.1	- IP D-5 Health Officer

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
K.2.ii	The individual(s), by title/position, who can authorize radiation doses in excess of occupational limits; and	- Ch 12.1	- IP D-5 Health Officer
K.2.iii	Processes for authorizing and documenting personnel to exceed occupational dose limits.	- Ch 12.1	- N/A
<i>K.2.a</i>	<i>The process for allowing onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities is described.</i>		
K.2.b.i	Emergency worker dose limits;	- Ch 12.1	- IP D-5 Health Officer
K.2.b.ii	Process for when emergency worker dose limits are reached and subsequently exceeded;	- Ch 12.1	- IP O-2 Law Enforcement
K.2.b.iii	Authorization and documentation processes for authorizing emergency workers to exceed dose limits, including exceeding limits identified in current Federal guidance;	- Ch 12.1	- IP D-5 Health Officer - IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.2.b.iv	Briefing and documentation processes for communicating risks involved for incurring excessive dose; and	- Ch 12.1	- IP D-5 Health Officer - IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.2.b.v	Any special conditions requiring additional limitations.	- Ch 12.1	- N/A
K.3.i	Types and quantities of dosimeters (and dosimeter chargers, when applicable) available per location and the number of emergency workers requiring dosimetry devices;	- Ch 9.3 - Ch 9.4 - Ch 12.2	- N/A
K.3.ii	Dosimetry storage locations;	- Ch 9.3 - Ch 9.4 - Ch 12.2	- N/A
K.3.iii	Process for distributing dosimeters to all emergency workers;	- Ch 9.3 - Ch 9.4 - Ch 12.2	- N/A
K.3.iv	Exposure control methods for emergency workers, including exposure from inhalation;	- Ch 9.3 - Ch 12.1	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
K.3.v	Process for reading DRDs and any early reading of PRDs; and	- Ch 12.1	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.3.vi	Specific dosimetry instructions, including record keeping of dosimeter readings and return of dosimeters.	- Ch 9.3 - Ch 12.1	- N/A
K.3.a.i	Designated time intervals for reading DRDs;	- Ch 12.2	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.3.a.ii	The method for emergency workers to record and report DRD readings;	- Ch 12.2	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.3.a.iii	The methods for obtaining and recording dose readings from emergency workers;	- Ch 12.2	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.3.a.iv	The method for maintaining dose records for emergency workers; and	- Ch 12.2	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.3.a.v	Appropriate reporting if administrative limits have been reached or exceeded.	- Ch 12.2	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
K.4.i	A description of facilities for monitoring and decontaminating emergency workers, equipment, and vehicles;	- Ch 2.7 - Ch 12.3	- IP EWAC E-1-1 Coordinator
K.4.ii	A description of facilities for monitoring and decontaminating general public, personal possessions, and vehicles;	- Ch 2.7 - Ch 12.3	- EWAC E-1-1 Coordinator
K.4.iii	Locations of monitoring and decontamination facilities (facilities for the public should be located outside the plume EPZ);	- Ch 2.7 - Ch 12.3	- IP D-0 EOC Manager - IP D-2 EOC PIO - IP O-0 Operations - IP O-1 Fire Coordinator - IP S-6 Red Cross
K.4.iv	Number of people needed to perform monitoring and decontamination operations;	- Ch 2.7 - Ch 12.3	- EWAC E-1-1 Coordinator
K.4.v	Survey instruments (i.e., specific appropriate equipment and sensitivity, including radiation type) used to monitor emergency workers, equipment, and vehicles;	- Ch 2.7 - Ch 9.2, Table 14 - Ch 12.3	- N/A
K.4.vi	Other supplies and equipment needed for monitoring and decontamination;	- Ch 2.7 - Ch 9.2, Table 14 - Ch 12.2	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
		- Ch 12.3	
K.4.vii	Methods for controlling the spread of contamination at the emergency worker and general public monitoring facilities;	- Ch 2.7 - Ch 12.3	- N/A
K.4.viii	The process for handling contaminated waste collection, handling, and storage;	- Ch 2.7 - Ch 12.3	- N/A
K.4.ix	Radioactive contamination levels that will trigger decontamination procedures, expressed in applicable units;	- Ch 2.7 - Ch 12.3	- IP EWAC E-1-9 RAD Monitor
K.4.x	The process for re-monitoring individuals, equipment, vehicles, and personal possessions, and recording the results; and	- Ch 2.7 - Ch 12.3	- IP EWAC E-1-9 RAD Monitor
K.4.xi	Criteria for sending individuals with fixed contamination for medical attention.	- Ch 2.7 - Ch 12.3	- IP EWAC E-1-9 RAD Monitor
L.1.i	A list of primary and backup hospitals/medical facilities to treat potentially contaminated, injured, and/or exposed individuals;	- Ch 13.1	- IP O-0 Operations
L.1.ii	Individual facility capabilities to evaluate radiation exposure and uptake, including the number of radiologically trained medical personnel and support staff;	- Ch 13.1	- N/A
L.1.iii	A description of hospital/medical facility and support service capabilities to treat potentially contaminated, injured, and/or exposed individuals; and	- Table 5 - Ch 13.1	- N/A
L.1.iv	A description of dosimetry procedures, including record-keeping and final receipt for processing.	- Ch 9.2 - Ch 9.4 - Ch 13.1	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
L.2	<i>Arrangements for the medical treatment of contaminated, injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:</i>		
L.2.a	<i>An onsite first aid capability with adequate medical equipment and supplies.</i>		
L.2.b	<i>Primary and backup offsite medical facilities.</i>		
L.2.c	<i>Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure</i>		

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
	<i>monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas.</i>		
<i>L.2.d</i>	<i>Provisions to evaluate for radiological contamination either prior to transport to a medical facility or after arrival.</i>		
<i>L.2.e</i>	<i>Contact information for facilities capable of treating overexposure to radioactive material.</i>		
L.3.i	Supplemental lists of additional hospitals/medical facilities capable of providing medical support for contaminated, injured individuals. The list includes any special radiological capabilities.	- Ch 13.1	- N/A
L.4.i	The individual(s), by title/position, responsible for determining an appropriate hospital/medical facility and the determination process;	- Ch 13.2	- N/A
L.4.ii	Means of transporting individuals;	- Ch 12.3 - Ch 13.2	- N/A
L.4.iii	How to request additional emergency medical transport services;	- Ch 13.2	- IP D-0 EOC Manager - IP D-1 Chairperson - IP D-2 EOC PIO - IP O-0 Operations
L.4.iv	Process for maintaining communications between the transport crew and hospital/medical facility staff;	- Ch 13.2	- N/A
L.4.v	Specifics of radiological monitoring and contamination control measures during transport;	- Ch 13.2	- N/A
L.4.vi	Decontamination techniques, including trigger/action levels; and	- Ch 13.2	- IP EWAC E-1-9 RAD Monitor
L.4.vii	Dosimetry for the transport crew.	- Ch 9.3 - Ch 9.4 - Ch 13.2 - Table 14	- IP 24 Just in Time Training for Emergency Workers during a Radiological Incident
M.1.i	Planned recovery efforts, including a list of recovery-specific actions and organizations responsible for carrying them out;	- Ch 14.1	- IP RR-0 Re-Entry & Recovery Actions
M.1.ii	The process for public reentry into restricted areas;	- Ch 14.1 - Ch 14.3	- IP D-1 Chairperson
M.1.iii	The process for establishing restricted areas; and	- Ch 11.12 - Ch 14.1	- N/A
M.1.iv	The process for establishing re-occupancy decisions.	- Ch 14.1	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
M.1.a	Reentry into areas controlled by the licensee.		
M.1.b.i	The process for authorizing reentry, including the individual(s), by title/position, authorized to grant access into a restricted area;	- Ch 14.1 - Ch 14.3	- IP RR-0 Re-Entry & Recovery Actions - IP D-1 Chairperson
M.1.b.ii	The evaluation criteria/method for approving reentry requests;	- Ch 14.1 - Ch 14.3	- N/A
M.1.b.iii	The access control process for reentry, including the authorization verification method by access control/check point officials;	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
M.1.b.iv	Provisions for exposure control of those authorized reentry;	- Ch 14.1 - Ch 14.3	- N/A
M.1.b.v	Contamination control practices within a restricted area; and	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
M.1.b.vi	Methods and resources for monitoring and decontamination of individuals exiting a restricted area.	- Ch 11.12 - Ch 14.1 - Ch 14.2 - Ch 14.3	- N/A
M.2	<i>Individuals that will comprise the licensee's recovery organization are identified by title/position. The recovery organization includes technical personnel with responsibilities to develop, evaluate, and direct recovery and reentry operations.</i>		
M.3	<i>The process for initiating recovery actions is described and includes the criteria for terminating the emergency.</i>		
M.4.i	The process for initiating recovery actions;	- Ch 14.2	- IP RR-0 Re-Entry & Recovery Actions
M.4.ii	Provisions for continuity during transfer of responsibility from the emergency phase to the recovery phase;	- Ch 14.2	- IP RR-0 Re-Entry & Recovery Actions
M.4.iii	Changes that may take place in the organizational structure, to include the chain of command; and	- Ch 14.2	- N/A
M.4.iv	The means to keep all involved response organizations informed of the recovery efforts.	- Ch 14.2	- IP RR-0 Re-Entry & Recovery Actions
M.5.i	Criteria for relaxing protective actions and allowing for public return;	- Ch 14.3	- N/A
M.5.ii	The process for allowing public return into a previously restricted area; and	- Ch 14.1 - Ch 14.3	- N/A



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M.5.iii	A process for establishing priorities in restoring vital services and facilities to areas where return is permitted.	- Ch 14.3	- N/A
M.6.i	The appropriate local, state, tribal or Federal organization(s) responsible for cleanup operations; and	- Ch 14.1 - Ch 14.4	- N/A
M.6.ii	Resources that may be needed to conduct cleanup efforts.	- Ch 14.3 - Ch 14.4	- N/A
M.7.i	The process for developing and modifying sampling plans;	- Ch 9.5 - Ch 14.5 - WA State, DOH/ORP Responsibility	- N/A
M.7.ii	Identification of laboratories to process samples; and	- Ch 9.5 - Ch 14.5 - WA State, DOH/ORP Responsibility	- N/A
M.7.iii	A description of each identified laboratory's sampling capability and capacity.	- Ch 9.5 - Ch 14.5 - WA State, DOH/ORP Responsibility	- N/A
M.8.i	The agencies responsible for, and involved in, long-term dose assessment activities post-incident; and	- Ch 14.6 - WA State, DOH/ORP Responsibility	- N/A
M.8.ii	The method for periodically conducting radiological assessments of public exposure, including estimation of the health impacts.	- Ch 14.5 - Ch 14.6 - WA State, DOH/ORP Responsibility	- N/A
N.1.i	Exercises are conducted in accordance with NRC and FEMA regulations and guidance.	- Ch 15.1	- N/A
N.1.a.i	The process to critique and evaluate exercises and drills utilizes FEMA REP's assessment methodology.	- Ch 15.1	- N/A
N.1.b.i	A description of the process for tracking identified findings and any associated corrective actions from identification through resolution.	- Ch 15.1	- N/A
N.1.c	<i>A drill or exercise starts between 6:00 p.m. and 4:00 a.m. at least once every eight-year exercise cycle.</i>		

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<i>N.1.d</i>	<i>A drill or exercise is unannounced at least once every eight-year exercise cycle.</i>		
N.2.i	All major elements of plans/procedures are tested at the minimum frequency specified.	- Ch 15.1	- N/A
N.2.a.i	Capabilities are exercised at least biennially in response to a plume exposure pathway scenario; and	- Ch 15.1	- N/A
N.2.a.ii	Exercise scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives.	- Ch 15.1	- N/A
N.2.b.i	Capabilities are exercised at least once every eight years in response to an ingestion exposure pathway scenario;	- Ch 15.1	- N/A
N.2.b.ii	The numbers and types of personnel participating in an ingestion exposure pathway exercise will be sufficient for demonstrating capabilities required by the plans/procedures; and	- Ch 15.1	- N/A
N.2.b.iii	OROs within the 50-mile ingestion exposure pathway EPZ that are not part of the full participation ingestion exercise with the state, participate in an ingestion TTX or other ingestion pathway training activity at least once during each eight-year exercise cycle.	- Ch 15.1	- N/A
N.3.i	Scenarios for exercises are varied from exercise to exercise to provide opportunity for appropriate capabilities to be demonstrated; and	- Ch 15.2	- N/A
N.3.ii	All exercise scenario elements are utilized during each eight-year exercise cycle.	- Ch 15.2	- N/A
N.3.a.i	The HAB scenario element is utilized at least once during each eight-year exercise cycle; and	- Ch 15.2	- N/A
N.3.a.ii	The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site.	- Ch 15.2	- N/A
N.3.b.i	A rapid escalation scenario element is utilized at least once during each eight-year exercise cycle.	- Ch 15.2	- N/A

Planning Standards (PS) / To Meet the Intent (MTI) Statements <i>Red is Licensee Only</i>		Plan Reference	Associated Implementing Procedure Title
N.3.c.i	A no/minimal radioactive material release scenario element is utilized only once each eight-year exercise cycle and is optional for state, local, and tribal governments.	- Ch 15.2	- N/A
N.3.c.1.i	ORO participation is optional for a no/minimal release scenario.	- Ch 15.2	- N/A
N.3.c.2.i	The planning process will account for capabilities and activities that may not have the opportunity to be evaluated under the no/minimal radiological release scenario elements; and	- Ch 15.2	- N/A
N.3.c.2.ii	Consideration is given to alternative demonstration and evaluation venues.	- Ch 15.2	- N/A
N.3.d.i	A resource integration element is utilized once during each eight-year exercise cycle; and	- Ch 15.2	- N/A
N.3.d.ii	This scenario element may be combined with other scenario elements.	- Ch 15.2	- N/A
N.3.e	<i>10 CFR 50.54(hh)(2) Strategies. Demonstration of the use of equipment, procedures, and strategies developed in compliance with 10 CFR 50.54(hh)(2).</i>		
N.4.i	All major elements of plans/procedures are tested at the minimum frequency specified.	- Ch 15.3	- N/A
N.4.a	<i>Emergency Medical Drills. Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).</i>		
N.4.b.i	Annual medical services drills are conducted annually at each medical facility identified in the emergency plan.	- Ch 15.3	- N/A
N.4.c.i	Laboratory drills are conducted biennially.	- Ch 15.3	- N/A
N.4.d.i	Environmental monitoring drills are conducted annually.	- Ch 15.3	- N/A
N.4.e.i	Ingestion pathway drills are conducted biennially; and	- Ch 15.3	- N/A
N.4.e.ii	Participants include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities.	- Ch 15.3	- N/A

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N.4.f.i	Communications drills between all applicable emergency response organizations within the plume and ingestion exposure pathway EPZs are conducted at the frequencies determined in evaluation criterion F.3; and	- Ch 7.3 - Ch 15.3	- N/A
N.4.f.ii	A message content check is included in all communications drills.	- Ch 7.3 - Ch 15.3	- All IP's
N.4.g	<i>Post-Accident Sampling Drills. Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.</i>		
N.4.h	<i>Off-Hours Report-In Drills. Off-hours report-in drills are conducted biennially and are unannounced.</i>		
N.4.i	<i>Off-Hours Call-In Drills. Off-hours call-in drills are conducted quarterly, such that each ERO member's normally expected response time is assessed at least biennially based on call-in drill responses or an alternate means for determining response time. Some drills are unannounced.</i>		
N.4.j	<i>Onsite Personnel Protective Action Drills. Onsite personnel protective action drills are conducted during every eight-year exercise cycle. These drills demonstrate the NPP site's ability to implement and coordinate protective actions for onsite personnel during hostile action.</i>		
N.4.k	<i>Aircraft Threat/Attack Response Drills. Aircraft threat/attack response drills are conducted during every eight-year exercise cycle. These drills demonstrate the use of procedures and protective measures developed for responding to hostile action involving an aircraft threat or attack.</i>		
O.1.i	The organization(s) or individual(s) responsible for ensuring training requirements are met, including a description of their responsibilities;	- Ch 16.1	- N/A
O.1.ii	Provisions to ensure personnel with an operational role receive appropriate training;	- Ch 16.2	- N/A
O.1.iii	A description of training programs, including scope, time intervals at which training will be	- Ch 16.2	- N/A

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	offered, and organization(s) that will provide training assistance;		
O.1.iv	Identification of mutual aid organizations and applicable arrangements for offering or receiving training;	- Ch 16.2	- N/A
O.1.v	Provisions for initial training;	- Ch 16.1 - Table 17 - Table 18	- N/A
O.1.vi	Provisions for at least annual retraining;	- Ch 16.1 - Table 17 - Table 18	- N/A
O.1.vii	Provisions for just-in-time training; and	- Ch 16.1	- N/A
O.1.viii	Documentation of attendance for training.	- Ch 16.1	- N/A
<i>O.1.a</i>	<i>Site-specific emergency response training is developed and conducted for those offsite organizations that may be called upon to provide onsite assistance in the event of an emergency.</i>		
<i>O.2</i>	<i>The ERO training program consists of learning objectives that are used to develop and maintain key skills. This includes a systematic analysis of jobs and tasks to be performed from which learning objectives are derived.</i>		
<i>O.2.a</i>	<i>The ERO training program is reviewed at least annually and revised as necessary.</i>		
<i>O.2.b</i>	<i>Training sessions that provide performance opportunities to develop, maintain, or demonstrate key skills are critiqued in order to identify weak or deficient areas that need correction.</i>		
P.1.i	The individual(s), by title/position, that require training because of their planning responsibilities; and	- Ch 17.1	- N/A
P.1.ii	A description of the initial and recurrent training program for the identified individuals.	- Ch 17.1	- N/A
P.2.i	The individual(s), by title/position, with the overall authority and responsibility for radiological emergency response planning.	- Ch 17.1	- N/A
P.3.i	The individual(s), by title/position, responsible for developing, maintaining, reviewing, updating, and distributing emergency plans/procedures, as well as coordinating	- Ch 17.1	- N/A

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	plans/procedures with other response organizations.		
P.4.i	A description of the process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements;	- Ch 17.2	- N/A
P.4.ii	A method to indicate where and when the most recent plans/procedures changes were made;	- Ch 17.2 - Summary of Changes	- N/A
P.4.iii	A method to indicate how plan/procedure changes are retained and historical context preserved;	- Ch 17.2 - Summary of Changes	- N/A
P.4.iv	The process for correcting identified findings and plan issues; and	- Ch 17.2 - Summary of Changes	- N/A
P.4.v	Acknowledgment/documentation that plans/procedures and agreements have been reviewed for accuracy and completeness of information, and when appropriate, changes have been made, within the last year.	- Ch 17.2 - Ch 17.3 - Summary of Changes	- N/A
P.5.i	A list of the organizations and individuals, by title/position, who are to receive the updated plans/procedures;	- Ch 17.3 - Record of Distribution	- N/A
P.5.ii	The process for distributing the latest plans/procedures to appropriate organizations and individuals; and	- Ch 17.3 - Record of Distribution	- N/A
P.5.iii	A process to verify that updated plan/procedures have been received.	- Ch 17.3 - Record of Distribution	- N/A
P.6.i	A list of annexes, appendices, and supporting plans; and	- Ch 17.4	- N/A
P.6.ii	Originating agency for each listed annex, appendix, and support plan.	- Ch 17.4	- N/A
P.7.i	A list of all implementing procedures associated with the emergency plan; and	- Ch 17.4	- N/A
P.7.ii	Identification of which section(s) of the plan are implemented by each procedure.	- Ch 17.4	- N/A
P.8.i	A table of contents; and	- Table of Contents, pg. 2	- N/A

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P.8.ii	A cross-reference between the plans/procedures and the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria.	- End of Document	- N/A
<i>P.9</i>	<i>Provisions for addressing the requirements of 10 CFR 50.54(t) are described.</i>		
P.10.i	The process for reviewing and updating contact information.	- Ch 17.2	- N/A
<i>P.11</i>	<i>The process for entering EP program-related issues that could reduce the effectiveness of the emergency plan into the sitewide corrective action program is described.</i>		
<i>P.12</i>	<i>The process to evaluate changes in plant configuration for their impact on the effectiveness of the emergency plan is described.</i>		