BENTON COUNTY LOCAL EMERGENCY PLANNING COMMITTEE

ESF #10 Hazardous Materials Response

Record of Revisions

Revision Number	Nature of Change	Date of Change	Initials
1	Complete revision to incorporate all 9 components	12/2020	KC
2	Formatting to make ESF 10 a "stand alone" plan. Edits based on SERC comments from 2020 and minor rewrite to clean up redundant language.	10/2021	DD
3	Update of Tier II and EHS data and exercise dates	11/1/2022	DD
4	Update of Tier II and EHS data (pages 27-31) and exercise dates (page 45)	10/19/2023	DD

All revisions to the Benton County Hazardous Materials Response Plan – Emergency Support Function (ESF) #10 will originate from the Local Emergency Planning Committee (LEPC). Before any revisions are finalized, the chairperson will approve the revisions recommended by the LEPC or its subcommittee.

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Coordination of Emergency Support Function (ESF) #10 Oil and Hazardous Materials Response Plan falls to the Local Emergency Planning Committee (LEPC) per Superfund Amendments and Reauthorization Act (SARA) Title III, "The Emergency Planning and Community Right-To-Know Act of 1986" (EPCRA). Benton County Emergency Management, the designated Community Emergency Coordinator for the Benton County LEPC, provides support to the LEPC in the implementation of ESF #10. This ESF #10, while a portion of the Comprehensive Emergency Management Plan (CEMP) for Benton County, can operate as a stand-alone plan.

Lead Agencies:
Southeast Washington Special Operations Group (SEWSOG) (Hazardous Materials Team)
Benton County Fire Districts and Municipal Fire Departments
(Benton County Fire Districts #1,2,4,5,6, West Benton Fire& Rescue, City of Richland Fire Department, City of Kennewick Fire Department)
Washington State Patrol
Washington State Department of Ecology

Support Agencies:
Benton County Emergency Management/LEPC
Law Enforcement Agencies
Benton-Franklin District Health District
Southeast Communications Center
Public Works/Engineering Departments
Regulated Facilities/Responsible Party

State Leads
Washington State Department of Transportation
Washington Military Department, Emergency

Federal Leads
U.S. Environmental Protection Agency
U.S. Coast Guard

INTRODUCTION

Purpose

The purpose of this support function is to provide for effective and coordinated response by City and County Governments to protect emergency workers and the public from adverse effects of hazardous material emergencies in Benton County.

The plan provides guidance for hazardous materials incident planning, notification and response as required by SARA Title III of 1986, also known as the Emergency Planning & Community Right-to-Know Act, which shall hereafter be referred to as EPCRA.

Scope

Emergency Support Functions are the strategic planning annexes to the CEMP. The ESF 10 provides for a coordinated response to actual or potential discharges and/or releases of hazardous materials within Benton County.

This ESF applies to all emergencies involving the actual or potential release of radioactive or non-radioactive hazardous materials within or affecting Benton County, except for those originating from the DOE Hanford Site or CGS. (DOE Hanford Plan and REP Plan published separately and available on request.) Response to hazardous material emergencies at those facilities will be carried out in accordance with the hazard-specific response plans for those activities.

Planning for every hazardous material contingency is beyond the scope of this ESF. This ESF provides broad objectives that will provide the greatest protection of life and health, the environment and property.

This establishes the policies and procedures under which Benton County will operate in the event of a hazardous materials incident, oil spill, or other release. It prepares Benton County and its political subdivisions for incident response and minimizes the exposure to or damage from materials that could adversely impact human health and safety or the environment; and, outlines the roles, responsibilities, procedures and organizational relationships of government agencies and private entities when responding to and recovering from a hazardous materials event.

Core Capabilities and Actions

The following table lists the response and recovery core capabilities that ESF #10 most directly supports along with the related ESF #10 actions. Though not listed in the table, all ESFs, including ESF #10, support the following core capabilities: Planning, Operational Coordination, and Public Information and Warning.

Mission Area	Core Capability	ESF #10—Hazardous Materials Response
Response	Critical Transportation	• For incidents where transportation infrastructure or routes are contaminated by oil or hazardous materials: • Helps to identify safe evacuation and ingress routes; assesses the nature and extent of contamination. • For incidents involving a release or threat of release associated with a CBRN threat agent resulting in a contaminated debris field: • ESF #10 assumes leadership for management of CBRN-contaminated debris after the emergency phase is over.
	Infrastructure Systems	• For incidents where infrastructure is contaminated by hazardous materials: • Assesses the nature and extent of contaminationand cleans up and/or decontaminates infrastructure.
	Environmental Response/Health and Safety	• Conducts actions to detect and assess the nature and extent of hazardous materials releases. • Takes appropriate actions to stabilize the release and prevent the spread of contamination; conducts environmental cleanup actions; and decontaminates buildings and structures; and manages contaminated wastes.
Recovery		• Minimize public exposure to environmental hazards through assessment of the hazards and implementation of public protective actions. • Follows applicable health and safety requirements for ESF #10 responders.

Policies And Legal Authorities

The State Department of Ecology (ECY) has overall responsibility for 24-hour environmental pollution prevention, preparedness, and response within the state of Washington as identified in the 2020 Northwest Contingency Plan - https://rrt10nwac.com/NWACP/Default.aspx .

The emergency field response to incidents of hazardous materials spills and releases is the responsibility of the fire services. The Washington State Patrol is Incident Command for hazardous materials incidents

in the entire county, not just on state highways, unless a fire agency having authority has specifically notified the WSP that they will assume Incident Command Authority in their jurisdiction

Local
Interlocal Cooperation Agreement - Emergency Management Organization Interlocal Agreement, July 2018.

State statutes and regulations
- RCW 38.52.070 - Local organizations and joint local organizations authorized - Establishment, operation - Emergency powers, procedures.
- Chapter 70.136 RCW - Hazardous materials incidents.
- RCW 70.136.030 - Incident command agencies - Designation by political subdivisions.
- RCW 90.56.020 – Director responsible for spill response (Department of Ecology).
- Chapter 118-40 WAC - Hazardous chemical emergency response planning and community right-to-know reporting.
- Chapter 296-824-30005 WAC - Train your employees.
- Chapter 296-824 WAC - Emergency response.

Federal statutes and regulations
- 40 CFR Part 355 - Emergency Planning and Notification
- 40 CFR Part 370 - Hazardous Chemical Report: Community Right-to-Know
- Comprehensive Preparedness Guide (CPG) 101 March 2009.
- National Response Framework – March 2008
- 29 CFR 1910.120 - Hazardous waste operations and emergency response.
- U.S. Code: Title 42, Chapter 116, Section 11003a-g - Comprehensive Emergency Response Plans: **This requires emergency planning to include (but is not limited to) each of the following nine parts that are incorporated into the Benton County ESF-10 plan:**

	Requirement Description	***Location in Plan***
1	*Identification of Facilities*	**Appendix B**
2	*Methods and Procedures to be followed by facility owners and operators*	**Appendix H**
3	*Designation of a community coordinator*	**Concept of Ops-direction and control page 12**
3	*Designation of facility emergency coordinator*	**Appendix B**
4	*Procedures providing reliable, effective, and timely notification*	**Concept of Ops, General**
5	*Methods for determining the occurrence of a release and the area or population likely to be affected*	**Concept of Ops, Release**

	Requirement Description	***Location in Plan***
5 (cont)	*Methods for determining the occurrence of a release and the area or population likely to be affected*	**Identification page 11**
6	*Description of emergency equipment and facilities and in the community*	**Appendix I**
7	*Evacuation Plans*	**Appendix E**
8	*Training Programs*	**Appendix F and G**
9	*Methods and schedules for exercising the plan*	**Appendix G**

SITUATION & ASSUMPTIONS

Situation

All areas of Benton County are vulnerable to the damaging effects of emergencies involving the use, processing, storage or transportation of hazardous materials. The types and quantities of hazardous materials that may be in Benton County at any single time are subject to change.

Transportation of hazardous materials through Benton County creates a potential for emergencies affecting populated areas. Materials transported through populated areas by road, and rail are a significant hazard due to their frequency and quantity.

The Hanford Site (currently being stored at the Hanford Site is radioactive waste from cold war era nuclear weapons production) and the Energy Northwest Columbia Generating Station (a nuclear power plant that was constructed within the Hanford Site) both hold unique risk.

Un-odorized natural gas pipelines enter the county from northeast and the northwest; both hold unique risk.

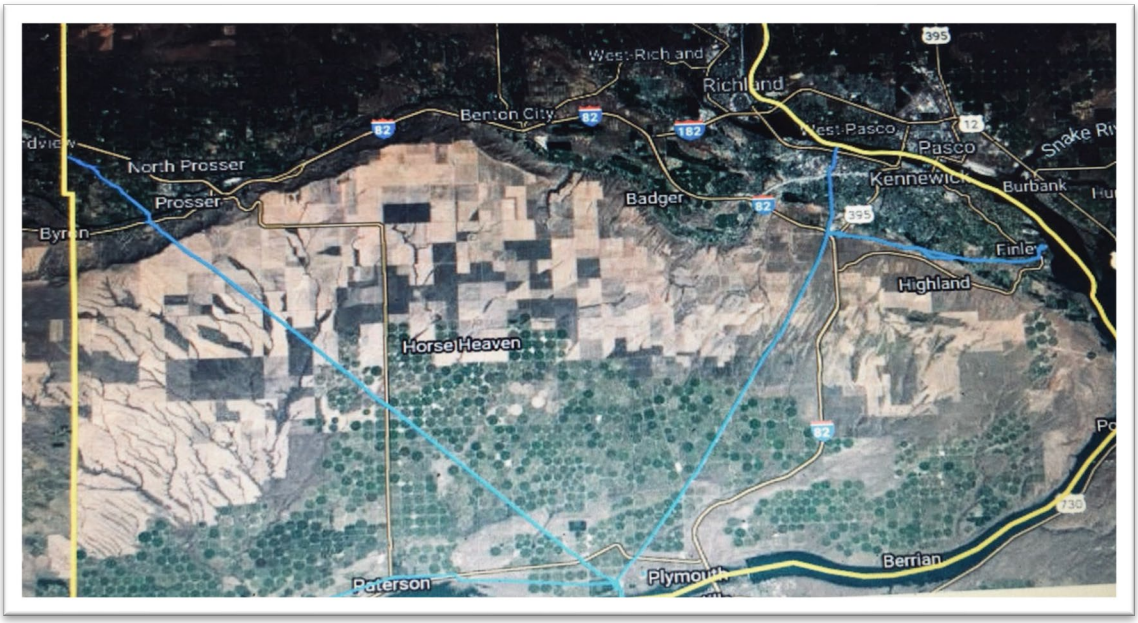


Figure 1.Natural Gas Pipelines in County

Assumptions

An accidental release of hazardous materials could pose a threat to the local population or environment.

The possible effects of an emergency could range from a small cleanup problem to the evacuation of residences, businesses, and special facilities. Chemical, radiological and hazardous materials incidents from transportation as well as fixed facilities represent risks to the County.

Protective actions that may be necessary for the public in the affected area may include sheltering, evacuation, and the protection of animals, water, and food supplies. The choice of protective actions will depend on many factors including the magnitude, severity and urgency of the situation, the characteristics of the area and population involved, weather and road conditions.

Hazardous materials that are transported may be involved in railroad accidents, highway collisions, or airline incidents.

Damage to, or rupture of, pipelines, transporting materials that are hazardous if improperly released will present serious problems.

Emergency exemptions may be needed for disposal of contaminated material.

A hazardous materials incident may be caused by or occur during another emergency, such as flooding, a major fire or earthquake. A major transportation hazardous materials incident may require the evacuation of citizens from any location in Benton County along these main arterials:

Interstate I-84
Interstate 182 that runs east to west
State Route 225
State Route 224
State Route 24
State Route 22
State Route 221
State Route 240
State Route 14
Highway 395
Highway 12
Rail freight service; Burlington Northern/Santa Fe & Union Pacific
Columbia River

The length of time available to determine the scope and magnitude of a hazardous materials incident will impact protective action recommendations. As will the response capability of the fire agency in the affected area. Wind shifts and other changes in weather conditions during an incident may necessitate changes in protective action recommendations.

In the event of an evacuation, at least 75% of the population at risk will relocate to private homes, or hotel/motel facilities. For planning purposes, mass care resources will be identified for 25% of the risk population.

Hazardous materials could possibly enter water or sewer systems and necessitate the shutdown of those systems.

Limitations

This plan does not imply, nor should it infer or guarantee a perfect response will be practical or possible. No plan can shield individuals from all events. As government assets and systems may be overwhelmed, jurisdictions can only try to make every reasonable effort to respond based on the situation, information, and resources available at the time of the event.

Every reasonable effort will be made to respond to emergencies, events or disasters; however, personnel and resources may be overwhelmed.

There may be little to no warning during specific events to implement operational procedures.

Successful implementation of this plan depends on timely identification of capabilities and available resources at the time of the incident and a thorough information exchange between responding organizations and the facility or transporter.

This plan does not cover the DOE-Hanford or Columbia Generating Station plans. Benton County Emergency Management, in coordination with Franklin and Grant Counties, the state of

Washington and Energy Northwest, has developed plans to respond in the unlikely event of an accident at the Columbia Generating Station (CGS). CGS is the Northwest's only commercial nuclear power plant and is owned and operated by Energy Northwest. The plans are designed to help protect nearby residents, specifically those living within the Emergency Planning Zones (EPZ) around the nuclear plant. They are addressed separately in the Benton County CGS plan
http://www.bces.wa.gov/home/bcem-1/energy-northwest and the CEMP at
https://drive.google.com/file/d/16da6mwTaHytzwUnyTr45YVd4GX6Lmbq_/view

CONCEPT OF OPERATIONS

General

The Benton County Local Emergency Planning Committee (LEPC) will assist in preparing and reviewing hazardous material response plans and procedures. The authorized representative of the regulated facilities and transportation companies involved in an actual or suspected release of a hazardous material will promptly notify SECOMM Center and/or appropriate response agency(s) of the incident. They will also make recommendations to the responding agencies on how to contain the release and protect the public and environment.

The responsible party having a HAZMAT Emergency will follow their notification procedures for reporting a release in excess or reportable quantities.

Agencies responding to the release will do so only to the extent of their personnel's training and qualification, available resources and capabilities. The Incident Commander will request the assistance of regional, mutual aid partners when the size and scope of the hazardous materials incident exceeds the response capabilities of the primary response agency.

The first priority of the Incident Commander will be to determine the appropriate protective action for the public, coordinate with law enforcement and disseminate such recommendations, and implement them. This should be done through the Benton County Emergency Operation Center if it is activated/open. Incident Command will coordinate with the EOC Emergency Manager or designee for activation of any of the alerting systems.

Agencies responding to the release will assist with the identification of the party responsible for the hazardous materials incident through the collection and reporting of relevant information related to their response activities. Incident-related information should be reported to the Incident Commander.

If the incident requires on-going coordination or additional resources, the Incident Commander may request assistance from Benton County Emergency Management (BCEM) and the EOC may be activated upon request by the IC. The BCEM EOC will notify the State Emergency Operations Officer (SEOO) of EOC status. If requested or necessary, a Joint Information Center (JIC) will be opened to coordinate public messaging between both public and private organizations. The Southeast Washington Type 3 Incident Management Team may be requested if needed.

Direction and Control

The National Incident Management System (NIMS) and the Incident Command System (ICS) will be used in all hazardous materials emergency response in accordance with federal, state, and local laws.

When a hazardous materials release occurs in Benton County, Benton County Emergency Management/Emergency Operations Center (EOC) will act as the Community Emergency Coordinator to support the field operations.

The response for a hazardous materials incident will be performed in accordance with RCW 70.136.030, applicable code, ordinance, or agreement. The designated ICs for jurisdictions within Benton County are identified in Appendix C. The IC will direct the activities of deployed emergency response elements through the Incident Command Post (ICP). The response will initially concentrate on the immediate needs at the incident site by isolating the area, implementing traffic controls, containing the spill, and formulating and implementing protective actions for emergency responders and the public at risk.

ACTIONS

Release Identification

The recognized methods and procedures responders will use to identify the release of hazardous materials vary by training and qualification. First responders will limit their actions to identify the occurrence of a release to those protocols specified for the hazardous materials response qualification level to which they are trained and currently qualified. Responders will follow their protocols per their specific level of training.

Releases of hazardous materials in transit will most likely be observed by the transport agent, citizens and/or responders. The methods and procedures used to determine a release occurred will also vary by the qualification of the responder and the resources available to the transport agent.

Generally, the major facility operators in Benton County assign a designated individual, or a Facility Emergency Coordinator, who are on duty 24/7 for emergencies. They are responsible for taking appropriate action including the reporting of incidents to local responders, the Washington State Department of Ecology, the local LEPC, and SERC, as well as the National Response Center (NRC). The Facility Emergency Coordinator, authorized representative or responsible party is expected to provide effective and timely notification of a release by telephone on behalf of the facility. The facilities Emergency Coordinator or the Responsible Party maintains the liaison relationship with the local responders and utilizes the facility's Emergency Response Plan to advise, as necessary.

Emergency Response

The methods and procedures used to respond to the release of hazardous materials conform to the standards setin the National Fire Protection Association (NFPA) 472 - Standard for Professional Competence of

Responders to Hazardous Materials Incidents and only vary by training and competency. First responder competencies, like training, are defined at the awareness, operational, technician and specialist levels. Responders' ability to determine and monitor the affected area will be dependent on their level of training. Refer to the training section (see Appendix F for specific requirements).

Responders trained to the awareness level are likely to witness or discover a hazardous substance release; are trained to initiate an emergency response by notifying the proper authorities of the release and take no further action beyond notifying the authorities.

Responders trained to the operational level will respond to actual or potential releases in order to protect nearby persons, property, and/or the environment from the effects of the release. They are trained to respond **defensively**, without trying to stop the release and may try to confine the release from a safe distance, keep it from spreading and/or protect other from hazard exposures.

Responders trained to the technician level will respond with the intent of stopping the release and are trained to approach the point of release **offensively** in order to either plug, patch or stop the release using other methods.

As quickly as possible first responders should Identify the type or types of materials involved, and the scope of the incident. Information can be gathered from the reporting party, the dispatch center (SECOMM), the responsible party, placards, and references such as the North American Response Guidebook, Chemtrec, and CAMEO. The following reference link materials and resources below can aid in the decision-making process, including determining affected areas and evacuation and shelter-in-place areas, include:

WA EPCRA mobile app, which is available as a free download in the Apple Store and Google Play ERG (Current Edition) using the "Table of Initial Isolation and Protective Action Distances"

Hazard Communication Standard: Safety Data Sheets (SDS)

Chemical Transportation Emergency Center (CHEMTREC)

AIHA Emergency Response Planning Guidelines

NIOSH Pocket Guide to Chemical Hazards

CAMEO Chemicals

Area Locations of Hazardous Atmospheres (ALOHA)

Mapping Applications for Response, Planning, and Local Operational Tasks (MARPLOT)

Public Safety/Public Warning

Regulated facilities are required to have evacuation plans for employees and visitors. Washington State Administrative Code (WAC) 296-24-567 requires each facility to have an emergency action plan which includes, at a minimum:

- Evacuation procedures and route assignments.

- Procedures for employees who remain to operate critical plant operations before they evacuate.
- Procedures to account for all employees after emergency evacuation has been completed.
- Rescue and medical duties for those employees who are to perform them.
- The preferred means of reporting fires and other emergencies; and
- Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.

The primary objective of every hazardous materials response is to protect the people at risk. This includes the employees of an affected facility and/or transportation company as well as citizens, visitors, and responders in the immediate area of the release and/or projected plume. Protection of the public during a chemical emergency is a complex undertaking and is the responsibility of the Incident Commander. Evacuation is the recognized standard for population protection; however, recent research indicates shelter-in-place should be considered as a better alternative for many hazardous materials incidents. These two strategies are available for the Incident Commander to consider for the protection of the public. Each strategy (evacuation or shelter-in- place) has inherent advantages and disadvantages and can only be issued as an advisory.

The advantage of evacuation is it removes employees, citizens, and visitors from the present and any future risks in the affected area. The concept of removing the population from risk is also an acceptable and preferred strategy for many members of the public. Evacuations are however highly disruptive events which create other challenges such as traffic control and sheltering. An effective evacuation may take hours to complete, during which evacuees may be exposed to unsafe concentrations of the toxic substance they are attempting to avoid.

Shelter-in-place can be instituted in a relatively short period of time. The population does not have long distances to travel and they are, for the most part, familiar with their surroundings. The speed with which a shelter-in-place effort can be implemented may make it the only reasonable short-term protective option for hospitals, nursing homes and corrections facilities. However, the concept of shelter-in-place is a foreign notion to many citizens who will self-evacuate. Training and exercising sheltering-in-place plans for those facilities where it might prove useful will facilitate its use when it is needed. It should be considered only for incidents expected to last for a short duration or when evacuation would result in harmful exposure to the public.
No single protective strategy is applicable in all situations. The two strategies are not mutually exclusive and may be combined to achieve the maximum population protection in some situations. For example, shelter-in- place for the public in an appropriate radius around a toxic release, combined with evacuation of downwind populations, might result in the best protection potential for the greatest number of people.

The decision to evacuate or order shelter-in-place should be based upon known data or perceived risk when insufficient data is immediately available.

The IC has the authority to order the protective measures appropriate to the type of threat, current weather conditions, condition of population at risk, response capabilities and timeliness, available transportation resources, time of day and ability to communicate with the at-risk population. The procedures for implementing the evacuation and shelter-in-place strategies are found in Appendix C - Public Safety Procedures.

Public Warning

If a release is of public safety concern, the public will receive emergency warning and notification of a hazardous materials release through multiple channels of communication per the request of the IC. The IC can make the request directly to Benton County Emergency Management or through SECOMM and request Emergency Management. The EM Manager or designee will utilize a notification system called CodeRED to notify the public of dangers or risks to their lives and/or property.

Three methods of warning may be used in Benton County: The Emergency Alert System Code Red, and Route Alerting.

The Emergency Alert System results in wide-area alerting of up to three counties (Benton, Franklin, and Walla Walla). It can be activated by authorized officials in each jurisdiction, according to procedures contained in the Columbia Basin EAS Operational Area Plan. This system relies on all Radio and Television stations in the area to monitor the Common Program Control Station (KONA) and re-broadcast any emergency messages immediately.

The CodeRED system is an opt-in high speed mass notification system that allows for voice notification to landlines and voice and text notifications to cell phones as well as email and TDD notifications. CodeRED messaging can be geographically targeted to provide information to those in an effected area. CodeRED also provides Benton County Emergency Management access to FEMA's Integrated Alert & Warning System, also known as IPAWS. IPAWS provides Wireless Emergency Alerts (WEA) which allows for public safety emergency messaging to be sent to all wireless devices in a geographically targeted area or to the entire county.

Route alerting may be used in addition to an Emergency Alert System message. Route alerting includes the use of loudspeakers or public address systems on emergency vehicles or door-to-door canvassing of an area to ensure that residents have received the warning. In fast-breaking situations when protective actions must be taken immediately, route alerting would be the most expeditious method to warn the public. However, the ability to conduct route alerting would be limited if the safety of emergency workers is in question. Route Alerting is the most time-consuming of the methods available but can be concentrated in a smaller area.

Responder Safety

It is essential that on-scene response personnel are protected from the adverse effects of hazardous materials contamination to safely perform their role in protecting the public and mitigating the incident. The safety of response personnel is a priority of ICS. A general Safety Officer shall be assigned to the Command Staff to assist the IC with responder safety. The Safety Officer is required to monitor operations, identify potential safety hazards, correct unsafe situations, and develop additional methods and procedures to ensure responder safety. The Safety Officer will be given authority to alter, suspend or terminate any activity he/she deems is unsafe. Safety Officers must be trained to the level of the incident, i.e., an operations level incident (gasoline spill) requires a Safety Officer trained to the operations level.

All responders to a hazardous materials incident will:

- Adhere to applicable local, state, and federal laws, statues, ordinances, rules, regulations, guidelines, and established standards pertaining to responder safety.
- Not exceed individual response certification level in accordance with Code of Federal Regulations (CFR) 1910.120 (HAZWOPER) and Chapter 296-824 WAC training under any circumstance. These certifications are outlined in the Training section (Appendix E).

Resource Management

The response and recovery resources available to Benton County come from federal, state, and local partners,public and private stakeholders, and nongovernmental organizations. During response operations, acquisition of resources will be by preexisting mutual aid agreements memorandums of understanding (MOUs), memorandums of agreement (MOAs), interagency agreements (IAAs) and contracts or through emergent contracting in accordance with RCW 38.52.070.

Private industry and regulated facilities may have resources and capabilities to respond immediately in the event an incident may impact their facility or is the cause of the incident.

Containment/Clean-Up

Hazardous material containment and cleanup oversight is the responsibility of the Incident Commander at the incident site. In Benton County this activity may be coordinated with the WA State Department of Ecology and the appropriate county departments such as Benton-Franklin Health District or city/county Planning and Public Works.

Response agencies will:

- Identify, contain, recover, and properly treat or remove hazardous materials and dispose of at state permitted site.
- Limit incident site entry to trained personnel with appropriate PPE.
- Follow decontamination procedures to limit area of contamination and restrict further spread of hazardous materials.
- Plan for restoration and mitigation of damage to the environment.

Although the containment and clean-up coordination falls on the designated Incident Command agency, the Responsible Party is liable for all response and remediation costs as stated in Chapter 70-105D RCW at http://app.leg.wa.gov/RCW/default.aspx?cite=70.105D. Depending on the material and/or quantity, cleanup may be arranged through an independent contractor and long-term site control and clean up strategies are developed in partnership with the EPA. A list of hazardous materials spill contractors is available through the Department of Ecology at http://www.ecy.wa.gov/programs/spills/spills_happen/HazmatSpillContractorList_PRC.pdf

RESPONSIBILITIES

Lead Agencies

Lead agencies have primary responsibility for mitigation, preparedness, response, and recovery with a focus on life safety, property protection and environmental preservation. These responsibilities include but are not limited to ensuring the readiness of skilled personnel, equipment, response procedures and protocols, responder training programs, resource coordination and the hazardous materials response program.

ESF Lead Agency	ESF Responsibilities
Southeast Washington Special Operations Group (SEWSOG) Hazardous Materials Team	The SEWSOG responds within the boundaries of Pasco and Franklin District 3, they may be called by the other entities in Franklin County but will be charged for services. The team has a Board of Directors comprised of representatives from the four counties' fire department/districts (Richland, Kennewick, Pasco, Benton County Fire Protection District #1, Benton County Fire Protection District #2, the City of Walla Walla Fire Department, Walla Walla County Fire Protection Districts #4 and #5 and the City of Yakima Fire Department. The team's host department (for administrative control) is Benton County Fire District #1. The team maintains its own agreement and bylaws. In incident situations, the team works under the direction of the jurisdiction in which the incident occurred. SEWSOG response assets and personnel are spread across the four counties (Benton, Franklin, Walla Walla and Yakima). This will allow for "Assessment Teams/Equipment/Vehicles" to be located across the four counties for an expeditious deployment and arrival on scene. If more assets are required, they will be sent from their location with the four counties. SEWSOG operates using an assessment concept which includes the nearest assessment company being dispatched to the incident to conduct a incident assessment and provide technical assistance to the Incident or Unified Commander in determining a mitigation strategy. SEWOG – Responsibilities • Respond in support of first response agencies when requested. Assess actions taken by first-in units. • Provide/recommend technical level response to hazardous materials incidents. Provide scene management expertise and equipment. • Evaluate/establish exclusionary zones. • Perform threat assessment via detecting, metering/monitoring, and sampling. • Perform substance identification testing via hazard ID analysis and/or

ESF Lead Agency	ESF Responsibilities
	radiological testing. • Determine the proper level of PPE, emergency medical treatment, decontamination techniques and additional authorities requiring notification. • Perform duties as directed by incident commander. • Coordinate with representatives from the impacted jurisdiction and/or the Benton County Emergency Management.
Benton County Fire Districts and Municipal Fire Departments	Provide a limited initial response to hazardous materials incidents based onresponder training and expertise. Act as incident commander until qualified hazardous materials IC arrives (except on state, interstate highways or in areas where the Washington State Patrol is designatedas incident commander). Notify the appropriate dispatch agency when the magnitude of the incident exceeds theexpertise of the initial responder(s). Identify hazardous material(s) without compromising safety (placard number, shippingdocuments, driver comments, etc.). Provide for the safety of the public by whatever means necessary (evacuation, shelter-in-place). Isolate the affected area in accordance with the Emergency Response Guidebook orother appropriate resource information. Effectively deploy all necessary and available fire jurisdiction equipment and manpower. Deploy mutual aid, as requested Support responding Hazmat Team with personnel, equipment, and other assistance, asrequired. Provide coordination and control of manpower and equipment through the communications center and at a command post near the scene. Provide manpower and equipment for decontamination and emergency medical aid atthe scene of a hazardous material incident. Provide manpower and equipment for control and containment of a hazardous materialrelease or fire involving hazardous materials, whenever possible. Provide emergency medical care and transportation for those injured in a hazardousmaterial incident. Perform other operations which may be appropriate in accordance with training.

ESF Lead Agency	ESF Responsibilities
Washington State Patrol	Act as designated incident command agency for hazardous materials incidents on interstate and state highways and in areas specifically designated by the local political entity. When the local jurisdiction does not designate an incident commandagency, WSP assumes incident command for the jurisdiction in accordance with RCW 70.136.030. When necessary, establish a unified command system with fire departments,emergency medical services and other state and federal agencies.
Washington State Department of Ecology	Provide 24-hour emergency response to reported spill incidents. Represent state laws and interests in oil and hazardous substances incidents by acting asthe State On-Scene Coordinator (SOSC) in the Unified Command System. Coordinate response efforts with other local, tribal, state, and federal agencies. Maintain resource list of cleanup contractors, equipment, and technical/scientificpersonnel for hazardous materials incidents. Assist in determining the release source, cause, and responsible party. Coordinate incident cleanup if the responsible party is non-responsive or unknown. Provide on-scene coordination and technical assistance on containment, cleanup, disposal, recovery, natural resource damage assessment, and laboratory analysis andevidence collection for enforcement actions. Coordinate Natural Resource Damage Assessment (NRDA) activities. Establish cleanup standards for the incident in accordance with federal and state law.Ensure source control, containment, cleanup, and disposal are accomplished.

Support Agencies

ESF Support Agency	ESF Responsibilities
Benton County Sheriff and Municipal Police Departments	Coordinate with Fire/SEWOG to implement evacuations. Provide any assistance securing a perimeter.

ESF Support Agency	ESF Responsibilities
	Secure any crime scenes. Provide representative to the Benton County EOC when requested. See ESF #13 in the Benton County CEMP
Benton County and Municipal Public Works/Utilities	Provide traffic barrier material as requested by law enforcement. Provide heavy equipment and diking material as requested by the incident commander. Support the mapping of water and sewer systems that may contain hazardous materialsdue to an incident. Provide information concerning sensitive systems that may be impacted by a hazardous materials incident Information sharing with public concerning impacted utilities. Provie support to the EOC if requested
Regulated Facilities **Regulated Facilities (cont.)**	Facilities storing extremely hazardous substances must identify the location of such substances and designate a Facility Emergency Coordinator to act as the contact for facility and hazardous materials information in accordance with 40 CFR 355.30. 40 CFR 355.30 (c) requires the owner or operator of a facility subject to the section to designate a facility representative who will participate in the local emergency planning process as a facility emergency response coordinator. The Facility Emergency Coordinators in Benton County are identified in Appendix B. Report chemical inventories to the State Emergency Response Commission (SERC),LEPC, and local fire department. Submit Tier II-Emergency and Hazardous Chemical Inventory Report and other information as required, by federal, state, or local law. Prepare hazardous materials emergency plans and provide copies to the Benton CountyLEPC, when requested. Train and equip personnel to implement plans Coordinate Plans with local fire jurisdictions Notify 9-1-1 and other agencies as required or necessary, when a hazardous materials incident occurs.

ESF Support Agency	ESF Responsibilities
Benton Franklin Health District	Take such measures as the Health Officer deems necessary to promote and protect thepublic's health. Assess the public health implications of a hazardous materials incident and take appropriate actions. In conjunction with the Washington State Departments of Ecology and Health, assist water and sewer utilities in the investigation and mitigation of impacts from the effectsof a hazardous materials incident. Direct the closure of contaminated sites, as necessary. Provide information to the public on the health effects of, and how to avoidcontamination from a hazardous materials release as needed.

Federal Agency Lead

ESF Federal Lead Agency	ESF Responsibilities
United States Environmental Protection Agency	Responds with advice and technical resources to protect the environment from all types of hazardous substances and oil to waters of the U.S. In conjunction with WA State DOE, will coordinate containment, removal, and disposal efforts and resources of major incidents. Serves as the Federal OSC under the National Contingency Plan for incidents involving inland areas and inland waterbodies.
United States Coast Guard	Responds with advice and technical resources to protect the environment from all typesof hazardous substances and oil to marine waters of the U.S. In conjunction with WA State DOE, will coordinate containment, removal, and disposalefforts and resources of major incidents. Serves as the Federal OSC under the National Contingency Plan for incidents involving marine waters.

Other Lead Washington State Departments list will be engaged as requested by Lead Agencies to assist in response and recovery efforts to fulfill their role as needed and defined in the Washington State ESF #10 Plan.

Areas Of Coordination

Function	**Agency**	**ESF**
Environmental Health (air and water quality)	BFHD/WA State Health Dept.	8
Traffic Control, assist with evacuations, criminal investigations	Benton County Sheriff's Office/Municipal Police Departments	13
Emergency Medical Services	Benton County Fire Districts and Municipal Fire Departments	8
Transportation	Ben Franklin Transit, WSDOT, public works	1
Alert and Warning	BCEM	Basic Plan/15
Sheltering/feeding	American Red Cross	6
Public Messaging	BCEM	15

APPENDIX	DESCRIPTION
A.	**Promulgation**
B.	**EPCRA Reporting and Regulated Facilities**
C.	**Incident Command Agency**
D.	**Public Safety Procedures**
E.	**Evacuation Map Routes**
F.	**Training Requirements and Schedule**
G.	**Exercise Types and Schedule**
H.	**Emergency Planning and Response/ Minimum Plan Requirements**
I.	**Description of Emergency Equipment and Facilities**
J.	**Petroleum Crude Oil Response Reference**

Appendix A – Promulgation

Emergency Support Function (ESF) 10 Hazardous Materials Approval and Implementation

The Benton County LEPC assisted in the development and review of the Hazardous Materials Emergency Response Plan (ERP) to identify and implement hazardous materials emergency preparedness and response responsibilities in accordance with Chapter 118-40 Washington Administrative Code (WAC). The ERP details the purpose, policy, concept of operations, direction/control, actions and responsibilities of primary and support agencies to ensure a mutual understanding and a coordinated plan of action is implemented with appropriate agencies within Benton County.

The Benton County LEPC request each office, department and agency to study the ERP and prepare or update, as needed, the supporting plans and operating procedures needed to implement the ERP in the event of a hazardous material event.

Benton County Emergency Management is responsible for publishing and distributing this ERP and will issue changes as required.

Deanna Davis
Manager, Benton County Emergency Management

Appendix B – EPCRA Reporting and Regulated Facilities 2019

Regulated Facilities in Benton County, WA

1. Anhydrous Ammonia is the main reportable EHS in Benton County. According to Washington State Ecology the average daily pounds of Anhydrous Ammonia that is in Benton County is 33,321,273.

2.

Clouds of anhydrous ammonia are subject to the unpredictability of air movement; they will change direction as quickly as the breeze. Clouds of ammonia may be nearly invisible in some atmospheric conditions, but in high concentrations may appear as white clouds. Rain will absorb the ammonia and remove it from the air; however, the ammonia-water mixture may still be a hazard until sufficiently deluded.

Anhydrous ammonia is lighter than air. Under cold condition, it may settle in the low areas of the surrounding landscape, such as road ditches, sloughs and valleys. People in threatened areas must be warned of the release and advised to leave the area or shelter in-place until the release has been controlled and the area is considered safe. These decisions should be made by emergency personnel, such as a local fire department.

3. **Chlorine**
   Chlorine is also a comely found substance in the county. Exposure to chlorine can occur in the workplace or in the environment following releases to air, water, or land. Effects of chlorine on human health depend on how the amount of chlorine that is present, and the length and frequency of exposure. Effects also depend on the health of a person or condition of the environment when exposure occurs.

   Breathing small amounts of chlorine for short periods of time adversely affects the human respiratory system. Effects differ from coughing and chest pain, to water retention in the lungs. Chlorine irritates the skin, the eyes, and the respiratory system. These effects are not likely to occur at levels of chlorine that are normally found in the environment.

4. **Fuel/Propane**
   Fuel and propane are frequently reported substances as well. Liquid releases flammable vapors at well below ambient temperatures and readily forms a flammable mixture with air. Dangerous fire and explosion hazard when exposed to heat, sparks or flame. Vapors are heavier than air and may travel long distances to a point of ignition and flash back. Container may explode in heat or fire. Runoff to sewer may cause fire or explosion hazard.

5. **Tier II Facilities List**
   The name of the Facility Emergency Coordinator, addresses and personal contact information can be secured at the Benton County Emergency Management office - 651 Truman Ave, Richland, WA 99352., (509)628-2600, or during an emergency by contacting dispatch and requesting them to contact Emergency Management.

EPCRA REPORTING

All facilities within Benton County receiving, storing and/or using extremely hazardous substances (EHS), reference 40 CFR Part 355, must notify the SERC and LEPC in accordance with Section 302 – Notification of Extremely Hazardous Substances.

Facilities must submit or a SDS list of the hazardous chemicals present on-site in excess of threshold levels to the SERC, LEPC and local fire department/district in accordance with Section 311.

Facilities storing chemicals must provide specific information about chemicals on site to the SERC, LEPC and local fire department/district using the Tier II Form in accordance with Section 312.

A facility must notify the SERC and LEPC, per Section 304, of a release at the facility in excess of the reportable quantity for the substance and when the release could result in exposure of person outside the facility. A verbal report must be submitted immediately and followed up with a written report within 14 days.

Tier II Facilities and Contacts 2022

FacilityName	Address	City	Zip Code	Contact Title	Contact Name	Phone
Amerigas Benton City	12121 W Morgan Rd	Benton City	99320	OPERATIONS MANAGER	JORGE GUAJARDO	5094124644
AMERIGAS PROSSER 2	54801 GAP RD	PROSSER	99350	OPERATIONS MANAGER	JORGE GUAJARDO	5098375414
ATKINS NUCLEAR SECURED	2774 Q AVE	RICHLAND	99354			
JIFFY LUBE STORE 2622	3502 W CLEARWATER AVE	KENNEWICK	99336	COMPLIANCE MANAGER	LILLIAN NICHOLSON	9728127900
LIGO HANFORD OBSERVATORY	127124 N RT 10	RICHLAND	99354	ENG	KYLE RYAN	5093728129
REFRESCO NORTH AMERICA KENNEWICK PLANT	10 E BRUNEAU AVE	KENNEWICK	99336	MAINTENANCE MGR	KEITH ADOLPHSEN	5095825200
AGRIUM US INC KFO FINLEY AREA	231610 E GAMEFARM RD	KENNEWICK	99337	OPERATIONS SUPERINTENDENT	JOHN HANSON	5095865488
AIRGAS USA LLC KENNEWICK	231808 E SR 397	KENNEWICK	99337	PLANT MANAGER	RON THOMAS	2538721945
American Rock Products Inc Batch Plant Prosser	2500 SR 221	Prosser	99350	ENVIRONMENTAL MANAGER	JANA MCDONALD	5095346221
AMERICAN ROCK PRODUCTS INC HANFORD PIT	2090 ROBERTSON DR	RICHLAND	99354	ENVIRONMENTAL MANAGER	JANA MCDONALD	5095346221
American Rock Products Inc Hospital Batch Plant	97100 E Locust Grove Rd	Kennewick	99338	ENVIRONMENTAL MANAGER	JANA MCDONALD	2087436356
AMERIGAS KENNEWICK	204 N FRUITLAND	KENNEWICK	99336	TERRITORY MANAGER	ROBERT DALE	5098647395
APPLIED PROCESS ENGINEERING LABORATORY APEL	350 HILLS ST STE 101	RICHLAND	99354	ENVIRONMENTAL SCIENTIST	DENIS MEHINAGIC	5093725768
ASH GROVE CEMENT CO KENNEWICK	633 N IVY ST	KENNEWICK	99336	ENVIRONMENTAL MANAGER	NORMA JOB	5418772640
ATT BENTON CITY WAA180	244202 N COLD CREEK RD	SUNNYSIDE	99320	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
ATT JOE BUTTE	JOE BUTTE	KENNEWICK	99336	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
ATT KENNEWICK	6500 CLEARWATER AVE	KENNEWICK	99336	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
ATT MOBILITY BADGER MT 10594	ATOP BADGER MOUNTAIN	RICHLAND	99352	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
ATT MOBILITY EAST KENNEWICK	410 E KENNEWICK AVE	KENNEWICK	99336	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
ATT PRIEST RAPIDS	51517 WA-24	PRIEST RAPIDS	99344	NATIONAL EPCRA MANAGER	JEREMY MCGRUE	4692952319
BEN FRANKLIN TRANSIT CO	1000 COLUMBIA PARK TRAIL	RICHLAND	99352	SAFETY SPECIALIST	KATRINA MCWHORTE	5097345178
Benton City No 1 Propane Site	32508 W Kelly Rd	Benton City	99320	DIRECTOR, EHS	MAXWELL TINSLEY	2084682504
BENTON COUNTY MOSQUITO CONTROL	4951 W VAN GIESEN	WEST RICHLAND	99353	MGR	ANGELA BEEHLER	5099672414
BLEYHL FARM SERVICE INC PROSSER	1000 BENNETT AVE	PROSSER	99350	DIRECTOR, EHS	MAXWELL TINSLEY	2084682504
BOLTHOUSE FARMS WASHINGTON	10 SONOVA RD	PROSSER	99350	ENVIRONMENTAL MANAGER	PATRICIA CUSICANQU	6612323337
BPA ASHE MAINTENANCE HQ	NONE PROVIDED	RICHLAND	99352	CHIEF OPS	GARTH LIEN	5095465060
BPA BADGER CANYON SUBSTATION	WA T8N R28E SEC 1	RICHLAND	99352	CHIEF OPERATOR	PETER GALLACHER	5415425401
BPA BENTON SUBSTATION	T11N R28E WN S11	RICHLAND	99352	CHIEF OPS	GARTH LIEN	5095465060
BPA HANFORD SUBSTATION	lat 46 40 08 long 119 34 15	RICHLAND	99352	CHIEF OPS	GARTH LIEN	5095465060
BPA KENNEWICK MICROWAVE STATION	ON JUMPOFF JOE BUTTE	KENNEWICK	99336	DISTRICT ENGINEER	JACOB SMITH	5095425411
BPA MIDWAY SUBSTATION	T13N R24E WM S14Â	RICHLAND	99352	CHIEF OPS	GARTH LIEN	5095465060
BPA WAUTOMA SUBSTATION	209497 N SR 241	SUNNYSIDE	98944	CHIEF OPS	GARTH LIEN	5095465060
BPA WHITE BLUFFS SUBSTATION	3580 HORN RAPIDS RD	RICHLAND	99352	CHIEF OPS	GARTH LIEN	5095465060
CENTRAL PREMIX CONCRETE CO RICHLAND	955 W LACEY	RICHLAND	99352	ENVIRONMENTAL ENGINEER	JANA MCDONALD	5095346221
CenturyLink QC W00B37	NE4SW4S12T7NR29E	KENNEWICK	99336	EHS MANAGER	JOE ROBERTSON	2067335149
CHARTER COMMUNICATIONS WA-11250	6019 W JOHN DAY	KENNEWICK	99336	SR. MANAGER, ENVIRONMENTAL	LAUREN ROSSI	2034280178
CHS SUN BASIN GROWERS KENNEWICK TERMINAL	900 E COLUMBIA	KENNEWICK	99336	ENVIRONMENTAL COMPLIANCE S	KIRSTEN TINDALL	6513556894
CITY of RICHLAND 3000 UV FACILITY	2715 GEORGE WASHINGTON WA	RICHLAND	99352	PUB WKS DIR	PETER ROGALSKY	5099427558
CITY of RICHLAND WTP	110 SAINT ST	RICHLAND	99352	PUB WKS DIR	PETER ROGALSKY	5099427558
CITY of RICHLAND WWTP	555 LACY RD	RICHLAND	99352	PUBLIC WORKS DIR	PETER ROGALSKY	5099427558
Coleman Oil Aaron	917 Aaron Dr	Richland	99352	REGULATORY MAINTENANCE MA	RUSSELL SATER	2087992000
Coleman Oil Gum St	206 N Gum St	Kennewick	99336	REGULATORY MAINTENANCE MA	RUSSELL SATER	2087992000
Coleman Oil Horn Rapids Cardlock	2451 Logan Street	Richland	99354	REGULATORY MAINTENANCE MA	RUSSELL SATER	2087992000
Coleman Oil Kennewick Bulk Plant	529 E KENNEWICK AVE	KENNEWICK	99336	REGULATORY MAINTENANCE MA	RUSSELL SATER	2087992000
Coleman Oil Vista	601 N Kellogg St	Kennewick	99336	REGULATORY MAINTENANCE MA	RUSSELL SATER	2087992000
COLUMBIA GENERATING STATION	SEC 5 T11N R28E	NORTH OF RICHLA	99352	ENVIRONMENTAL SCIENTIST	BRIAN D JONES	5093774375
CONNELL OIL INC CLOVER ISLAND YACHT CLUB	104 CLOVER ISLAND	KENNEWICK	99336	PRES	BRAD BELL	5095473326
CONNELL OIL INC COLUMBIA DR	813 W COLUMBIA DRIVE 8	KENNEWICK	99336	PRES	BRAD BELL	5095473326
CONNELL OIL INC COLUMBIA POINT DR	350 COLUMBIA POINT DR	RICHLAND	99352	PRES	BRAD BELL	5095473326
CONNELL OIL INC COTTONWOOD	106609 E WISER PARKWAY	KENNEWICK	99337	PRES	BRAD BELL	5095473326
CONNELL OIL INC MERLOT DR	350 MERLOT DR	PROSSER	99350	PRES	BRAD BELL	5095473326
CONNELL OIL INC PORT of KENNEWICK	206 CLOVER ISLAND	KENNEWICK	99336	PRES	BRAD BELL	5095473326
CONNELL OIL INC PROSSER AIRPORT	111 NUNN RD	PROSSER	99350	PRES	BRAD BELL	5095473326
CONNELL OIL INC TERMINAL DR 2	1980 TERMINAL DR	RICHLAND	99352	PRES	BRAD BELL	5095473326
Costco Richland MDO 4008	1661 FOWLER ST	RICHLAND	99352	GLOBAL COMPLIANCE MANAGER	GAVIN PENDLETON	4254277862
COSTCO WHOLESALE 486	8505 W GAGE BLVD	KENNEWICK	99336	DIRECTOR OF GLOBAL SUSTAINAI	SHARON SAKNIT	4254162334
CROWN CASTLE COLUMBIA CENTER	7400 W QUINAULT AVE	KENNEWICK	99336	REGULATORY COMPLIANCE MAN	DON SNYDER	7244162470
CROWN CASTLE KENNEWICK	3104 W KENNEWICK AVE	KENNEWICK	99336	REGULATORY COMPLIANCE MAN	DON SNYDER	7244162470
CROWN CASTLE RICHLAND	1310 KNIGHT ST	RICHLAND	99352	REGULATORY COMPLIANCE MAN	DON SNYDER	7244162470

Tier II Facilities and Contacts 2022 (cont.)

FacilityName	Address	City	Zip Code	Contact Title	Contact Name	Phone
FERGUSON ENTERPRISES 0796	2501 BATTELLE BLVD	RICHLAND	99354	HAZMAT & ENVIRONMENTAL MA	DREW HARTSOCK	7578747795
FERRELLGAS KENNEWICK	306 N FRUITLAND	KENNEWICK	99336	REGION SAFETY MANAGER	DONALD MAY	5095512830
FRAMATOME NP	2101 HORN RAPIDS RD	RICHLAND	99354	ENV ENGINEER	JIM PERRYMAN	5093758452
FRUITSMART PROSSER	1125 SHERIDAN AVE	PROSSER	99350	MAINTENANCE MANAGER	ELTON BROWN	5097783874
GRANITE RICHLAND HANFORD PLANT	2090 ROBERTSON DRIVE	RICHLAND	99352	ENVIRONMENTAL ENGINEER	STEVE HITZEL	5099304863
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	99337	PLANT MANAGER	DENNIS FAULKNER	3605223617
HENNINGSEN COLD STORAGE CO RICHLAND	2025 SAINT ST	RICHLAND	99354	RCM	BO HURLEY	2087510635
HERC RENTALS TRI CITY	266 WELLSIAN WAY	RICHLAND	99352	BRANCH MANAGER	JUSTIN EVANS	5099431163
Horn Rapids Solar Storage and Training Project	2800 Horn Rapids RD	Richland	99352	ENVIRONMENTAL SCIENTIST	MARSHALL SCHMITT	5093725334
INENTEC LLC	1935 BUTLER LOOP	RICHLAND	99354	VP OF ENGR	DAVID LAMAR	5099465700
Ingredion Inc Richland	216 UNIVERSITY DR	RICHLAND	99354	PLANT MANAGER	PAUL LANDON	5093035818
J R SIMPLOT CO HEDGES TERMINAL	227120 E HEDGES RD	KENNEWICK	99337	TERMINAL MANAGER	JIM PITTAM	5413148553
JIFFY LUBE STORE 2621	421 WILLIAMS BLVD	RICHLAND	99352	COMPLIANCE MANAGER	LILLIAN NICHOLSON	9728127935
JIFFY LUBE STORE 2624	7201 W CANAL DR	KENNEWICK	99336	COMPLIANCE MANAGER	LILLIAN NICHOLSON	9728127910
JIFFY LUBE STORE 2896	2802 W 10TH AVE	KENNEWICK	99336	COMPLIANCE MANAGER	LILLIAN NICHOLSON	9728127910
KADLEC REGIONAL MEDICAL CENTER	888 SWIFT BLVD	RICHLAND	99352	PLANT OPERATIONS ASSISTANT	DENISE GILBERT	5099422612
KAISER ALUMINUM WASHINGTON	2425 STEVENS DR	RICHLAND	99354	GM	LEE FINNEY	5093750900
KENYON ZERO STORAGE INC PROSSER	100 BENITZ	PROSSER	99350	RVP	JASON HOLCOMB	3609890414
LAMB WESTON INC RICHLAND PLANT	2013 SAINT ST	RICHLAND	99354	SR. ENVIRONMENTAL MANAGER	ANTHONY SEARLS	5097138055
LAMB WESTON PATERSON PLANT	187107 S WATTS RD	PATERSON	99345	PLANT MGR	KATHY DOUGHTY	5098752737
LEVEL 3 COMMUNICATIONS PROSSER DBA CENTURY L	89303 W SELLARDS RD	PROSSER	99350	EHS MANAGER	JOE ROBERTSON	2067335149
LINEAGE LOGISTICS LLC KENNEWICK	224905 E BOWLES RD	KENNEWICK	99337	REGIONAL VICE PRESIDENT	JASON HOLCOMB	3609890414
LOVES TRAVEL SHOP 681	700 WINE COUNTRY RD	PROSSER	99350	ENVIRONMENTAL MANAGER	CHRIS WELDON	4053026673
MANULIFE INVESTMENT MANAGEMENT FMS HESS	98902 W HESS RD	PROSSER	99350	ENVIRONMENTAL HEALTH & SAF	RAQUEL PEREZ	2094857577
MILNE FRUIT PRODUCTS BENNETT	804 BENNETT AVE	PROSSER	99350	PLANT ENGR	BRUCE DEJONG	5097862611
MILNE FRUIT PRODUCTS SR 221	2200 SR 221	PROSSER	99350	PLANT ENGINEER	BRUCE DEJONG	5097862611
NORTHWEST PIPELINE PLYMOUTH PLANT	42612 E CHRISTY RD	PLYMOUTH	99346	ENVIRONMENTAL SPECIALIST	CECILIA DIAZ	7132152964
NUTRIEN AG SOLUTIONS KENNEWICK	227515 BOWLES RD	KENNEWICK	99337	OPERATIONS SUPERINTENDENT	JOHN H HANSON	5095865488
NUTRIEN AG SOLUTIONS PLYMOUTH	187710 S PLYMOUTH IND RD	PLYMOUTH	99346	BRANCH MANAGER	JUSTIN ZIMMERLY	5097834076
PACIFIC RECYCLING KENNEWICK	315 S GUM ST	KENNEWICK	99336	HSET DIRECTOR	KIRBY FARNER	4068685062
PACIFICORP KENNEWICK COMM SITE	175198 JUMP OFF JOE RD	KENNEWICK	99337	ENVIRONMENTAL ANALYST	MARLI HEININGER	5038137152
PACIFICORP PROSSER HILL COMM TECH	.	PROSSER	99350	ENVIRONMENTAL ANALYST	MARLI HEININGER	5038137152
PCA RICHLAND PACKAGING	3003 KINGSGATE WAY	RICHLAND	99354	QUALITY & TECHNICAL SERVICES	EMILY OUHL	5092125908
PERMA FIX NORTHWEST RICHLAND INC	2025 BATTELLE BLVD	RICHLAND	99354	REGULATORY COMPLIANCE OFFI	RICK HUCKFELDT	5093757008
PREFERRED FREEZER SERVICES LLC RICHLAND	2800 POLAR WAY	RICHLAND	99354	ENVIRONMENTAL HEALTH & SAF	AMBER DARRINGTON	5093185276
Rattlesnake Mt Combined Community Communicatic	109692 N SR 225	Benton City	99320	ENVIRONMENTAL AND REGULAT	PAYTON SAMPLE	5093772469
SANDVIK SPECIAL METALS CORP	235407 E SR397	Kennewick	99337	EHS MGR	STEVEN L THOMPSON	5097343930
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	99350	SUPV	JAIME ALBA	5099858808
STE MICHELLE WINE ESTATES 14 HANDS	660 FRONTIER RD	PROSSER	99350	SAFETY SPECIALIST	EVAN BRESTAR	4252193832
STE MICHELLE WINE ESTATES CANOE RIDGE	239653 CANOE RIDGE RD	PATTERSON	99345	SAFETY SPECIALIST	EVAN BRESTAR	4252193832
STE MICHELLE WINE ESTATES COL SOLARE WINERY	50207 ANTINORI RD	BENTON CITY	99320	SAFETY SPECIALIST	EVAN BRESTAR	4252193832
STE MICHELLE WINE ESTATES COLUMBIA CREST WINEF	HWY 221 COLUMBIA CREST DR	PATERSON	99345	SAFETY SPECIALIST	EVAN BRESTAR	4252193832
SUNBELT RENTALS PC 328	9115 W CLEARWATER AVE	KENNEWICK	99336	ENV MANAGER	MIKE CROUCH	7042222484
TARGET STORE 2314	2941 QUEENSGATE DR	RICHLAND	99352	COMPLIANCE DIRECTOR	JUSTIN NELSON	8005872228
TARGET STORE T0830	1106 N COLUMBIA CENTER BLVD	KENNEWICK	99336	COMPLIANCE DIRECTOR	JUSTIN NELSON	8005872228
TESSENDERLO KERLEY INC KENNEWICK	233807 E STRAIGHTBANK RD	KENNEWICK	99337	SR. HSE SPECIALIST	BRIAN BEETSO	6028898307
THE HOGUE CELLARS	3090 WITTKOPF	PROSSER	99350	SENIOR MANAGER WINEMAKING	SEAN HAILS	5097866027
THE HOME DEPOT STORE 4739	3910 W 27TH AVE	KENNEWICK	99337	MANAGER - REGULATORY COMPL	MICHELLE O'BRIEN	7704338211
THE HOME DEPOT STORE 4746	2855 DUPORTAIL ST	RICHLAND	99352	MANAGER - REGULATORY COMPL	MICHELLE O'BRIEN	7704338211
THE MCGREGOR CO KENNEWICK	1020 S CLODFELTER RD	KENNEWICK	99338	ACCOUNT MANAGER	LOGAN HOEFT	5096273917
TREE TOP INC PROSSER	2780 LEE RD	PROSSER	99350	ENVIRONMENTAL SPECIALIST	VASILIY KRAVTSOV	5096981613
TWIN CITY FOODS INC KENNEWICK	1000 E 1ST AVE	KENNEWICK	99336	DIV MGR	DON LATHIM	5095867568

Tier II Facilities and Contacts 2022 (cont.)

FacilityName	Address	City	Zip Code	Contact Title	Contact Name	Phone
U S ECOLOGY	1/4 MILE WEST OF 200 EAST AREA	RICHLAND	99352	QA & RCC	MICHAEL AMAN	5093772411
UNIFIRST/UNITECH CORPORATION RICHLAND	2424 ROBERTSON DR	RICHLAND	99354	ENVIRONMENTAL COMPLIANCE S	SARAH WHITE	9785274048
UNITED RENTALS BRANCH 290	116 N MORAIN ST	KENNEWICK	99336	ENVIRONMENTAL MANAGER	JEFF WALKER	8563056625
UPS KENNEWICK	6504 W OKANOGAN	KENNEWICK	99336	CORPORATE ENVIRONMENTAL C	PAUL JONES	9515696036
US DOE 1100 AREA	2355 STEVENS DR	RICHLAND	99352	EPCRA REPORTING POC	ALEX E TEIMOURI	5093766222
US DOE 7220 BLDG	712 NORTHGATE	RICHLAND	99352	EPCRA REPORTING POC	ALEX E TEIMOURI	5093766222
US DOE FEDERAL BLDG	825 JADWIN AVE FEDERAL BLDG	RICHLAND	99352	EPCRA REPORTING POC	ALEX E TEIMOURI	5093766222
US DOE HANFORD	2420 Stevens Pl	RICHLAND	99354	EPCRA REPORTING POC	ALEX E TEIMOURI	5093766222
US DOE PNNL	3200 INNOVATION BLVD	RICHLAND	99354	ENVIRONMENTAL PROGRAM MA	THOMAS M. MCDERM	5093724675
US LINEN AND UNIFORM INC	1106 HARDING ST	RICHLAND	99352	CHIEF ENGINEER	STEVE PETERSON	5099466125
WASTE MANAGEMENT of KENNEWICK	1611 S WASHINGTON	KENNEWICK	99337	SITE MGR	MICHAEL SLACK	5095861704
WESTERN SINTERING CO INC	2620 STEVENS DR	RICHLAND	99352	PRESIDENT	JEFF WOOD	5095316023
WESTINGHOUSE RICHLAND SERVICE CENTER	2939 RICHARDSON RD	RICHLAND	99352	CHEMISTRY LEAD/CHO	DARIK TIPPETTS	5093727827
WS DOT PROSSER	2385 SALES YARD RD	PROSSER	99350	ENVIRONMENTAL POLICY MANA	NORMAN PAYTON	3607057848
WSP KENNEWICK	143302 E LAW LANE	KENNEWICK	99337	ENVIRONMENTAL POLICY MANA	NORMAN PAYTON	3607057848
WSU Irrigated Agriculture Research and Extension C	24106 Bunn Road	Prosser	99350	WSU EH&S DIRECTOR	JASON SAMPSON	5093359564
WYCKOFF FARMS INC BOTANIC	166301 W LEMLEY RD	PROSSER	99350	ENGINEERING MANAGER	DAVID PIERCE	5092035665
ZIPLY FIBER KENNEWICK HIGHLANDS	4916 W CLEARWATER	KENNEWICK	99336	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIPLY FIBER KENNEWICK MAIN CO	15 S BENTON ST	KENNEWICK	99336	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIPLY FIBER MEADOW SPRINGS CO	803 GAGE BLVD	RICHLAND	99352	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIPLY FIBER NORTH RICHLAND CO	2600 STEVENS DR	NORTH RICHLAND	99352	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIPLY FIBER RICHLAND CO	4577 FALLON DR	W RICHLAND	99353	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIPLY FIBER RICHLAND GTDS	751 MANSFIELD	RICHLAND	99352	SAFETY SPECIALIST	DON SCHWAB	4254223710
ZIRKLE FRUIT CO PROSSER	101 BENITZ RD PROSSER INDUSTR	PROSSER	99350	SAFETY MANAGER	SCOTT BLACKLEDGE	5099418714

EHS – Facilities reported 2022

FacilityName	Address	City	Max Pound Quantity	Avg Pound Quantit	Days Onsite	Product Name	EHS Name
AGRIUM US INC KFO FINLEY AREA	231610 E GAMEFARM RD	KENNEWICK	4000000	4000000	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
AGRIUM US INC KFO FINLEY AREA	231610 E GAMEFARM RD	KENNEWICK	38000000	20000000	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
AMERICAN ROCK PRODUCTS INC HANFORD PIT	2090 ROBERTSON DR	RICHLAND	1950	1950	365	LEAD ACID BATTERY	SULFURIC ACID
AMERIGAS KENNEWICK	204 N FRUITLAND	KENNEWICK	1000800	1000800	365	PROPANE	propane
APPLIED PROCESS ENGINEERING LABORATORY APEL	350 HILLS ST STE 101	RICHLAND	1950	1950	365	BATTERY ACID	SULFURIC ACID
ATT BENTON CITY WAA180	244202 N COLD CREEK RD	SUNNYSIDE	604	604	365	Sulfuric Acid	Sulfuric
ATT JOE BUTTE	JOE BUTTE	KENNEWICK	1455	1455	365	Sulfuric Acid	Sulfuric
ATT KENNEWICK	6500 CLEARWATER AVE	KENNEWICK	618	618	264	Sulfuric Acid	Sulfuric
ATT MOBILITY BADGER MT 10594	ATOP BADGER MOUNTAIN	RICHLAND	606	606	365	Sulfuric Acid	Sulfuric
ATT MOBILITY EAST KENNEWICK	410 E KENNEWICK AVE	KENNEWICK	1286	1286	365	Sulfuric Acid	Sulfuric
ATT PRIEST RAPIDS	51517 WA-24	PRIEST RAPIDS	592	592	365	Sulfuric Acid	Sulfuric
Benton City No 1 Propane Site	32508 W Kelly Rd	Benton City	126000	50000	365	PROPANE	Propane
BENTON COUNTY MOSQUITO CONTROL	4951 W VAN GIESEN	WEST RICHLAND	2500	1300	365	Naled	DDVP
BLEYHL FARM SERVICE INC PROSSER	1000 BENNETT AVE	PROSSER	117446	67078	365	DIESEL NO.2	Petroleum Distillates
BLEYHL FARM SERVICE INC PROSSER	1000 BENNETT AVE	PROSSER	378000	189000	365	REGULAR UNLEADED GAS	Light Petroleum Distillates
BOLTHOUSE FARMS WASHINGTON	10 SONOVA RD	PROSSER	15000	13500	365	AMMONIA ANHYDROUS	AMMONIA ANHYDROUS
BOLTHOUSE FARMS WASHINGTON	10 SONOVA RD	PROSSER	7700	5000	365	LIQUIFIED PETROLEUM GAS	Propane
BPA ASHE MAINTENANCE HQ	NONE PROVIDED	RICHLAND	2030	2030	365	SULFURIC ACID	SULFURIC ACID
BPA BADGER CANYON SUBSTATION	WA T8N R28E SEC 1	RICHLAND	650	650	365	SULFURIC ACID	SULFURIC ACID
BPA BENTON SUBSTATION	T11N R28E WN S11	RICHLAND	900	900	365	SULFURIC ACID	SULFURIC ACID
BPA HANFORD SUBSTATION	lat 46 40 08 long 119 34 15	RICHLAND	891	891	365	SULFURIC ACID	SULFURIC ACID
BPA KENNEWICK MICROWAVE STATION	ON JUMPOFF JOE BUTTE	KENNEWICK	504	504	365	SULFURIC ACID	SULFURIC ACID
BPA MIDWAY SUBSTATION	T13N R24E WM S14Ã	RICHLAND	2100	2100	365	SULFURIC ACID	SULFURIC ACID
BPA WAUTOMA SUBSTATION	209497 N SR 241	SUNNYSIDE	21500	21500	365	DIESEL FUEL #2	DIESEL FUEL #2
BPA WAUTOMA SUBSTATION	209497 N SR 241	SUNNYSIDE	2200	2200	365	SULFURIC ACID	SULFURIC ACID
BPA WHITE BLUFFS SUBSTATION	3580 HORN RAPIDS RD	RICHLAND	1000	1000	365	SULFURIC ACID	SULFURIC ACID
CENTRAL PREMIX CONCRETE CO RICHLAND	955 W LACEY	RICHLAND	4700	4300	365	LEAD ACID BATTERY	SULFURIC ACID
CenturyLink QC W00B37	NE4SW4S12T7NR29E	KENNEWICK	1189	1189	365	LEAD ACID BATTERY	SULFURIC ACID
CHARTER COMMUNICATIONS WA-11250	6019 W JOHN DAY	KENNEWICK	2975	2975	365	SULFURIC ACID	SULFURIC ACID
CHS SUN BASIN GROWERS KENNEWICK TERMINAL	900 E COLUMBIA	KENNEWICK	20	17	365	Weevil-Cide	ALUMINUM PHOSPHIDE
COLUMBIA GENERATING STATION	SEC 5 T11N R28E	NORTH OF RICH	104000	104000	365	LEAD	Lead
COLUMBIA GENERATING STATION	SEC 5 T11N R28E	NORTH OF RICH	290000	247600	365	SULFURIC ACID	Sulfuric Acid
Costco Richland MDO 4008	1661 FOWLER ST	RICHLAND	2085	2085	365	SULFURIC ACID (LEAD ACID BAT	SULFURIC ACID
COSTCO WHOLESALE 486	8505 W GAGE BLVD	KENNEWICK	6601	6601	365	SULFURIC ACID	SULFURIC ACID
CROWN CASTLE COLUMBIA CENTER	7400 W QUINAULT AVE	KENNEWICK	727	727	365	Sulfuric acid	Sulfuric acid
CROWN CASTLE KENNEWICK	3104 W KENNEWICK AVE	KENNEWICK	1500	1500	365	Sulfuric acid	Sulfuric acid
CROWN CASTLE RICHLAND	1310 KNIGHT ST	RICHLAND	1072	1072	365	Sulfuric acid	Sulfuric acid
FERGUSON ENTERPRISES 0796	2501 BATTELLE BLVD	RICHLAND	44100	44100	365	SULFURIC ACID	Sulfuric acid
FRAMATOME NP	2101 HORN RAPIDS RD	RICHLAND	229300	57330	365	HYDROFLUORIC ACID	Hydrofluoric acid
FRAMATOME NP	2101 HORN RAPIDS RD	RICHLAND	120187	96150	365	NITRIC ACID	Nitric Acid
FRUITSMART PROSSER	1125 SHERIDAN AVE	PROSSER	21157	21157	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
FRUITSMART PROSSER	1125 SHERIDAN AVE	PROSSER	4170	4170	365	SULFURIC ACID	SULFURIC ACID
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	3076	3076	365	DIESEL FUEL NO 2	Diesel fuel no 2
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	20000	20000	365	NITROGEN DIOXIDE	Nitrogen
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	1800	1500	365	SODIUM HYDROXIDE (3-20 perc	sodium hydroxide
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	2000	1500	365	SODIUM HYDROXIDE 50 percent	sodium hydroxide
GREENBRIER RAILCAR SERVICES LLC	228919 E COCHRAN RD	FINLEY	3076	3076	365	UNLEADED GASOLINE @10 perc	unleaded gasoline
HENNINGSEN COLD STORAGE CO RICHLAND	2025 SAINT ST	RICHLAND	8500	8500	365	ANHYDROUS AMMONIA	Anhydrous Ammonia
HENNINGSEN COLD STORAGE CO RICHLAND	2025 SAINT ST	RICHLAND	12103	12103	365	BATTERY ELECTROLYTE	BATTERY ELECTROLYTE
INENTEC LLC	1935 BUTLER LOOP	RICHLAND	18250	9955	365	NITROGEN LIQUID	Nitrogen
Ingredion Inc Richland	216 UNIVERSITY DR	RICHLAND	3500	3500	365	LEAD-ACID BATTERY- SULFURIC	Sulfuric Acid
Ingredion Inc Richland	216 UNIVERSITY DR	RICHLAND	10321	4992	365	Phosphorus oxychloride	Phosphorus oxychloride
KAISER ALUMINUM WASHINGTON	2425 STEVENS DR	RICHLAND	1278	1278	365	SULFURIC ACID BATTERY SOLUT	Sulfuric Acid
KENYON ZERO STORAGE INC PROSSER	100 BENITZ	PROSSER	25266	25266	365	AMMONIA ANYHDROUS	Ammonia
KENYON ZERO STORAGE INC PROSSER	100 BENITZ	PROSSER	5600	5600	365	BATTERY ELECTROLYTE	sulfuric acid
KENYON ZERO STORAGE INC PROSSER	100 BENITZ	PROSSER	35000	35000	365	BATTERY LEAD	Battery lead

FacilityName	Address	City	Max Pound Quantity	Avg Pound Quantit	Days Onsite	Product Name	EHS Name
LAMB WESTON INC RICHLAND PLANT	2013 SAINT ST	RICHLAND	114025	114025	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
LAMB WESTON INC RICHLAND PLANT	2013 SAINT ST	RICHLAND	1200	1000	83	CHLORINE	CHLORINE
LAMB WESTON INC RICHLAND PLANT	2013 SAINT ST	RICHLAND	98423	98423	365	Lead Acid Batteries	Sulfuric Acid
LAMB WESTON INC RICHLAND PLANT	2013 SAINT ST	RICHLAND	1742	799	365	NITRIC ACID	Nitric Acid
LAMB WESTON PATERSON PLANT	187107 S WATTS RD	PATERSON	71097	40053	365	ANHYDROUS AMMONIA	Ammonia
LAMB WESTON PATERSON PLANT	187107 S WATTS RD	PATERSON	2122	2028	365	SULFURIC ACID (BATTERY COMP	Sulfuric Acid
LEVEL 3 COMMUNICATIONS PROSSER DBA CENTURY	89303 W SELLARDS RD	PROSSER	992	992	365	LEAD ACID BATTERY	SULFURIC ACID
LINEAGE LOGISTICS LLC KENNEWICK	224905 E BOWLES RD	KENNEWICK	28500	26595	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
LINEAGE LOGISTICS LLC KENNEWICK	224905 E BOWLES RD	KENNEWICK	105000	105000	365	LITHIUM ION BATTERIES (TOTAL	Lithium Ion Batteries
LINEAGE LOGISTICS LLC KENNEWICK	224905 E BOWLES RD	KENNEWICK	56000	56000	365	SULFURIC ACID (LEAD ACID BAT	Lead Acid Batteries
MILNE FRUIT PRODUCTS BENNETT	804 BENNETT AVE	PROSSER	7900	7000	365	ANHYDROUS AMMONIA	Ammonia
MILNE FRUIT PRODUCTS BENNETT	804 BENNETT AVE	PROSSER	9000	7800	365	ANHYDROUS AMMONIA	Ammonia
MILNE FRUIT PRODUCTS BENNETT	804 BENNETT AVE	PROSSER	96000	60000	365	SULFURIC ACID	Sulfuric acid
NUTRIEN AG SOLUTIONS KENNEWICK	227515 BOWLES RD	KENNEWICK	3250000	3000000	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
NUTRIEN AG SOLUTIONS KENNEWICK	227515 BOWLES RD	KENNEWICK	20704	10352	365	ENDCOR UAN9764	ENDCOR UAN9764
NUTRIEN AG SOLUTIONS KENNEWICK	227515 BOWLES RD	KENNEWICK	5000000	2500000	365	NITRIC ACID	NITRIC ACID
NUTRIEN AG SOLUTIONS PLYMOUTH	187710 S PLYMOUTH IND RD	PLYMOUTH	1216000	456000	90	AMMONIA (ANHYDROUS)	Ammonia (Anhydrous)
PACIFIC RECYCLING KENNEWICK	315 S GUM ST	KENNEWICK	900	300	365	BATTERY ACID	Battery Acid
PCA RICHLAND PACKAGING	3003 KINGSGATE WAY	RICHLAND	3456	2606	365	SULFURIC ACID	SULFURIC ACID
PERMA FIX NORTHWEST RICHLAND INC	2025 BATTELLE BLVD	RICHLAND	3004	3004	365	LEAD-ACID BATTERY- SULFURIC	Sulfuric Acid
PREFERRED FREEZER SERVICES LLC RICHLAND	2800 POLAR WAY	RICHLAND	18500	18400	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
Rattlesnake Mt Combined Community Communicati	109692 N SR 225	Benton City	5679	5679	365	BATTERY ACID (SULFURIC ACID)	SULFURIC ACID
SANDVIK SPECIAL METALS CORP	235407 E SR397	Kennewick	7115	2000	365	HYDROFLUORIC ACID	Hydrofluoric Acid
SANDVIK SPECIAL METALS CORP	235407 E SR397	Kennewick	22661	500	365	NITRIC ACID	Nitric Acid
SANDVIK SPECIAL METALS CORP	235407 E SR397	Kennewick	1500	500	365	SULFURIC ACID	Sulfuric Acid
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	23108	5424	306	CHE-ZINC 9 PERCENT PHT [265G	Anhydrous Ammonia
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	6300	4283	29	COUNTER 20G SMARTBOX (RUP	Terbufos
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	9600	896	333	GRAMOXONE SL 3.0 (RUP) [250(	Paraquat Dichloride
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	6912	1590	240	GRAMOXONE SL 3.0 [2.5G]	PARAQUAT DICHLORIDE
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	950	548	237	JET-AG [5G]	PEROXYACETIC ACID
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	2650	2650	137	JET-AG[265G]	PEROXYACETIC ACID
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	3240	3240	29	MOCAP 15G LOCK N LOAD (RUP	Ethoprop
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	600	334	79	ROZOL PGB BURROW BUILDER F	CHLOROPHACINONE
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	1400	879	141	ROZOL VOLE BAIT (50L)	Chlorophacinone
SIMPLOT GROWER SOLUTIONS PROSSER	102501 BIGGAM RD	PROSSER	2699	1347	205	VYDATE L (RUP) [2.5G]	OXAMYL
STE MICHELLE WINE ESTATES 14 HANDS	660 FRONTIER RD	PROSSER	4500	4000	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
STE MICHELLE WINE ESTATES 14 HANDS	660 FRONTIER RD	PROSSER	150	120	365	Sulfur dioxide	Sulfur dioxide
STE MICHELLE WINE ESTATES CANOE RIDGE	239653 CANOE RIDGE RD	PATTERSON	4100	3312	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
STE MICHELLE WINE ESTATES CANOE RIDGE	239653 CANOE RIDGE RD	PATTERSON	3129	2000	365	Sulfur dioxide	Sulfur dioxide
STE MICHELLE WINE ESTATES CANOE RIDGE	239653 CANOE RIDGE RD	PATTERSON	28000	25000	365	SULFURIC ACID BATTERIES	SULFURIC ACID BATTERIES
STE MICHELLE WINE ESTATES COL SOLARE WINERY	50207 ANTINORI RD	BENTON CITY	150	50	365	Sulfur dioxide	Sulfur dioxide
STE MICHELLE WINE ESTATES COLUMBIA CREST WINE	HWY 221 COLUMBIA CREST DR	PATERSON	21600	17500	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
STE MICHELLE WINE ESTATES COLUMBIA CREST WINE	HWY 221 COLUMBIA CREST DR	PATERSON	7800	6500	365	LEAD-ACID BATTERY- SULFURIC	SULFURIC ACID
STE MICHELLE WINE ESTATES COLUMBIA CREST WINE	HWY 221 COLUMBIA CREST DR	PATERSON	660	400	365	Sulfur dioxide	Sulfur dioxide
STE MICHELLE WINE ESTATES COLUMBIA CREST WINE	HWY 221 COLUMBIA CREST DR	PATERSON	1400	500	365	SULFURIC ACID Solution	synergex
SUNBELT RENTALS PC 328	9115 W CLEARWATER AVE	KENNEWICK	41635	41000	365	LEAD-ACID BATTERIES	Sulfuric Acid
TARGET STORE 2314	2941 QUEENSGATE DR	RICHLAND	513	513	365	SULFURIC ACID	SULFURIC ACID
TARGET STORE T0830	1106 N COLUMBIA CENTER BLV	KENNEWICK	529	529	365	SULFURIC ACID	SULFURIC ACID
TESSENDERLO KERLEY INC KENNEWICK	233807 E STRAIGHTBANK RD	KENNEWICK	3713950	1403273	365	Carbon disulfide	Carbon disulfide
THE HOGUE CELLARS	3090 WITTKOPF	PROSSER	2949	2949	365	LEAD ACID BATTERY	SULFURIC ACID
THE HOME DEPOT STORE 4739	3910 W 27TH AVE	KENNEWICK	841	841	365	SULFURIC ACID	SULFURIC ACID
THE HOME DEPOT STORE 4746	2855 DUPORTAIL ST	RICHLAND	743	743	365	SULFURIC ACID	SULFURIC ACID
THE MCGREGOR CO KENNEWICK	1020 S CLODFELTER RD	KENNEWICK	480	48	365	GRAMOXONE SL 3.0	Paraquat Dichloride
THE MCGREGOR CO KENNEWICK	1020 S CLODFELTER RD	KENNEWICK	9590	1438	180	HELMQUAT 3SL	Paraquat Dichloride
THE MCGREGOR CO KENNEWICK	1020 S CLODFELTER RD	KENNEWICK	3452	480	180	PARAQUAT CONCENTRATE	Paraquat Dichloride
TREE TOP INC PROSSER	2780 LEE RD	PROSSER	17050	17050	365	AMMONIA	AMMONIA
TREE TOP INC PROSSER	2780 LEE RD	PROSSER	2896	2896	365	Nitric acid	Nitric acid
TREE TOP INC PROSSER	2780 LEE RD	PROSSER	6922	6922	365	Peracetic acid	Peracetic acid
TREE TOP INC PROSSER	2780 LEE RD	PROSSER	2158	2158	365	Sulfuric acid	Sulfuric acid
TWIN CITY FOODS INC KENNEWICK	1000 E 1ST AVE	KENNEWICK	9000	7500	365	ANHYDROUS AMMONIA	Anhydrous Ammonia
TWIN CITY FOODS INC KENNEWICK	1000 E 1ST AVE	KENNEWICK	2478	2478	365	SULFERIC	SULFERIC
UNIFIRST/UNITECH CORPORATION RICHLAND	2424 ROBERTSON DR	RICHLAND	5122	2500	365	SULFURIC ACID	sulfuric acid
UNITED RENTALS BRANCH 290	116 N MORAIN ST	KENNEWICK	17704	10622	365	LEAD ACID BATTERY	Sulfuric Acid
US DOE 1100 AREA	2355 STEVENS DR	RICHLAND	30802	30802	365	LEAD ACID BATTERY	SULFURIC ACID
US DOE 7220 BLDG	712 NORTHGATE	RICHLAND	3682	3682	365	LEAD-ACID BATTERIES	Sulfuric Acid
US DOE FEDERAL BLDG	825 JADWIN AVE FEDERAL BLD	RICHLAND	3380	3380	365	LEAD-ACID BATTERIES	Sulfuric Acid
US DOE HANFORD	2420 Stevens Pl	RICHLAND	2475	2475	365	CHLORINE	CHLORINE
US DOE HANFORD	2420 Stevens Pl	RICHLAND	11625	11292	365	HYDROGEN PEROXIDE	Hydrogen peroxide (Conc.> 52
US DOE HANFORD	2420 Stevens Pl	RICHLAND	22900	21940	365	HYDROGEN SULFIDE	Hydrogen sulfide
US DOE HANFORD	2420 Stevens Pl	RICHLAND	403756	403756	365	LEAD-ACID BATTERIES	Sulfuric Acid
US DOE HANFORD	2420 Stevens Pl	RICHLAND	828	759	365	NITRIC ACID	NITRIC ACID
US DOE HANFORD	2420 Stevens Pl	RICHLAND	369022	369022	365	SULFURIC ACID	SULFURIC ACID
US DOE HANFORD	2420 Stevens Pl	RICHLAND	100	100	365	VANADIUM PENTOXIDE	VANADIUM PENTOXIDE
US DOE PNNL	3200 INNOVATION BLVD	RICHLAND	16194	16194	365	LEAD ACID BATTERY	Lead Acid Battery
US LINEN AND UNIFORM INC	1106 HARDING ST	RICHLAND	8250	23	365	SULFURIC ACID 93 percent	SULFURIC ACID
WESTINGHOUSE RICHLAND SERVICE CENTER	2939 RICHARDSON RD	RICHLAND	333	333	365	HYDRAZINE	Hydrazine, Aqueous Solution,
WYCKOFF FARMS INC BOTANIC	166301 W LEMLEY RD	PROSSER	100000	60000	365	CARBON DIOXIDE	CARBON DIOXIDE
ZIPLY FIBER KENNEWICK HIGHLANDS	4916 W CLEARWATER	KENNEWICK	92117	92117	60	Lead Acid Batteries	Sulfuric Acid
ZIPLY FIBER KENNEWICK MAIN CO	15 S BENTON ST	KENNEWICK	30510	30510	60	Lead Acid Batteries	Sulfuric Acid
ZIPLY FIBER MEADOW SPRINGS CO	803 GAGE BLVD	RICHLAND	16998	16998	60	Lead Acid Batteries	Sulfuric Acid
ZIPLY FIBER NORTH RICHLAND CO	2600 STEVENS DR	NORTH RICHLAN	17430	17430	60	Lead Acid Batteries	Sulfuric Acid
ZIPLY FIBER RICHLAND CO	4577 FALLON DR	W RICHLAND	9870	9870	60	Lead Acid Batteries	Sulfuric Acid
ZIPLY FIBER RICHLAND GTDS	751 MANSFIELD	RICHLAND	29430	29430	60	Lead Acid Batteries	Sulfuric Acid
ZIRKLE FRUIT CO PROSSER	101 BENITZ RD PROSSER INDUS	PROSSER	31700	31700	365	ANHYDROUS AMMONIA	ANHYDROUS AMMONIA
ZIRKLE FRUIT CO PROSSER	101 BENITZ RD PROSSER INDUS	PROSSER	4000	2500	365	LIQUID PROPANE GAS	liquid propane gas
ZIRKLE FRUIT CO PROSSER	101 BENITZ RD PROSSER INDUS	PROSSER	8000	4000	120	NITROGEN	NITROGINE

Appendix C – Incident Command Agency

JURISDICTION	INCIDENT COMMAND AGENCY	DESIGNATION DATE
Benton County FPD#1	Benton County FPD#1	11/10/1987
Benton County FPD#2	Benton County FPD#2	12/07/1987
West Benton Fire& Rescue	Washington State Patrol	2/01/1988
Benton County FPD#4	Benton County FPD#4	9/3/1991
Benton County FPD#5	Washington State Patrol	2/1/1988
Benton County FPD#6	Washington State Patrol	3/15/1996
Benton City	Benton County FPD#2	12/19/2000
Hanford Site	Hanford Fire Dept. (except Highway 24 and 240)	1/14/1988
Kennewick	Kennewick Fire Dept.	12/15/1987
Port of Benton	Richland Fire Dept.	12/07/1987
Port of Kennewick	Benton County FPD#1 and Kennewick Fire Dept.	12/19/2000
Prosser	Washington State Patrol	2/17/1998
Richland	Richland Fire Dept.	12/07/1987
West Richland	Benton County FPD#4	12/19/2000
Unincorporated Area	Benton County Sheriff	12/06/1982

Appendix D - Public Safety Procedures

Shelter-in-Place

The term, shelter-in-place, means to seek immediate shelter and remain there during an emergency rather than evacuate the area. Evacuation is the preferred public safety option. Therefore, shelter-in-place should only be used when an evacuation is not safe. The decision to shelter-in-place will be made by the affected jurisdiction fire department and/or law enforcement, in consultation with a hazardous materials technician or specialist, when possible. Once the decision to shelter-in-place is made, instructions will be relayed to the affected population to shelter-in-place. This notification will be made using any means of communication available, i.e., EAS; CodeRED, route alerting by available emergency vehicles.

In the event of a critical incident where hazardous (including chemical, biological or radiological) materials may have been released into the atmosphere either accidentally or intentionally, a decision to shelter-in-place may be the preferred method of safely waiting out the release. Consider providing the following instructions to citizens during a shelter-in-place situation:

- Turn-off heating, cooling and ventilation system to prevent drawing in outside air.
- Get disaster supply kit, pets and their food and water.
- Move to a small, interior room above ground level and close doors and windows, rooms having little or no ventilation are preferred. Seal air vents, cracks around doors and windows with blankets, sheets, towels, plastic sheeting, duct tape or other materials.
- Do not use the fireplace or wood stove, extinguish all burning materials and close dampers.
- Notify those around you and encourage others to remain in your room/ office rather than to try to leave the building.
- Do not use the telephone unless you have an emergency.
- Listen to your local radio or television stations for further instructions.
- Stay in your rooms/ offices/ classrooms and only come out when you are told that it is safe.

It is important following a shelter-in-place event the public take reverse actions. When outside toxic levels fall below those inside structures, directives should be given to begin ventilating buildings by restarting heating, cooling and ventilation systems and opening windows and doors. This is a critical component of the shelter-in-place concept but one where public compliance may become an issue.

Evacuation

The public is more likely to respond positively to an evacuation directive when they are well informed of the threat and appropriate action to take. It is very important the IC get the shelter-in-place or evacuation order out to the public as expeditiously as possible to minimize the potential of a wholesale self-evacuation. Uninformed, self-evacuees could frustrate response operations and compromise the traffic control plan.

The IC is responsible for determining the need to evacuate, executing the evacuation order, and communicating evacuation procedures to the public. Evacuation alert levels are as follows:

- **LEVEL 1**: BE ALERT. Be aware. Danger exists in your area. Monitor local media for information. People with access or functional needs, such as health or mobility concerns, or those with animals, should begin making arrangements to evacuate.
- **LEVEL 2**: BE READY. There is significant danger to your area. People should voluntarily relocate to a place outside the affected area. If choosing to remain, be prepared to leave at a moment's notice. Monitor local media for more information. THIS MAY BE THE ONLY EVACUATION NOTICE YOU RECEIVE!
- **LEVEL 3**: LEAVE IMMEDIATELY Danger to your area is current or imminent. Leave immediately. Listen to local media and emergency personnel for further instructions regarding the evacuation.

At a minimum, an evacuation directive should include:

- Location of the hazard.
- Description of the hazard.
- Description and boundaries of the evacuation zone.
- Name and address of shelters/reception centers.
- Primary evacuation routes to be used.
- Information on how special groups, i.e., schools, nursing homes, the functionally challenged, within the evacuation zone will be evacuated/assisted.
- Information on available public transportation system and pick-up points.
- Details on what to bring and not bring to the shelter/reception center.
- Information on security within the evacuation zone.
- Estimated time the zone/area will need to be evacuated.
- Information on how evacuees will receive instructions on when to return to the evacuation zone.

Evacuees should also receive instructions to, time permitting:

- Gather and pack only what is most needed, with particular attention given to medications, materials for infant care, essential documents, etc.

- Turn off heating, ventilation and cooling systems and appliances, except the refrigerator.
- Leave gas, water, and electricity on unless damage is suspected, there is a leak, or advised to do so by authorities.
- Lock the house or building prior to leaving.
- Do not use the telephone unless it is an emergency.
- Car-pool or take only one car and drive safely. Keep all vehicle windows and vents closed, turn on local radio station for evacuation routes and up-to-date information.
- Follow directions given by officials along the evacuation route(s) and be prepared to provide the right-of-way to emergency response vehicles.
- Do not call your school or go to pick-up children. The children will be moved if an evacuation is necessary at their location. The parents of evacuated children will be notified where to pick-up children.

Evacuation plans are specific to the individual facility and possibly to the specific chemical. They will include special provisions and instructions for facilities in the impacted area, especially those with captive or high-risk populations, i.e., schools, hospitals, nursing homes, prisons, etc. Provisions will be made to evacuate the elderly and physically challenged who require assistance to comply with evacuation directive. Precautionary evacuation of certain, high-risk members of the affected population may be recommended even when no other segments of the population are evacuated. This could include infants, pregnant women, persons with respiratory illnesses and the elderly.

Once an evacuation is complete, no access to the evacuated area will be allowed without the express permission of the IC, in coordination with the chief law enforcement officer. Once the area is deemed safe, the orderly return of evacuees to the evacuated area will be authorized through the IC. Return will be coordinated using predetermined procedures through designated checkpoints.

Local and state law enforcement agencies will use common traffic control procedures to keep evacuation routes open. The IC will determine the evacuation routes. The major thoroughfares will be utilized whenever possible to expedite the flow of evacuees.

The Interstate and state routes should be considered as transportation routes for hazardous substances and also as evacuation routes in Benton County; however, numerous county roads should also be considered based on the location of the hazardous materials incident.

Routes include:

- Interstate I-84
  - State Route 225
  - State Route 24
    - State Route 22

- State Route 221
- Interstate 182 that runs east to west
- State Route 240
- Highway 12
- State Route 14
- State Route 395

See Appendix E for a map depicting these routes

Any combination of the following modes of transportation will be utilized to transport evacuees from the evacuation zone to shelters/reception centers.

- **Walking:** When the evacuation is expected to be of short duration, evacuation zone is limited to a small area and weather conditions are acceptable, able-bodied persons may be asked to walk to a nearby shelter/reception center (school, parking lot, church, field, etc.). If the hazardous material is highly flammable and ignition sources need to be eliminated or surface arterials are in gridlock, walking would be the chosen mode for evacuation until a safe area is reached where follow-on transportation to a shelter/reception center is available.

- **Private vehicle (car, van, pick-up truck, etc.):** When walking is not an option, use of private vehicles is a viable alternative as long as the vehicle is in the area to be evacuated, fueled, and in operating condition. Use of personal vehicles can be quick and convenient and a community resource for transporting neighbors without access to their own vehicle or persons with physical challenges that do not require EMS level transportation.

- **Public Transit (city/county bus, school bus):** This mode minimizes the stress on surface arterials and provides a means of evacuation for individuals without a vehicle or immediate access to a vehicle when the distance to clear the evacuation zone is too far to walk.

- **EMS vehicles (ambulance or handicap equipped vehicle):** This mode is primarily used to transport the sick, infirmed, or disabled from the evacuation zone to a shelter/reception center or other, more appropriate facility.

  Public school buildings are normally used as evacuation shelters/reception centers when the evacuation is projected to last for an extended period of time; however, any large building outside the evacuation zone with adequate facilities could be utilized as long as the owner agrees to its use. Every effort will be made to ensure each shelter/reception center is accessible to evacuees, including the physically challenged and elderly. This may not be possible in every situation. In these instances, assistance will be provided and/or alternative facilities will be identified. Alternative facilities may be required to accommodate the special needs population, hospital patients or jail/prison inmates.

The American Red Cross (ARC) operates shelters/reception centers in Benton County jurisdictions. The services provided in these shelters/reception centers will be in accordance with ESF 6 – Mass Care, Housing and Human Services, Comprehensive Emergency Management Plan. The ARC has surveyed facilities throughout Benton County and have agreements with those entities to use each specific facility.

Law enforcement personnel will be assigned to secure the perimeter of the evacuation zone and, when environmental conditions permit, periodically patrol the interior of the evacuation zone. Law enforcement personnel may also be dispatched to shelter/reception center locations to provide security. The EOC, if requested, will request state assistance when the duration of the evacuation and/or size of the evacuation zone exceeds the capabilities of local law enforcement.

Law enforcement is responsible for verifying the identity of non-uniformed personnel requiring access to the evacuation zone to conduct business (local and state government, utilities, business owners, etc.) and maintaining a log recording when these individuals enter and exit the evacuation zone.

Appendix E - Evacuation Routes Map

An accident at the Columbia Generating Station involving the release of radioactive material into the surrounding community is very unlikely, but holds serious consequences. The evacuation plan below has been established.

In An Emergency

If there is an accidental release of radioactive material from the Columbia Generating Station, nearby residents will be warned in a number of ways.

Click here for more on how residents will be notified.

What Do I Do?

If you live within the Emergency Planning Zones, you may be asked to take action during an emergency.

Click here for detailed information.

Keep Informed

Each year, local emergency officials provide a calendar with emergency instruction in both English and Spanish to all residents living within the Columbia Generating Station's Emergency Planning Zones. The calendar contains important emergency information about what steps to take to protect yourself and your family if there is an accident at CGS. If you live in one of the CGS EPZ and haven't received the current year's calendar, contact us at 628-2600. **2020 Site Neighbors Calendar - click here.**

More Information

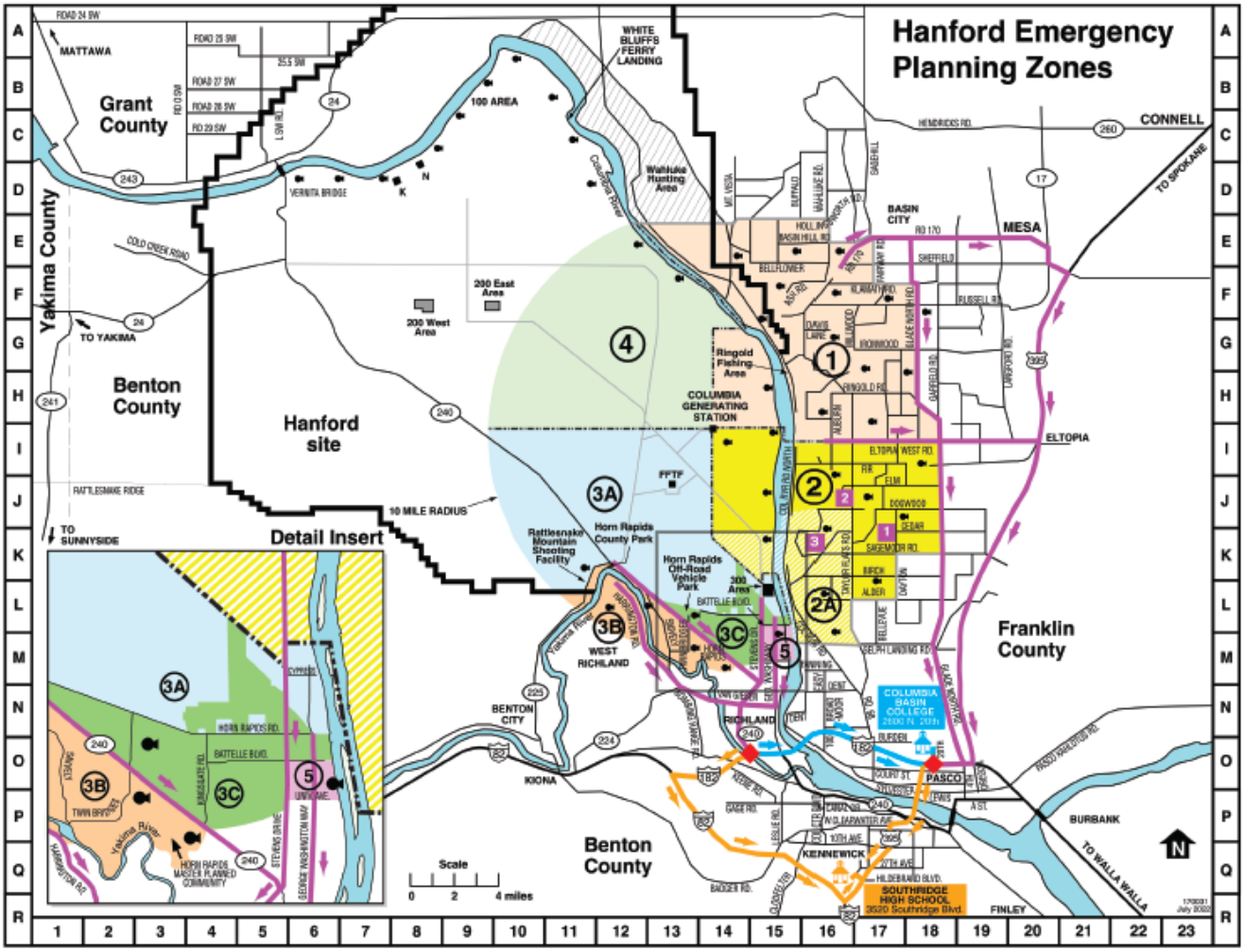
To find out more about Columbia Generating Station and nuclear energy, follow these links:

Energy Northwest
Columbia Generating Station

Radiological Emergency Information for Farmers, Food Processors and Distributors

Green Book (English)	Tri-fold (English)
Green Book (Spanish)	Tri-fold (Spanish)

The following Emergency Planning Zones are in Benton County:
Section 3B includes the area south of SR 240, west of River Park Street 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.
Section 3B also includes the Rattlesnake Mountain Shooting Facility and the Horn Rapids Park.
Section 3C is south of the Hanford site and north of Battelle Boulevard, between Stevens Drive and the Columbia River. It includes the area west of Stevens Drive between SR 240 and the Hanford Site.
Section 4
This section is on the Hanford Site and under jurisdiction of the Department of Energy. There are no permanent residents in this area. Hanford workers would be notified if any protective actions were necessary.



Evacuation Routes & Assistance Centers

Map Key

- Primary Evacuation Routes
- Route to Columbia Basin College
- Route to Southridge High School
- Columbia Basin College Assistance Center
- Southridge High School Assistance Center
- Decision Points
- Sirens

Schools within the 10-mile zone:

1. Country Christian Center
2. Edwin Markham School
3. Big River Country School

K-16	Big River Country School
J-17	Country Christian Center
J-16	Edwin Markham School
J-13	Fast Flux Test Facility (FFTF)
L-13	Horn Rapids Off-Road Vehicle Park
K-12	Horn Rapids Park
G-18	Columbia Basin College
R-17	Southridge High School
M-15	Leslie Groves Park
H-14	Columbia Generating Station
L-11	Rattlesnake Mountain Shooting Facility
G-15	Ringold Fishing Area
D-5	Vernita Bridge
E-13	Wahluke Hunting Area
B-1	White Bluffs Ferry Landing
C-8	100 Area
G-8	200 West Area
G-9	200 East Area
K-15	300 Area

Appendix F - Training Schedule

The different Benton jurisdiction's fire district, law enforcement, public works departments maintain their own individual training records for due diligence purposes. All National Incident Management System reporting is passed to the county through the NIMS Casting report system.

Responders in Benton County will adhere to WAC 296-824-30005 to ensure their responders are trained appropriately and are delegated appropriate roles equivalent to their certified level of training as depicted in the tables on the next pages:

The minimum level of responder training in accordance with WAC 296-824-30005 is listed below. Retraining isalso required on an annual basis but only if employees demonstrate competencies annually at certified trainings where records of demonstrated methodology are kept.

Awareness Level	Awareness level responders are those personnel who, in the course of their normal duties, could encounter an emergency involving hazardous materials/ weapons of mass destruction (WMD) and be expected to recognize the presence of the hazardous materials/WMD, protect themselves, call for assistance and secure the scene.
	
	Awareness Level First Responders competencies:
	• Understand what hazardous substances are and their associated risks.
	• Recognize the presence of hazardous substances in an emergency.
	• Can identify the hazardous substances, when possible.
	• Understand the potential consequences of hazardous substances in an emergency.
	• Understand the role of a first responder at the awareness level as described in:
	  ○ The employer's emergency response plan, including site security and control.
	  ○ The United States Department of Transportation's ERG.
	• Can use the ERG.
	• Recognize the need for additional resources and the need to notify the incident'scommunication center accordingly.

Operations Level	Operations level responders are personnel who respond to hazardous materials/WMD incidents for the purpose of implementing or supporting actions to protect people, property, and the environment from the effects of a release. They are trained to respond in a defensive fashion, which may include attempts to confine, contain or otherwise control the release without coming into contact with the material/product. First responders at the operations level must receive at least eight hours of training and demonstrate awareness level competencies as well as the competency to: • Know basic hazard and risk assessment techniques. • Select and use PPE appropriate for first responder operations level. • Understand basic hazardous materials terms. • Perform basic control, containment and/or confinement operations within the capabilities of the resources and PPE available. • Implement decontamination procedures to their level training. • Understand relevant standard operating and termination procedures.
Technician Level	Technician level responders are personnel who respond to a hazardous materials/WMD incident using a risk-based response process to analyze the situation involving hazardous materials/WMD, select applicable decontamination procedures and control the release using specialized protective clothing and control equipment. First responders at the technician level must receive at least 24 hours of training and demonstrate operations level competencies as well as the competency to: • Implement an employer's emergency response plan. • Function within their assigned role in the incident command system. • Understand hazard and risk assessment techniques. • Understand basic chemical and toxicological terminology and behavior. • Use field survey instruments and equipment to classify, identify, and verify materials at the incident. • Select and use PPE appropriate for hazardous materials technicians. • Perform advance control, containment, and/or confinement operations within the capabilities of the resources and PPE available. • Implement decontamination procedures to their level of training. • Understand termination procedures.

Specialist Level	Specialist level responders are personnel who respond with and provide support to hazardous materials technicians. Their duties parallel those of hazardous materials technicians but require a more specific knowledge of the various substances they may be called upon to contain. Hazardous materials specialists also act as site liaisons with federal, state, tribal and local government authorities with regard to site activities. First responders at the specialist level must receive at least 24 hours of training and demonstrate technician level competencies as well as the competency to: • Implement the local emergency response plan. • Know of the state emergency response plan. • Develop a site safety and control plan. • Understand chemical, radiological, and toxicological terminology and behavior. • Understand in-depth hazard and risk techniques. • Use advanced survey instruments and equipment to classify, identify and verify materialsat the incident. • Select and use proper specialized chemical PPE given to hazardous materials specialists • Perform specialized control, containment and/or confinement operations within thecapabilities of the resources and PPE available. • Determine decontamination procedures.
Incident Commander	IC is the person responsible for all incident activities, including development of strategies and tactics and ordering and release of resources. IC, who assume control of a hazardous materials incident from the responders first on the scene, must receive at least 24 hours of training and demonstrate operations level competencies as well as the competency to: • Know of the state emergency response plan and the Federal Regional Response Team. • Implement the local emergency response plan. • Implement the employer's emergency response plan. • Have knowledge of the ICS and understand how they relate to it. • Implement the employer's ICS. • Understand the hazards and risks associated with employees working in chemical protective clothing. • Understand the importance of decontamination procedures.

WSP provided training is available statewide with 90% of their HAZMAT training at the requesting agency's locations

HAZARDOUS MATERIALS COURSES	Check link for Dates	LOCATIONS
• Chemistry for Emergency Response • Hazmat IQ/ Above the Line/Below the Line • Hazardous Materials Awareness • Hazardous Materials On-Scene Incident Command • Hazardous Materials Operations • Hazardous Materials Technician • Hazardous Materials Training • Hazmat Safety Officer	http://www.wsp.wa.gov/fire/fire-training-academy/	Fire Training Academy 50810 SE Grouse Ridge Rd North Bend, WA
HAZMAT On-Scene Incident Command	*March 31-April 1 2021* http://www.wsp.wa.gov/other-training *(dates vary/ check schedule)*	HazMat Training Conference(Leavenworth, WA) WSP Academy 631 W Dayton-Airport Rd Shelton WA

HAZMAT Safety Officer	http://www.wsp.wa.gov/other-training *(dates vary/ check schedule)*	WSP Academy 631 W Dayton-Airport Rd Shelton WA
Awareness/Operations (48-hours)	AWR338- Hazardous Materials Awareness Distance Learning AWR358- Hazardous Materials Awareness Refresher	Online Learning ***AWR*** courses at https://cdp.dhs.gov/online_course http://www.wsp.wa.gov/other-training
ICS 300 and 400	*(dates and online availability will vary. Check training link)*	https://reg.learningstream.com/view/cal2a.aspx?ek=&ref=&aa=&sid1=&sid2=&as=38&wp=134&tz=&ms=&nav=&cc=&cat1=&cat2=&cat3=&aid=WSEMD&rf=&pn=

Table 1
Minimum Training Durations for All Responders

If you are a:	**Then:**
First responder at the awareness level	Training duration needs to be sufficient to provide the required competencies
First responder at the operations level	You need a minimum of 8 hours training
Hazardous materials technician	You need a minimum of 24 hours training
Hazardous materials specialist	You need a minimum of 24 hours training
Incident commander	You need a minimum of 24 hours training

Table 2
Competencies for First Responders at the Awareness Level and Operations Level

Employees must be able to show they:	When they are designated as First Responders at the:	
	Awareness Level	Operations Level
Understand what hazardous substances are and their associated risks.	X	X
Recognize the presence of hazardous substances in an emergency.	X	X

Appendix G - Hazmat Exercise Types and Schedule

The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance based exercise program which provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning.

Exercise Types: Discussions-based Exercises familiarize participants with current plans, policies, agreements, and procedures, or may be used to develop new plans, policies, agreements, and procedures. Types of Discussion-based Exercises include:

- ***Seminar***. A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., a seminar to review a new Evacuation Standard Operating Procedure).
- ***Tabletop Exercise (TTX).*** A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures.

Operations-based Exercises validate plans, policies, agreements, and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment. Types of Operations-based Exercises include:

- ***Drill.*** A drill is a coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity (e.g., a fire department conducts a decontamination drill).
- ***Functional Exercise (FE).*** A functional exercise examines and/or validates the coordination, command, and control between various multi-agency coordination centers (e.g., emergency coordination center, etc.). A functional exercise does not involve any "boots on the ground" (i.e., first responders or emergency officials responding to an incident in real time).
- ***Full-Scale Exercise (FSE).*** A full-scale exercise is a multi-agency, multi-jurisdictional, multidiscipline exercise involving functional (e.g., emergency operation centers, etc.) and "boots on the ground" response (e.g., firefighters decontaminating mock victims).

Exercise Schedule:

Date	Exercise Title	Type	Open To
Feb 2024	Dress rehearsal - Columbia Generating Station Nuclear Plant 2-day Ingestion Exercise	FSE	CGS Counties
Mar 2024	FEMA Evaluated Columbia Generating Station Nuclear Plant 2-day Ingestion Exercise	FSE	CGS counties
May 2024	DOE-Hanford Nuclear Reservation		Local, State ,Federal

Appendix H - Emergency Planning and Response References

Regulatory (APPENDIX A: 40 CFR PART 68)
Subpart E — Emergency Response

Section 68.90 Applicability
(a) Except as provided in paragraph (b) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of § 68.95.
(b) The owner or operator of stationary source whose employees will not respond to accidental releases of regulated substances need not comply with § 68.95 of this part provided they meet the following:
(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11003;
(2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department; and
(3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

Section 68.95 Emergency Response Program
(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:
(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:
(i) Procedures for informing the public and local emergency response agencies about accidental releases;
(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and
(iii) Procedures and measures for emergency response after an accidental release of a regulated substance;
(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;
(3) Training for all employees in relevant procedures; and
(4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.
(b) A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements

provided in paragraph (a) of this section, shall satisfy the requirements of this section if the owner or operator also complies with paragraph (c) of this section.
(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

Informative Introduction
Emergency Action Plan and Alarm Systems Requirements
The emergency action plan requirements apply to employers who will evacuate their employees from the danger area when an emergency occurs, and who do not permit any of their employees to assist in handling the emergency. Arrangements will be made with off-site personnel to respond to ammonia releases at the facility.

Procedures
The procedures for preparing an emergency action plan are divided into the following sections:

- Purpose and Scope
- Statement of Policy
- Current Revision Date
- Facility Description
- Employee Responsibilities
- Incident Discovery
- Procedures for Internal and External Notifications

    The responsible party having a HAZMAT Emergency will follow their facility's emergency plan/procedures and ensure these offsite contacts are made immediately:

    a. Emergency Dispatch: 9-1-1
    b. Washington State Duty Officer: 1.800.258.5990
    c. Emergency Management:
        i. 509.628-2600 Office
        ii. 509.380-4522 EM Manager
        iii. 509.628-0333 24-hr Dispatch (non-emergency)
    d. Local Fire Agency om their jurisdiction

- Scenarios and Procedures
- Planning
- Logistics
- Termination and Follow-Up Activities
- Training

Purpose and Scope

This document is to ensure that the facility is properly prepared for a fire, explosion, or an unplanned or accidental discharge of a hazardous substance. This emergency action plan addresses the actions that will be taken.

This plan was designed specifically to conform to the following regulations:

- Occupational Safety and Health Administration (OSHA), Process Safety Management (PSM) of Highly Hazardous Chemicals Requirements (29 CFR 1910.119)
- Occupational Safety and Health Administration (OSHA), Employee Emergency Plans and Fire Prevention Plans, 29 CFR 1910.38(a)
- Occupational Safety and Health Administration (OSHA), Employee Alarm Systems, 29 CFR 1910.165
- Environmental Protection Agency (EPA), Risk Management Programs for Chemical Accidental Release Prevention (40 CFR Part 68)

Appendix I - Description of Emergency Equipment/ Facilities

JURISDICTION	RESOURCE	MUTUAL AID
Benton County FPD#1	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	**MUTUAL AID FOR THE HAZARDOUS MATERIALS TEAM** 1. When a requesting mutual aid department requests the hazardous materials team for technical expertise, the On-Duty Chief Officer will be contacted immediately for direction. 2. The On-Duty Chief Officer shall respond to any mutual aid response and shall retain responsibility over their personnel and equipment unless relieved by a higher-ranking officer from their agency. A Chief Officer vehicle shall be utilized for the response. 3. A recall of off-duty personnel may be made for the Hazardous Materials Team personnel. 4. Both on-duty and off-duty personnel of the Hazardous Materials Team may be used for the response. Four team members will comprise minimum response, in addition to non-team personnel. 5. An Engine/Rescue and Ambulance with a minimum of three personnel shall also respond.6. The total minimum personnel response is :a. A Chief Officer b. Four Hazardous Materials Team members c. Three-member Engine/Rescue crew 7. The total minimum equipment response is: a. A Chief Officer vehicle b. An Engine/Rescue c. The Hazardous Materials Team vehicle 8. When an agency requests the Tri-County Hazardous Materials Team for offensive mitigation, the On-Duty Chief Officer shall notify Control and have the Tri-County HazMat Team activated. The previous sections 2 - 7 shall be followed for the incident advisory process.
Benton County FPD#2	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	**MUTUAL AID FOR THE HAZARDOUS MATERIALS TEAM** 1. When a requesting mutual aid department requests the hazardous materials team for technical expertise, the On-Duty Chief Officer will be contacted immediately for direction. 2. The On-Duty Chief Officer shall respond to any mutual aid response and shall retain responsibility over their personnel and equipment unless relieved by a higher-ranking officer from their agency. A Chief Officer vehicle shall be utilized for the response. 3. A recall of off-duty personnel may be made for the Hazardous Materials Team personnel. 4. Both on-duty and off-duty personnel of the Hazardous Materials Team may be used for the response. Four team members will comprise minimum response, in addition to non-team personnel. 5. An Engine/Rescue and Ambulance with a minimum of three personnel shall also respond.6. The total minimum personnel response is :a. A Chief Officer b. Four Hazardous Materials Team members c. Three-member Engine/Rescue crew 7. The total minimum equipment response is: a. A Chief Officer vehicle b. An Engine/Rescue c. The Hazardous Materials Team vehicle 8. When an agency requests the Tri-County Hazardous Materials Team for offensive mitigation, the On-Duty Chief Officer shall notify Control and have the Tri-County HazMat Team activated. The previous sections 2 - 7 shall be followed for the incident advisory process.

JURISDICTION	RESOURCE	MUTUAL AID
West Benton Fire& Rescue	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	(Not a member of Southeast Washington Special Operations Group – SEWSOG – Hazardous Materials Team)
Benton County FPD#4	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	(Not a member of Southeast Washington Special Operations Group – SEWSOG – Hazardous Materials Team)
Benton County FPD#5	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	(Not a member of Southeast Washington Special Operations Group – SEWSOG – Hazardous Materials Team)

JURISDICTION	RESOURCE	MUTUAL AID
Benton County FPD#6	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	(Not a member of Southeast Washington Special Operations Group – SEWSOG – Hazardous Materials Team)
Hanford Site	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	(Not a member of Southeast Washington Special Operations Group – SEWSOG – Hazardous Materials Team)
Richland	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	**MUTUAL AID FOR THE HAZARDOUS MATERIALS TEAM** 1. When a requesting mutual aid department requests the hazardous materials team for technical expertise, the On-Duty Chief Officer will be contacted immediately for direction. 2. The On-Duty Chief Officer shall respond to any mutual aid response and shall retain responsibility over their personnel and equipment unless relieved by a higher-ranking officer from their agency. A Chief Officer vehicle shall be utilized for the response. 3. A recall of off-duty personnel may be made for the Hazardous Materials Team personnel. 4. Both on-duty and off-duty personnel of the Hazardous Materials Team may be used for the response. Four team members will comprise minimum response, in addition to non-team personnel. 5. An Engine/Rescue and Ambulance with a minimum of three personnel shall also respond.6. The total minimum personnel response is :a. A Chief Officer b. Four Hazardous Materials Team members c. Three-member Engine/Rescue crew 7. The total minimum equipment response is: a. A Chief Officer vehicle b. An Engine/Rescue c. The Hazardous Materials Team vehicle 8. When an agency requests the Tri-County Hazardous Materials Team for offensive mitigation, the On-Duty Chief Officer shall notify Control and have the Tri-County HazMat Team activated. The previous sections 2 - 7 shall be followed for the incident advisory process.

JURISDICTION	RESOURCE	MUTUAL AID
Kennewick	The team is composed of emergency response personnel certified according to standards set by the Occupational Safety and Health Administration (OSHA), Washington Administrative Code (WAC), and the National Fire Protection Association (NFPA). HAZMAT Awareness	**MUTUAL AID FOR THE HAZARDOUS MATERIALS TEAM** 1. When a requesting mutual aid department requests the hazardous materials team for technical expertise, the On-Duty Chief Officer will be contacted immediately for direction. 2. The On-Duty Chief Officer shall respond to any mutual aid response and shall retain responsibility over their personnel and equipment unless relieved by a higher-ranking officer from their agency. A Chief Officer vehicle shall be utilized for the response. 3. A recall of off-duty personnel may be made for the Hazardous Materials Team personnel. 4. Both on-duty and off-duty personnel of the Hazardous Materials Team may be used for the response. Four team members will comprise minimum response, in addition to non-team personnel. 5. An Engine/Rescue and Ambulance with a minimum of three personnel shall also respond.6. The total minimum personnel response is :a. A Chief Officer b. Four Hazardous Materials Team members c. Three-member Engine/Rescue crew 7. The total minimum equipment response is: a. A Chief Officer vehicle b. An Engine/Rescue c. The Hazardous Materials Team vehicle 8. When an agency requests the Tri-County Hazardous Materials Team for offensive mitigation, the On-Duty Chief Officer shall notify Control and have the Tri-County HazMat Team activated. The previous sections 2 - 7 shall be followed for the incident advisory process.

AREA SPILL RESOURCES

JURISDICTION/ LOCATION	RESOURCE	AMOUNT
Yakama Nation,-Toppenish,WA 509) 865-5121 x4402	*Boom*	*800 feet-12",*
	Spill equipment	Inside 7X8 trailer
BNSF- Lyle,WA 800-832-5452	Boom	19'' Boom-900feet,19'' Boom-600 feet, 19'' Boom-600 feet, 19'' Boom-600 feet, and 19'' Boom-600 feet
	Spill equipment	in 5 air transport containers
	1CD18H-24 coated drum skimmer	One -
	Petroleum storage bladder	3,000-gallon
Department of Ecology- Central eastern Washington 509) 754-5088 x3137	Boom	2700 feet of 12'' boom, 900 feet of 10'' boom, 800 feet of 18'' inshore boom
	Spill equipment	12 spill response trailers
Phillips 66- Moses Lake,WA 509-765-7051	Radios	Mobile Radio equipment
	Spill equipment	Inside 7X8 trailer
National Response Corporation	Air Mover Truck	60 barrel storage capacity

JURISDICTION/ LOCATION	RESOURCE	AMOUNT
Environmental Services- Pasco,WA 1-800-33-SPILL		
	Backhoe	One
TideWater Barge Lines-Pasco,WA 360-6393-1491	Boom	1,800 feet of 20'' Boom
ACT Remediation Services, Pasco,WA 1-888-477-0015	Biohazard clean up	NA
SERVPRO, Walla Walla, WA 1-888-629-1222	Biohazard clean up	NA
Able Clean Up Technologies (Coverage area Eastern WA) 1-509-466-5255	Primary Service is oil and chemical Clean up and materiel remediation.	NA
Big Sky Industrial (Coverage area Eastern WA) 1-509-624-4949	Oil and chemical Clean up and materiel remediation.	NA
NRC Environmental Services (Coverage area national) 1-800-337-7455	All environment oil clean up.	NA

FOAM INVENTORY IN AREA

Agency	Product	Quantity	Size	Total Gal	Storage config	Applications	Contact Info
Tidewater Pasco, WA	AFFF Ansulite 3%	5 drums	55 Gal each	275 Gal	On pallets	Ag chemicals, diesel, non-oxygenated gasoline (**NOT for ethanol**) stored in temperature controlled warehouse	Tidewater Terminal Company 671 Tank Farm Rd Pasco WA 99301, 509-547-7701 Cell: 509-385-8122 John.sherman@tidewater.com Alt. 24 Hr. 509-727-1585 (terminal operator)
	AR-AFFF Ansulite 3%X3	2 totes	265 Gal each	530 Gal	Foam trailer/350 or 500 gpm nozzle	diesel, all gasolines, ethanol - stored in a temperature controlled warehouse at the Tidewater Pasco Terminal	
	AR-AFFF Ansulite 3%X3	10 drums	55 gal	550 Gal	On pallets		

FOAM INVENTORY IN AREA							
	AR-AFFF Chemguard3%x3%	2 totes	265 gal	530 Gal	Foam trailer/350 or 500 gpm nozzle	diesel, all gasolines, ethanol	
Total Tidewater Pasco Foam Inventory: 1885 Gallons							
Tidewater Umatilla, OR	AFFF – Thunderstorm 3%	2 drums	55 gal each	110 Gal	Truck Rack	diesel, non-oxygenated gasoline, (**NOT for ethanol**)	
NRCES Pasco WA	AR-AFFF Chemguard 3%X3%	2 totes	265 gal each	530 Gal	Foam trailer w/nozzle	diesel, non-oxygenated gasoline, (**NOT for ethanol**)	NRC Environmental Services 800-337-7455 1810 E. James St, Pasco WA Office 509-545-6110 (24Hr #)
This Foam Inventory Belongs to BNSF Railroad but is maintained by NRCES							
Tesoro, Pasco WA	AR-AFFF Ansulite 3% X3%	100 pails	5 gal each	500 Gal	On pallets in storage	diesel, all gasolines, ethanol	Wil Ricard, Terminal mgr wil.m.ricard@tsocorp.com 2900 Sacajawea Park Rd Pasco, WA. Office 509-543-6101 Cell: 509-531-6744
Tri-Cities Airport	AFFF			500 Gal			**Typically, not available due to airport requirements to have on site**
Umatilla FD	AFFF Thunderstorm 3%	2 totes	265 Gal each	530 Gal	On a foam truck	diesel, non-oxygenated gasoline, (**NOT for ethanol**)	541-922-3718

Appendix J - Petroleum Crude Oil Response Reference

Benton County has numerous shipments of empty and full Bakken crude railcars passing along the rail lines inside the County. While not a traditional "fixed facility", the rail cars can be parked for weeks on end, in numerous places around the county. Bakken crude is a very light volatile type of crude that acts more like refined products such as gasoline when involved in fire. While the majority of the railcars are empty, Bakken has a higher gas content/ vapor pressure, lower flash point and boiling point and thus a higher degree of volatility than most other crudes in the U.S.,(which correlates to increased ignitability and flammability even when dealing with empty railcars). The Reference Sheet below provides further guidance:

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

COMMODITY PREPAREDNESS AND INCIDENT MANAGEMENT REFERENCE SHEET

PETROLEUM CRUDE OIL

CAS NO. 8002-05-9
UN 1267
DOT Hazard Class: 3
FLAMMABLE LIQUID
ERG Guide No. 128

HAZARD RATING = HIGH

DOT Hazard Classification and NFPA 704 - Standard System for the Identification of the Hazards of Materials for Emergency Response

TRANSPORTATION AND PLANNING CONSIDERATIONS

- With the increased production of oil from shale reserves in states such as North Dakota and Texas, there has been a dramatic increase in the transportation of crude oil by rail. Rail shipments of crude oil from these regions are typically made using unit trains. Unit trains of crude oil are single commodity trains that generally consist of over 100 tank cars, each carrying approximately 30,000 gallons of crude oil.
- Unit trains typically move from one location (e.g., shipper's production facility or transloading facility) to a single destination (e.g., petroleum refinery). Given the usual length of these trains (over a mile long), derailments can cause road closures, create significant detours, and require response from more than one direction to access the scene of the incident.
- In the event of an incident that may involve the release of thousands of gallons of product and ignition of tank cars of crude oil in a unit train, most emergency response organizations will not have the available resources, capabilities or trained personnel to safely and effectively extinguish a fire or contain a spill of this magnitude (e.g., sufficient firefighting foam concentrate, appliances, equipment, water supplies).
- Responses to unit train derailments of crude oil will require specialized outside resources that may not arrive at the scene for hours; therefore it is critical that responders coordinate their activities with the involved railroad and initiate requests for specialized resources as soon as possible.
- These derailments will likely require mutual aid and a more robust on-scene *Incident Management System* than responders may normally use. Therefore, pre-incident planning, preparedness and coordination of response strategies should be considered and made part of response plans, drills and exercises that include the shippers and rail carriers of this commodity.

- Tank cars carrying crude oil may also be found in general freight (manifest) trains that are made up of shipments of many different commodities from many different shippers. In these situations, emergency responders need to consider the potential impact that tank cars containing other hazardous commodities may have on tank cars containing crude oil if a release occurs, and vice-versa.
- To determine what specific commodities or hazardous materials may be involved, responders should obtain a train consist from the train crew or by contacting the rail carrier's emergency contact number.

HAZARD SUMMARY

- Petroleum crude oil is a light to dark colored liquid hydrocarbon containing flammable gasses. It is not a uniform substance and its physical and chemical properties may vary from oilfield to oilfield or within wells located in the same oilfield. Light, sweet crude oils contain flammable gasses such as butane and propane (unless it is known that the gasses have been removed). These gasses can readily ignite if released, when they come in contact with an ignition source. These crude oils may also contain hydrogen sulfide, a toxic inhalation hazard material, in the vapor space of the tank car. Due to the characteristics of crude oil, in an accident scenario, the behavior of this product may range from that of gasoline for the lighter (sweet) crude oils to diesel fuel for the heavier (sour) crude oils.
- Releases may create vapor/air explosion hazards indoors, in confined spaces, outdoors, or in sewers. Remove sources of heat, sparks, flame, friction and electricity, including internal combustion engines and power tools. Use caution when approaching the scene and positioning apparatus. Implement air monitoring as soon as possible to detect the presence of combustible gasses.
- Volatile vapors released from the spill area may create flammable atmospheres. Some crude oil vapors may be heavier than air and accumulate in low areas, and travel some distance to a source of ignition and flash back.
- When working in flammable atmospheres (where any concentration of lower explosive limit (LEL) exists), extreme caution must be taken to avoid creating ignition sources. This includes but is not limited to the use of non-sparking tools and intrinsically safe/explosion-proof equipment.
- The more volatile materials in crude oil may be present in air in high concentrations creating an inhalation hazard. There is also the possibility that the crude oil may contain varying concentrations of benzene or hydrogen sulfide. Products of combustion may also include toxic constituents. Responders should wear self-contained breathing apparatus (SCBA) to avoid potential exposure.
- Use water fog spray to cool containers, control vapors, and to protect personnel and exposures. Direct the cooling water to the top of the tank. There is some potential that containers of liquid that are not properly cooled may rupture violently if exposed to fire or excessive heat. Stay away from ends of tank(s) involved in fire, but realize that shrapnel may travel in any direction.

RAILROAD SAFETY PROCEDURES

Emergency response personnel should always be aware of the potential for serious injury when working in and around railcars, tracks and related equipment. The following safe operating practices should be followed when involved in emergency response operations at the scene of a crude oil train derailment:

- **Expect a train or rail equipment to move on any track from either direction at any time.**

- **DO NOT APPLY WATER DIRECTLY INSIDE A TANK CAR. Apply water from the sides of the tank car and from a safe distance to keep fire exposed containers cool. Use unmanned fire monitors for cooling tank cars when available. Withdraw immediately in case of rising sound from venting pressure relief devices or discoloration of tank.** If available, dry chemical extinguishing agents, such as potassium bicarbonate (i.e., Purple K) may also be used in conjunction with Class B foams.

- Improper application of fire streams may create a dangerous phenomenon known as a *slopover*, thereby increasing risks to emergency responders. **A *slopover* results when a water stream is applied to the hot surface of burning oil. The water is converted into steam causing agitation of the liquid and burning oil to slop over the sides of the tank car. This can occur within 10 minutes of the product becoming involved in fire.** Note: *Slopover* will not occur in a pool of crude oil on the ground.

- Hazardous combustion/decomposition products may be released by this material when exposed to heat or fire. These can include carbon monoxide, sulfur oxides, nitrogen oxides and aldehydes. Response personnel should exercise extreme caution on-scene and wear appropriate personal protective clothing and equipment, including respiratory protection.

- Apply Class B firefighting foam as you would on fires involving other hydrocarbons. Class B foam blankets prevent vapor production and ignition of flammable and combustible liquids. Foam is most effective on static fires that are contained in some manner. Firefighting foam is not effective on hydrocarbon fuels in motion (i.e., three dimensional fires) that include product leaking or spraying from manways, valves, fractures in the tank shell (e.g., rips, tears, etc.) or spills on sloping terrain.

- As a general rule, **DO NOT** flush crude oil spills with water. Most crude oils are not water soluble and will have a tendency to float on water. Some crude oils will sink and some fractions of crude oil are water soluble. For those crude oils that float on water, burning crude oil may be carried away from the immediate area and may reignite on the surface of the water.

- Prevent runoff from entering storm/sewer systems and sensitive areas, as this may create a serious hazard and potential environmental problems. Notify proper authorities, downstream sewer and water treatment operations, and other downstream users of potentially contaminated water. Runoff may be flammable and/or toxic and should be contained, treated and disposed of in accordance with applicable federal, state and local environmental regulations.

- Watch for movement in both directions before crossing tracks. If the tracks are clear, walk single file at a right angle to the rails.

- Trains can approach with little or no warning. You may not be able to hear them due to atmospheric conditions, terrain, noisy work equipment, or passing trains on other tracks. Stand a minimum of 25 feet away from the tracks if possible, and face the train when rail equipment is passing through.

- Always contact the railroad to advise them of your presence – they may not know that you are on-scene or that they have a problem. Work with the railroad to be sure the track is "blue flagged" – the railroad's version to provide protection by their lock-out, tag-out process.

- Never stand, walk or sit on railway tracks, between the rails or on the ends of ties. Never step on the rail - step over it. The rail can be a slip, trip, or fall hazard. Never put your feet on moveable parts of a rail car such as couplers, sliding sills or uncoupling levers.

- Do not occupy the area between adjacent tracks in multiple track territory when a train is passing. If crossing between two stationary railcars, ensure there is at least 50 feet between them.

- Be especially careful working in rail yards and terminal areas. Tank cars are pushed and moved, and can change tracks often. Cars that appear to be stationary or in storage can begin to move without warning. Be sure that any rail equipment is secured against movement (wheels chocked, hand brakes secured, etc.) before attempting to work on or near it. Keep at least 25 feet away from the end of a car or locomotive to protect yourself from sudden movement.

- Never move equipment across the tracks unless at an established road crossing or under the supervision of a railroad representative.

- If it is necessary to climb rail equipment, use three points of contact at all times. The ladders on rail equipment may curve around the car making it difficult to find the rung with your foot. The first step on to rail equipment is typically some distance off of the ground. When descending the ladder, step - do not jump from the last step. Normally, there is ballast around the tracks which can be uneven and shift, causing a fall hazard. Locomotive steps are considered ladders. Always face the locomotive going up and coming down.

- Never cross over or under rail equipment -- use the ladders, handholds and crossover platforms or walk around the attached equipment. Remember to block the feet and tie off ladders at the top. When laddering tank cars or box cars, always consider using two points of access - the second being a point of escape should the other become inaccessible for any reason. Plan to use your own ladders.

- Avoid the use of cell phones when within 25 feet of live tracks.

- Be aware of the location of structures or obstructions where clearances are close.

- Stay away from track switches since they can be remotely operated.

Company	Emergency Telephone Number
BNSF Railway	(800) 832-5452
Canadian National (CN) Railway	(800) 465-9239
Canadian Pacific (CP) Railway	(800) 716-9132
CSX Transportation	(800) 232-0144
Kansas City Southern Rail Network	(877) 527-9464
Norfolk Southern Railroad	(800) 453-2530
Union Pacific Railroad	(888) 877-7267