HAZARD ANNEX K: HAZARDOUS MATERIALS RESPONSE, GAS LEAKS & OIL SPILLS

A. INTRODUCTION

(1) Purpose
This hazard specific annex is a guide for operational responsibilities and details mitigation, preparation, response, and recovery activities relating to a hazardous materials release or oil spill incident. This annex outlines the roles, responsibilities, procedures, and organizational relationships of Western, City of Bellingham, Whatcom County, Washington State, and federal agencies during a hazardous materials release response.

(2) Scope
This annex is applicable to situations involving actual or threatened releases involving hazardous materials (chemical, biological, or radiological). It augments training and planning involved with other hazardous materials programs, including the Emergency Planning and Community Right-to-Know Act (EPCRA; also known as Superfund Authorization and Reauthorization Act, Title III), City of Bellingham and Whatcom County programs, the University’s chemical hygiene plans and chemical hazard communication program, and the University’s radioactive materials license.

(3) Authorities
- The Washington Administrative Code Chapters 296-62 (General occupational health standards), 296-824 (Emergency Response), 296-843 (Hazardous Waste Operations), and 296-828 (Hazardous chemicals in laboratories) regulate emergency response to hazardous materials.
- The Revised Code of Washington Chapter 90.56 (Oil and hazardous substance spill prevention and response).
- The University’s Oil Spill Prevention and Countermeasure Plan is provided in Section E (Checklists, Diagrams, and Attachments) of this annex and is in accordance with Washington Administrative Code, Chapter 173-180.
- The Washington Utilities and Transportation Commission’s Master Meter Emergency Plan Inspection and Checklist for Western (Natural Gas Emergency Plan) is provided in Section E as well. This Natural Gas Emergency Plan was developed to comply with Washington Administrative Code, Part 480-93 and Title 49, Part 192 of the Code of Federal Regulations.
- Title III of the Superfund Amendments and Reauthorization Act of 1986, also known as SARA Title III, and as the Emergency Planning and Community Right-To-Know Act (EPCRA).
- Whatcom Unified Hazardous Materials Emergency Response Plan

B. PRIORITIES
The University’s priorities during a hazardous materials release or oil spill are listed below in numerical order of importance.

Priorities Specific to Hazardous Materials Release:
1) Minimize loss of life and injury by providing appropriate personal protection actions to actual and potentially affected areas and requesting properly trained personnel to provide emergency response.
2) Provide accurate and timely warnings to protect the campus community.
3) Minimize damage to property and the environment by requesting properly trained personnel to provide emergency response.
4) Establish an Incident Command structure so that university personnel can support emergency response personnel.
5) Provide a safe reunification area for arriving parents, friends, and loved ones as needed.
6) Clean up and dispose of hazardous waste to return the campus to a safe condition and normal operations.

C. SITUATION, ASSUMPTIONS, AND LIMITATIONS

1) Situation
   - Hazardous materials or oil spill incidents can occur anywhere and at any time with little or no warning. They can cause significant human suffering, injury and death, property damage, environmental degradation, and economic hardship.
   - Western has a variety of hazardous materials handled by numerous faculty, staff and students in laboratories for classwork and research, and in conducting their everyday jobs.
   - Releases of hazardous materials occurring in the surrounding community along transportation routes and at businesses may affect Western’s campus.
   - Western is classified as a SARA Title III reporting facility.
   - Western’s Environmental Health and Safety office provides internal procedures for detecting and reporting a release in a timely manner, training for those handling hazardous materials, and distribution of the WWU Emergency Response Guide flip-chart found in most classrooms and online at Western’s Emergency Communications website.

Hazard/Risk Assessment
Western’s Hazard Identification and Vulnerability Analysis identifies a hazard materials release incident as potentially having a “catastrophic” impact on life and safety, but overall is expected to be a “limited” incident that is not likely to occur frequently, nor cause significant impacts to property and/or education.

2) Assumptions
   - A hazardous material incident has the potential to escalate from a minor incident into a full-scale disaster.
   - Actual or threatened releases of hazardous materials, oil spills, and other releases often require an immediate response.
   - Most hazardous material incidents at Western are minor in scope and can be handled by trained responders.
   - The number and severity of hazardous materials releases can be minimized by prevention programs.
   - A hazardous materials incident may be caused by, or occur during, another emergency.
   - A major hazardous materials incident may require population protection methods. See Annex B: Protection Activities-Evacuation, Transportation, and Shelter-in-Place.
   - Campus community notifications or warnings are sent as needed. See Appendix 3: Notification and Warning.

3) Limitations
   - Each agency and facility responds within the limits of their training or actual capabilities and qualifications and equipment available.
D. CONCEPT OF OPERATIONS

(1) Assessment of Hazard
A hazardous material release can be defined as the unanticipated release of a material that is a danger to life, property or to the environment. Hazardous materials releases may range from a few drops of a low toxicity material to a large spill of a mixture of highly toxic substances. Ordinary mishaps at Western, especially in laboratory settings, are routinely cleaned up by laboratory personnel. Releases that require protective equipment or are larger in scope are usually managed by Western’s Environmental Health and Safety office, which has several trained Hazardous Material Technician level responders. See Dangerous Waste Contingency Plan, available by request from the Environmental Health and Safety office.

Significant releases may require outside agency assistance. The Bellingham Fire Department responds to larger incidents and, in turn, may request assistance of the Whatcom County Special Emergency Response Program (SERP) and coordination by Whatcom Unified Emergency Management.

The Washington State Department of Ecology has primary authority to oversee prevention, abatement, response, containment, and cleanup efforts with regard to any oil or hazardous substance in Washington State, and shall coordinate the response efforts. The 1996 Northwest Area Contingency Plan is a joint agreement between the U.S. Coast Guard, U.S. Environmental Protection Agency, and the states of Oregon, Idaho, and Washington, and includes information on spill preparedness and response.

The United State Coast Guard is responsible for hazardous material response in marine waters. The WA State Highway Patrol are authorized first responders to spills on highways in the state.

(2) Notification and Warning
During regular business hours, Western’s Environmental Health and Safety office may be contacted directly by telephone, pager, or two-way radio in case of a spill or release. As appropriate, the Environmental Health and Safety office will make verbal and/or written notifications to the WA State Department of Labor and Industries, WA State Department of Ecology, WA State Department of Health, Office of Radiation Protection, Whatcom Unified Local Emergency Planning Committee, Washington State Emergency Response Commission, and the National Response Center. For radiological releases, the Federal Bureau of Investigation should also be notified.

After hours, University Police may perform an initial investigation of a spill or release concern, and is able at any time to contact Environmental Health and Safety by telephone or pager.

(3) Protective Actions
More complete information on protective actions are found in the WWU Emergency Response Guide flip-chart found in most classrooms, online at Western’s emergency communications website, emergency.wwu.edu, and the Office of Environmental Health and Safety. Western faculty, students and staff are encouraged to read the “Hazardous Material Incident” section. Also refer to Annex B: Protection Activities-Evacuation, Transportation, and Shelter-in-Place in the Comprehensive Emergency Management Plan for more information on related protection activities.
E. EMERGENCY MANAGEMENT PHASES

This section covers the four phases of emergency management for a hazardous materials incident: mitigation, preparedness, response, and recovery.

(1) Mitigation Activities

Western defines mitigation as: *The effort to reduce loss of life and property by lessening the impact of disasters*. Mitigation activities include the following:

The University has a program of periodic self-auditing for departments, including hazardous materials areas. A program through the Environment Health and Safety office for removal of unwanted chemicals has been in place since 1992. This program was formalized in 1993 as part of the University’s Pollution Prevention Plan.

Shelving used for chemicals or other hazardous materials has lips to prevent breakage during a seismic event, and chemicals are frequently stored in cabinets with doors and secure latches.

All persons that handle any type of hazardous material are required to complete training according to the Washington Administrative Code, Part 296-800-170 (Toxic and Hazardous Substances - Hazard Communication) and use safe handling measures and proper personal protective equipment. Training is provided either by the department using the materials or Environmental Health and Safety to all faculty, staff, and students that use or are exposed to hazardous materials including chemicals, biological agents, or radioactive materials. For those using flammable materials, training in the use of fire extinguishers is provided by the Environmental Health and Safety office.

Also see *Oil Spill Prevention Control and Countermeasure Plan* in Addendum 2 of this annex.

(2) Preparedness Activities

Western defines preparedness as: *Creating plans or procedures to save lives and to minimize damage when an emergency occurs*. Planning, training, and disaster drills are essential elements of preparedness. Preparedness activities include:

The University maintains Hazardous Material Technician level trained responders at Western’s Environmental Health and Safety office in the event of a release. Most academic and administrative departments provide chemical inventories that are updated at least annually. The Environmental Health and Safety office maintains a master database of the chemical inventory. Hard copies of Material Safety Data Sheets (MSDSs) are located in Environmental Studies, Room 72. (Many of these are also available on the internet). Chemical emergency information is provided to the campus community in a poster format. Eyewashes and emergency showers are provided in many areas of chemical use in the event a release exposes a person.

The Environmental Health and Safety office maintains supplies for hazardous materials response, such as spill pillows and mercury spill kits, and personal protective equipment including Level B protection. Personal protective equipment is provided in accordance with a department’s hazard assessment certification. Secondary containment is a requirement for waste storage, and is encouraged for chemical storage of all types.

Department emergency plan guidelines instruct each department to develop a list of emergency contacts for each room where chemical, biological, or radiological materials are used or stored.
These lists are maintained by the University Police to be used in the event of a hazardous material release or concern.

Preparedness encompasses issues relating to faculty research and destruction/salvation of unique samples, texts, and records. Losses to personal research and to teaching materials can be prevented by a systematic program for duplication of data and notes and splitting of samples. Off-campus storage of duplicates is recommended.

(3) Response Activities
Western defines an emergency response as: The first and immediate response to an incident, which includes the aggregate of decisions and measures taken to:

(i) Contain or mitigate the effects to prevent loss of life and/or property; and
(ii) Restore order in its immediate aftermath.

A majority of hazardous materials releases that happen on Western’s campus are handled by the individual involved or the Environmental Health and Safety office. In the event of a release which is unable to be handled by the individual involved, the Environmental Health and Safety office determines its ability to manage the response, or if additional response assistance is required. Bellingham Fire Department provides response assistance, aided by Whatcom County’s Special Emergency Response Program, as needed. Whatcom Unified Emergency Management coordinates response efforts. For natural gas emergencies, see the Natural Gas Emergency Plan in Section F of this hazard specific annex.

Initial verbal notification to Prospect Dispatch, accessed via dialing 911, serves as notification to Whatcom Unified LEPC. Prospect Dispatch is responsible for the notification of appropriate emergency response agencies found in the Hazmat Contact/Resources in Whatcom Unified Emergency Management database. Notification of WA Emergency Management Division ((800) 258-5990) by Prospect with information concerning the incident satisfies the requirement to verbally notify the State Emergency Response Commission. Verbal notification of the National Response Center under certain conditions is required at (800) 424-8802:

1. CERCLA Section 103 (40 CFR Part 302.6, Part 300.405) requires that the release of a CERCLA hazardous substance that meets or exceeds the reportable quantity (RQ) set forth in 40 CFR 302.4 must be reported to the NRC.
2. EPCRA Section 304 (40 CFR Part 355.40) requires that the release of an RQ or more of an EPCRA extremely hazardous substance or a CERCLA hazardous substance (one pound or more if a reporting trigger if not established by regulation) that results in exposure of people outside the facility boundary be reported to State and local authorities.
3. HMTA Section 1808 (49 CFR Part 171.15) requires that the release of a DOT hazardous material during transportation be reported to the NRC under certain circumstances such as death, injury, significant property damage, evacuation, highway closure, etc.
4. CWA Section 311 requires that the release of oil be reported to the NRC if the release: (1) violates applicable water quality standards; (2) causes a film, sheen or discoloration of the water or adjoining shorelines; or (3) causes a sludge or an emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines.

Written report notification needs to be made within fourteen days following the initial verbal notification to the WA State Emergency Response Commission and Whatcom Unified Local Emergency Planning Committee on the Emergency Release Follow-up Notification Form available at http://www.ecy.wa.gov/epcra/section304.html. Following immediate verbal notification to the National Response Center, written notification is to be made as soon as is practical. The form is available at http://www.nrc.uscg.mil/nrchp.html.
Environmental Health and Safety provides chemical, biological and/or radioactive materials response (See Chemical and Biological Incident Response 05-18-10 and EHS Exposure Control Plan 12-09-08 ds (2) in EHS subdirectories). Faculty or students should not respond to large or toxic spills or releases unless they are properly trained in spill response as described in the Washington Administrative Code, Section 296-824-30005. They are, however, expected to provide expertise and consultation to responders, as requested.

Following any release, the person involved must quickly determine a plan of action. If the release is large enough that it cannot be handled by the individual, evacuation of the room should take place immediately. Further evacuation should take place based on quantity, type, and toxicity of the hazardous material. Sources for reference include:

- Material Safety Data Sheets (MSDS)
- Chemical Transportation Emergency Center (CHEMTREC)
- National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards
- Wireless Information System for Emergency Responders (WebWISER) http://webwiser.nlm.nih.gov/getHomeData.do;jsessionid=F0ABA8526B486331EE788185B06AE84A8

Western’s Environmental Health and Safety office, Bellingham Fire Department, and/or Whatcom County Special Emergency Response Program are responsible for establishing evacuation distances. University Police are responsible for assistance in enforcing evacuation zones.

Personal protective activities associated with a major airborne hazardous materials release include evacuation and shelter-in-place. The Incident Commander has the authority to order or recommend a plan of action based on the type of threat, current weather conditions, response capabilities available, and time of day. See Annex B: Protection Activities-Evacuation, Transportation, and Shelter-in-Place for more information.

Facilities Management Department provides protection of campus water supplies, sewage, and storm water systems from the effects of a hazardous material incident to the extent possible, and coordinates their response with hazardous materials responders.

The Bellingham Fire Department and Whatcom County Special Emergency Response Program have the ability to perform decontamination. PeaceHealth St. Joseph Medical Center is the facility identified for medical treatment of individuals exposed in a hazardous materials incident.

Western’s Student Health Center and Whatcom County Department of Health may be requested to help determine and/or coordinate public health issues that involve the campus community and/or the City of Bellingham and Whatcom County community due to a hazardous materials release.

Western’s Environmental Health and Safety office is responsible for maintaining all records relating to the response of an incident. A written Incident Action Plan is required for hazardous materials incidents that exceed 4-6 hours or in which the Incident Command System has been activated. Environmental Health and Safety personnel are involved with developing the Incident Action Plan and designating assignments as appropriate.

(4) Recovery Activities

Western defines recovery as: *The restoration or return to any former or better condition.*

Western’s Environmental Health and Safety office is responsible for receiving, reporting, making appropriate notifications, and documenting all hazardous material or oil releases. For significant incidents, an After Action Review should be conducted at the end of the incident.
A hazardous materials release is stabilized by Western departmental or laboratory personnel, Environmental Health and Safety personnel, or City, County or State response personnel.

Cleanup of a stabilized release may be performed by a Western departmental or laboratory personnel, Environmental Health and Safety personnel, an outside contractor, or other designated party. Appropriate removal and disposal of all waste materials are generally determined by responders, including the Environmental Health and Safety office, and/or Washington State Department of Ecology. However, disposal of Western’s waste materials are generally directed by the Environmental Health and Safety office.

Recovery activities focus on returning areas and activities to normal status. Building and/or grounds damage repair is handled by Facilities Management. The Environmental Health and Safety office ensures that affected areas are safe to be re-occupied. University Police generally announce building re-entry.
F. CHECKLISTS, DIAGRAMS, AND ATTACHMENTS

Figure HK-1. Chemical Release Emergency Update Format

This is a Western Washington University emergency update as of _____ (day) at ____ (time).

A ______ (chemical spill/fire/other emergency) has occurred at _______ (building) located at ___________________________ (cross street) and ______________ (cross street) has resulted in _______________ (fumes/odors/toxic gas cloud) which has _________ (entered/threatens to enter/is not expected to enter) the community.

The content of the release is ___________ (known to be highly toxic/known to be irritating but not toxic/believed to present little risk/unknown).

All people downwind should ________________ (evacuate/seek shelter and remain indoors with doors and windows closed and heating and air conditioning systems off/not be concerned at this time).

Dangerous concentrations are not expected to reach ____ (distance) miles downwind. Winds are currently from the ____ (direction) at ____ (velocity) miles per hour.

The incident is being managed by University personnel and emergency responders from _______ (organizations) and is _________ (now under control/expected to be under control by ____ (time a.m. or p.m.)).

The primary materials ____ (known/believed) to be involved are ________________ (chemical names, common names).

______ (There are ___ (number) people/No people are) known to have been exposed to the release. They are being treated ____ (at the scene/at ______ (name) hospital).

Other information:

For further updates - provide how to receive them

Please do not call Western Washington University or public agencies at this time since they are heavily involved in managing the incident.

CHEMICAL NAME:

COMMON NAME:

CAS NUMBER:

NFPA SYSTEM 704 FOR IDENTIFICATION OF FIRE HAZARD:

HEALTH: 0 1 2 3 4  FIRE: 0 1 2 3 4  REACTIVITY: 0 1 2 3 4  OTHER:
**REACTED/COMBUSTION/DECOMPOSITION RISK:**

**PROBABLE CLOUD CONTENT:**

- CO
- CO₂
- H₂O
- NOX
- SOX
- H₂S
- HCN
- HCL
- POX
- As
- N₂

**ESTIMATED CHEMICAL QUANTITY:**

<table>
<thead>
<tr>
<th>INCIDENT LEVEL</th>
<th>DECLARED</th>
<th>TERMINATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LEVEL 0.** No hazard to general public possible

**LEVEL 1.** Public notification with removal of sensitive individuals indoors. No hazard to healthy individuals.

**LEVEL 2.** General public advised to go indoors with heating and air conditioning turned off and windows and doors closed – shelter in place.

**LEVEL 3.** Evacuation

**RELEASE NOTIFICATION:**

- CONSIDERED
- REJECTED
- NOTIFICATION IMPLEMENTED
Figure HK-1 shows Western’s departmental involvement (columns) and Hazard Matrix Functions (rows) for an incident involving a hazmat response and oil spills. Hazard Matrix Functions are specific operations that may be carried out in any incident, and descriptions are found in the Functions Definitions located at the beginning of the Hazard Specific Annexes.

**Figure HK-2. Hazmat Response and Oil Spill Hazard Matrix**

![Hazard Matrix](chart.png)
Figure HK-3. Position-Specific Considerations for Hazmat Response and Oil Spills

<table>
<thead>
<tr>
<th>Executive Policy Group and President’s Cabinet</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Consider class delay, building closure, and/or campus closure options</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incident Commander</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Activate Western’s Incident Communications Team (See Annex A: Emergency Public Information (Media))</td>
</tr>
<tr>
<td>☐ Request Bellingham Police to activate MyStates system for community notification (residence and businesses around Western), as appropriate</td>
</tr>
<tr>
<td>☐ If radiological release, notify FBI (Bellingham office 360-734-2980, 24 hr Seattle office 206-622-0460)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Information Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Activate a Joint Information Center (See Annex A: Emergency Public Information (Media))</td>
</tr>
<tr>
<td>☐ Designate media parking areas and press release locations (See Annex A: Emergency Public Information (Media))</td>
</tr>
<tr>
<td>☐ Activate and staff telephone bank, providing informational templates</td>
</tr>
<tr>
<td>☐ Notify University Operator at 650-3000 and provide informational template</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liaison Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Notify Sehome High School (676-6481) and Happy Valley Elementary School (676-6420) of campus population protection activities (See Annex B: Protection Activities-Evacuation, Transportation and Shelter-in-Place)</td>
</tr>
<tr>
<td>☐ Notify Whatcom Transit Authority (676-6843) to terminate or use alternate routes public transportation to Western, if appropriate</td>
</tr>
<tr>
<td>☐ Brief student leadership (AS Students)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Manage Western’s responders environmental health and safety needs</td>
</tr>
<tr>
<td>☐ Maintain close liaison with outside response agencies on safety issues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operations Section Chief</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Activate traffic control plan and post flaggers at vehicular entrances for campus closure (See Annex B: Protection Activities – Evacuation, Transportation, and Shelter in Place), as needed</td>
</tr>
<tr>
<td>☐ Activate involved area access controls, as needed</td>
</tr>
<tr>
<td>☐ Set-up and activate temporary shelter and feeding for students, employees, and responders, as needed</td>
</tr>
<tr>
<td>☐ Determine affected buildings and/or areas return-to-use timelines</td>
</tr>
<tr>
<td>☐ Work with Space Administration to provide alternate workspace/classrooms, as needed</td>
</tr>
<tr>
<td>☐ Work with ATUS/Blackboard to provide alternate class presentation options, i.e. online classwork</td>
</tr>
<tr>
<td>☐ Determine Residence Hall response, as needed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Logistics Section Chief</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Provide a safe waiting and reunification area for arriving parents, friends, and loved ones when fatalities or injuries are involved</td>
</tr>
</tbody>
</table>
Figure HK-4. Quick Contact List

<table>
<thead>
<tr>
<th>Contact Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA Dept. of Ecology</td>
<td>800-999-OILS</td>
</tr>
<tr>
<td>Ecology Northwest Regional Office</td>
<td>425-649-7000</td>
</tr>
<tr>
<td>WA Emergency Management Division</td>
<td>800-258-5990</td>
</tr>
<tr>
<td>National Response Center</td>
<td>800-424-8802</td>
</tr>
</tbody>
</table>

Figure HK-5. Sample Unified Command structure during initial response for a hazardous materials release

NOTE: “IC” is Incident Commander. “PIO” is Public Information Officer.
Figure HK-6. Sample Organization Chart for Western’s Management of Recovery Activities. (This can develop while Unified Command is in effect to continue after its termination).

Note: This chart is not considered all-inclusive, but is presented as a starting point for any incident. It demonstrates how a response organization can build to keep track of all people and work.
Figure HK-7. Suggested Incident Command positions for a Hazardous Materials Release incident at Western.

<table>
<thead>
<tr>
<th>Incident Command Position</th>
<th>Designated Responder</th>
<th>Identified Backup Responders (Contacted by EOC if needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident Commander</td>
<td>Public Safety Director or VP Business and Financial Affairs</td>
<td>VP Enrollment and Student Services</td>
</tr>
<tr>
<td>Safety Officer</td>
<td>Environmental Health &amp; Safety Director</td>
<td>EHS Safety Officer</td>
</tr>
<tr>
<td>Public Information Officer</td>
<td>University Communications and Marketing Director</td>
<td>University Communications and Marketing Asst. Director</td>
</tr>
<tr>
<td>Liaison Officer</td>
<td>University Police Asst. Chief or designee</td>
<td>Director Environmental Health &amp; Safety</td>
</tr>
<tr>
<td>Operations Section Chief</td>
<td>Facilities Management Director</td>
<td>Assistant Director for Facilities Management Operations</td>
</tr>
<tr>
<td>Planning Section Chief</td>
<td>Vice Provost for Information Technology</td>
<td>Special Assistant to VP for Enrollment and Student Services</td>
</tr>
<tr>
<td>Logistics Section Chief</td>
<td>Director Business Services</td>
<td>Director of University Residences or designee</td>
</tr>
<tr>
<td>Finance/Admin. Section Chief</td>
<td>Director of Financial Services</td>
<td>Risk Manager</td>
</tr>
<tr>
<td>Emergency Operations Center (EOC) Manager</td>
<td>Emergency Management Program Specialist</td>
<td>EHS Director</td>
</tr>
<tr>
<td>IT/Telecom*</td>
<td>Information Technology Specialist 4</td>
<td>Information Technology Specialist 3</td>
</tr>
<tr>
<td>EOC Reception*</td>
<td>Public Safety Administration Staff</td>
<td>Special Assistant to VP of Business and Financial Affairs</td>
</tr>
</tbody>
</table>

*Recommended EOC position, but not standard ICS position.
HAZARD ANNEX K ADDENDUM 1:
Washington Utilities & Transportation Commission
Master Meter Emergency Plan Inspection Guide and Checklist for Western Washington University

A. INTRODUCTION

This section provides emergency response personnel with essential information needed when responding specifically to a natural gas emergency incident at Western Washington University. When Western’s response capabilities are exceeded, the Bellingham Fire Department and the Cascade Natural Gas Corporation are requested to assist.

B. SITUATION, ASSUMPTIONS, AND LIMITATIONS

1) Definition of Emergency Incident

An “emergency” condition exists when a potential or existing natural gas hazard can no longer be safely handled by the operator or responsible person with the procedures, equipment, personnel, and/or supplies immediately available. These types of hazards include, but are not limited to the following:

a. Underpressure in the gas system.
b. Overpressure in the gas system.
c. Large volumes of uncontrolled escaping gas.
d. Fire, ignition, or explosion.
e. Any natural disasters such as floods, tornadoes, earthquakes, or other severe forces of nature which make emergency provisions necessary.
f. Any hazardous Grade 1 leak (See Figure HK-7 below). This leak represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous. A hazardous leak will include, but is not limited to, the following:

   • Any leak that, in the judgment of the operating personnel at the scene, is regarded as an immediate hazard.
   • Any indication of gas which has migrated into or under a building, or into a tunnel.
   • Any gas reading at the outside wall of a building, or where gas would likely migrate to an outside wall of a building.
   • Any gas reading of 80% lower explosive limit (L.E.L., 3% gas in air) or greater in a confined space.
   • Any gas reading of 80% L.E.L. (3% gas in air) or greater in small substructures (other than gas-associated substructures) from which gas would likely migrate to the outside wall of a building.
   • Any leak that can be seen, heard, or felt, and which is in a location that may endanger the general public or property.
Figure HK-8. Gas piping and Technology Committee standards for grading natural gas leaks

<table>
<thead>
<tr>
<th>Grade</th>
<th>Hazard condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>Represents an existing or probable hazard to persons or property</td>
<td>Requires immediate repair or continuous action</td>
</tr>
<tr>
<td>Grade 2</td>
<td>Recognized as being nonhazardous at the time of detection</td>
<td>Repairs should be scheduled based on probable future hazard</td>
</tr>
<tr>
<td>Grade 3</td>
<td>Non-hazardous at the time of detection</td>
<td>Reasonably expected to remain non-hazardous</td>
</tr>
</tbody>
</table>

2) Gas Leaks

A. Gas Odor/Leak Report

All gas leak or odor reports are investigated immediately, with the top priority given to any leak inside a building. All gas leak or odor reports must be documented on a Gas Odor/Leak Report form (Figure HK-11) found at the end of this document. The first Western employee receiving the gas leak or odor report is responsible for completing documentation. Gas Odor/Leak Report forms are also maintained at the Facilities Management Work Control Center.

If it is determined that a hazardous gas leak may exist inside a building, the occupants should be advised to:
- Evacuate the structure and move to a safe distance.
- Do not operate any electric switches or appliances.
- Do not use a telephone inside the building.
- Do not use matches, cigarettes, or other possible sources of ignition.

Any strong odor of gas inside a building must be assumed to be hazardous. A Western employee from University Police, Environmental Health and Safety, and/or Facilities Management will be dispatched immediately to the location of the reported leak to make an evaluation and possibly shut off service valves, main valves, or master meter valves if necessary. He/she should also:
- Call Bellingham Fire Department, if necessary.
- Call Cascade Natural Gas Corporation, if necessary.
- Call Washington Utilities and Transportation Commission (WUTC) Pipeline Safety Section, if necessary.

See Gas Leak Check List (Figure HK-9) below for phone numbers.

B. Gas Leak- Inside Building

The first Western employee to arrive at the scene of a gas leak shall take all appropriate, possible corrective actions s/he may safely accomplish to protect life and property. If the presence of a dangerous concentration of gas is indicated by a strong odor or by the use of a combustible gas indicator, proceed as follows:
1. Assess the danger to the public, surrounding building occupants, and property.
2. Evacuate the involved building(s) immediately.
3. Do not operate any electrical switches or appliances.
4. Do not use a telephone inside the building.
5. Shut off the following if personnel can safely do so:
ADDENDUM 1: Master Meter Guide

- Gas service valve,
- Main valve(s), or
- Master meter valve(s).

7. Notify Bellingham Fire Department.
8. Notify other appropriate persons.
9. Use the Gas Leak Check List (Figure HK-9) below to ensure appropriate actions are taken.
10. Occupants may return to buildings after it has been determined that it is safe to do so. The on-site University Police officer is the designated person to announce a building is safe to re-enter.

C. Gas Leaks Outside - With or without Fire/Explosion/Gas Ignition/ Natural Disaster/ Civil Disturbance

The first Western employee to arrive at the scene of a gas leak, fire, explosion, gas ignition, natural disaster, or civil disturbance shall take all corrective actions to protect life and property that they are able to safely accomplish. This employee shall:

1. Assess danger to the public, surrounding building occupants, and property.
2. If necessary, evacuate and/or assist all persons to safety.
3. If necessary, notify Bellingham Fire and University Police departments, and Cascade Natural Gas.
4. If it is determined that a hazardous condition may exist and personnel are able to safely reach the following, turn off the gas supply at:
   - Service valve,
   - Main valve(s), or
   - Master meter valve(s).
5. Notify other appropriate persons.
6. If necessary, deny access to the area.
7. Use the Gas Leak Check List (Figure HK-9) below to ensure appropriate actions are taken.
Figure HK-9. Gas Leak Check List

**Gas Leak Check List**

- □ 1. Bellingham Fire Department notified? (911 or 3911-on campus only)
- □ 2. Cascade Natural Gas Corporation notified? (800- 552-1130)
- □ 3. Have persons been evacuated and area blockaded?
- □ 4. University Police department notified? (650-3911)
- □ 5. Has Washington Utilities Transportation Commission (WUTC) Pipeline Safety Section been provided a telephone report? (360-664-1150) 
  (See WUTC Requirements below)
- □ 6. Has a repair crew been notified?
- □ 7. Has Puget Sound Energy been called for power shut off to the area, if appropriate? (888-225-5773)
- □ 8. Can emergency valve(s) or proper valve(s) be shut down or a reroute of gas be identified and located?
- □ 9. Has the leak been eliminated and gas supply shut off or brought under control?
- □ 10. If an area has been cut off from a supply of gas, has the individual service of each customer been cut off?
- □ 11. Is the situation stabilized and has the possibility of reoccurrence been eliminated?

**Safety Considerations**

All leaks are either: hazardous (Grade 1) or non-hazardous (Grades 2 or 3).

- If gas is found in the ground, call the Bellingham Fire Department and Cascade Natural Gas Corporation.
- Do not rely on your sense of smell to determine if gas is present in a building or in the ground. **Instruments must be used for this.** Environmental Health and Safety (ext. 3064 )has some of these instruments. When in doubt, call for assistance.
- Do not enter a building if it is potentially unsafe.
D. Emergency Shutdowns/Pressure Reductions

Emergency shutdown and pressure reduction procedures may be needed if:

- There is a failure in the Cascade Natural Gas Corporation regulator station or metering equipment, freezing or malfunctioning of regulators or meters, or
- A line break caused by construction work, pipe failure, etc.

In the event an emergency shutdown is needed:

- The proper valve(s) must be closed to isolate the affected areas (where applicable).
- Gas must not be turned on into the system affected where an outage occurs until all service terminal valves have been shut off.
- Emergency personnel should be called if deemed necessary.

E. Restoration of Service Due to Outage

When the supply of gas has been shut off to an area, individual service to each occupant must be turned off prior to re-starting the gas. The individual service of each building must be turned off either at the meter or at service valves. If the service valve cannot be located, the service line must be identified and a service valve installed and gas turned off. When restoring service to an affected area, all gas piping and meters must be purged and appliances relit (see Facilities Management Operations & Maintenance protocols). Facilities Management appliance personnel coordinate this operation and are responsible for purging and the safe restoration of all gas service.

A complete record of the incident, with drawings, pressure test, etc., shall be kept on file (see Facilities Management Operations & Maintenance protocols).

3) Training, Media, and Equipment

A. Employee Training

At least once per year, and periodically as needed, an employee training shall be scheduled for Western FM employees in natural gas emergency procedures. This training shall be coordinated by the Facilities Management Maintenance Manager or his/her designee, and Environmental Health and Safety.

The employee training shall include, but may not be limited to the following:

1. Location of this emergency plan.
2. Review of emergency plan procedures and employee responsibilities.
3. Review the location and use of emergency equipment.
4. Review the locations and use of the:
   - System maps
   - Emergency valves
5. Review the method of calling for assistance.
6. Update the call list which is located at Facilities Management.
8. Record keeping (documentation).

Records shall be kept on file of attendance and items discussed at trainings. EHS training documentation will be maintained with EHS and university training records.
B. Public Education
A continuing education program is provided by the Environmental Health and Safety office in consultation with Facilities Management staff to enable the public, occupants, and excavators to recognize a natural gas pipeline emergency. The program material shall include, but may not be limited to:

- Information about gas properties.
- Recognition of gas odors.
- What to do and not to do when there is a strong gas odor.
- Notification of the master meter operator prior to making excavation or excavation related activities.
- Providing an appropriate phone number and after hours number to call for information or to report an emergency.

This information shall be conveyed to the occupants and excavators by the following, but may not be limited to:

- Bulletins
- Meetings
- Hand-outs
- Scratch and sniff pamphlets

A record shall be maintained of the public education program and related activities.

C. Liaison with Public Officials
A liaison shall be established with the Bellingham Fire Department, University Police and the WUTC Pipeline Safety Section. The Facilities Management department will implement and coordinate this program with the WUTC. The Environmental Health and Safety office will implement and coordinate this program with the Bellingham Fire Department. Both organizations will implement and coordinate this program with University Police.

Notifications shall be sent to the appropriate officials to acquaint them with the master meter emergency capabilities and procedures concerning pipeline gas emergencies. The Facilities and Utilities Maintenance Service Manager will learn the capability and responsibility of each government organization that may respond to a natural gas emergency.

The Bellingham Fire Department will be advised of the location of all emergency valves and the location of the gas pipeline map. The Facilities and Utilities Maintenance Service Manager will participate in fire, police, and WUTC Pipeline Safety Section meetings where appropriate.

A record shall be maintained of all meetings, training sessions, and other related activities by the Facilities and Utilities Maintenance Service Manager.

D. Telephone Reports to the Washington Utilities & Transportation Commission
A gas pipeline incident must be reported to the WUTC Office of Pipeline Safety if the incident meets one of the requirements listed below:

Federal Requirements:

- An event that involves a release of gas from a pipeline and results in a death, or personal injury necessitating in-patient hospitalization, or causes estimated property damage of $50,000 or more.
An event that is significant, in the judgment of the operator, even though it did not meet the criteria above.

WUTC Requirements:
1) Release of natural gas which:
   - Caused a death or a personal injury requiring hospitalization.
   - Resulted in gas ignition, explosion, or fire.
   - Caused estimated total damages in excess of $5,000 (total of operator’s damage, damage to others, and cost of gas loss).
2) Any news media inquiry.
3) A significant incident, in the judgment of the operator, even though it does not meet the above criteria.

The telephone report to WUTC should contain the following information:

- Name of operator and reporting party
- Reporting party’s title and telephone number
- The location, time, and date of incident
- Fatalities and personal injuries
- All other significant known facts that are relevant to the cause of the leak or extent of the damages. (Describe accident)
- Who in management should be contacted upon arrival at incident site

The telephone report should be made within two hours of incident occurrence, but in no case later than six hours after the discovery. It must be reported to WUTC (See Emergency Call List below). A written report shall be filed with WUTC.

### Emergency Call List

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Bellingham Fire Department</td>
<td>911</td>
</tr>
<tr>
<td>Cascade Natural Gas Corporation</td>
<td>(800) 552-1130</td>
</tr>
<tr>
<td>University Police Department</td>
<td>650-3911</td>
</tr>
<tr>
<td>Washington Utilities &amp; Transportation Commission</td>
<td>(360) 664-1150</td>
</tr>
<tr>
<td>Facilities Management Personnel</td>
<td>650-3420</td>
</tr>
</tbody>
</table>
E. Emergency Equipment
The Facilities Management department is responsible for the adequacy, availability and condition of emergency equipment. Inspection of emergency equipment will be conducted quarterly, or as often as may be necessary, and records of these inspections will be kept on file. The emergency equipment will include, but is not limited to the following items:

- Valve wrenches

All emergency equipment is listed and located as follows:

<table>
<thead>
<tr>
<th>Name:</th>
<th>WWU Facilities Management Plumbing and Outdoor Maintenance Shops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>915 26th Street, Bellingham WA</td>
</tr>
<tr>
<td>24-hour Phone:</td>
<td>650-3420 during business hours. Other times 650-3911</td>
</tr>
</tbody>
</table>

A map of the natural gas meter system is included in Figure HK-10. It includes the locations of:

- Gas main lines
- Gas service lines
- Emergency valves
- Master meter
- Buildings and reference points
At Recycle Center

At Steam Plant

At Physical Plant

At Birnam Woods

At Fine Arts

WWU Natural Gas Master Meter Shut-Off Valve Locations

Master Meters are only those meters connected on the outflow side to more than one building. This map shows the location of the five master meter distribution systems after the meter that are owned and operated by the University.

ADDENDUM 1: Master Meter Guide

02-15-2013

HAZ K-23
F. Investigation of Failures
Incidents should be reported to WUTC by telephone ((360) 664-1150) within six hours of occurrence. The Facilities and Utilities Maintenance Service Manager or designee minimizes failures by conducting audits on maintenance and installation procedures. Facilities and Utilities Maintenance Service Manager conducts an investigation to determine any cause of failure and to minimize the possibility of recurrence.

G. Scope of Services provided by Third Party
A third party, or other arrangement, provides annual maintenance for Western, which includes:
1. Annual leak survey using a gas detection instrument of the existing natural gas piping.
2. Annual atmospheric corrosion inspection of existing above ground natural gas piping.
3. Annual survey of the cathodic protection system associated with existing below-ground, steel natural gas piping. Documentation of the findings and information provided to Western.
4. Annual maintenance on all existing, accessible natural gas valves identified by Western.
5. Annual maintenance on all existing, accessible natural gas regulators identified by Western.
6. Conduct of one monthly odorometer test at an accessible location identified by Western.
7. Documentation of all maintenance and inspections performed in a format determined by the third party.
Western Washington University Gas Odor/Leak Report

Report received from:

Name ___________________________ Date reported ____________
Address __________________________ Time reported ____________
Telephone __________________________ Received by ____________
Address of Odor/Leak location __________________________

Description of Problem:

1. Odor/leak: ___________ inside [ ] outside [ ]
2. Can escaping gas be heard? yes [ ] no [ ]
3. Size of broken gas line (leave blank if unknown)
4. Was there: fire [ ] explosion [ ] ignition [ ]
5. Fatality? Yes [ ] Injuries? Yes [ ] Property damage? Yes [ ]
6. Number of services out ____________
7. Additional information __________________________

<table>
<thead>
<tr>
<th>Action Required</th>
<th>Phone</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dispatch staff from Facilities Management</td>
<td>650-3420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Call Bellingham Fire Department</td>
<td>911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Call Cascade Natural Gas Corporation</td>
<td>(800) 552-1130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Call WUTC</td>
<td>(360) 664-1150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Incident resolved by the following actions:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Completed by: ______________
Western Washington University Natural Gas Emergency Plan Checklist

Date____________________ Signed______________________________

Emergencies

☐ Report all required leaks to the WUTC Pipeline Safety Section 2 to 6 hours after Discovery
  - Death or personal injury requiring hospitalization
  - Gas ignition, explosion, or fire
  - Total damage of $5,000
  - News media inquiry
  - Significant event

☐ Follow-up phone call with written report

Programs

☐ Update call list annually

☐ Annual employee training
  ☐ Location of Hazmat, Gas Leak, Oil Spill Addendum 1: Master Meter Guide
  ☐ Review of emergency procedures
  ☐ Location & use of emergency equipment (crescent wrench)
  ☐ Location & use of maps & emergency valves
  ☐ Properties of natural gas
  ☐ Record keeping
  ☐ Updated call list

☐ Maintain record of public education

☐ Maintain record of meeting/training related to liaisons with public officials
  
  Bellingham Fire Department, University Police, WUTC.

☐ Advise Bellingham Fire Department of the location of emergency valves & map of the gas pipeline
HAZARD ANNEX K

ADDEDUM 2: OIL SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

A. Introduction

University policy U5950.01, Health, Safety and Environmental Protection, mandates that the University comply with all federal and state environmental laws. In accordance with Title 40, Code of Federal Regulations, Part 112(d)(2) (40 CFR 112(d)(2)), the University commits personnel, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Western stores, transfers, uses and consumes oil and oil products. Due to the location of these facilities, a discharge of oil could be in quantities that may be harmful into or upon the navigable waters of the United States or adjoining shorelines. Under 40 CFR 112 (Oil Pollution Prevention), Western has established procedures, methods, and other requirements to prevent this occurrence.

Western is providing this Spill Prevention, Control, and Countermeasure (SPCC) Plan as regulated under 40 CFR 112.7. The following types of oil containers are included in this regulation:

- Emergency Generators
- Virgin and Waste Oil Containers 55 gallons or greater
- Transformers
- Animal Fats and Vegetable Oils (as defined in 40 CFR 112.12)
- 55 gallon drum(s) of gasoline

According to 40 CFR 112.20(f)(i), a facility is required to have a response plan if:

(i) The facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 gallons; or

(ii) The facility’s total oil storage capacity is greater than or equal to 1 million gallons

Western does not meet these requirements and therefore is exempt from this part of the regulation.

B. General Requirement for Spill Prevention, Control, and Countermeasure Plans

Western complies with the general requirements of this section in accordance with good engineering practices as stated in 40 CFR 112.7.
(1) Emergency Generators

1. Physical Layout of the Facility
   a) Description – Figure HK-15 includes all the emergency generators on campus. The table describes the building, location, description, the fuel capacity in gallons, energy rating in kilowatts, if any connected loads are present, secondary containment and curbing.
   b) Diagrams – Figure HK-16 includes diagrams for each emergency generator.
   c) The type of oil in each container and its storage capacity - Diesel fuel is stored in all the emergency generators on Main Campus, Physical Plant and Shannon Point Marine Center. The storage capacity for each of these generators is listed in Figure HK-15.

2. Discharge prevention measures
   a) Procedures for routine handling of products (loading, unloading, and facility transfers):
      Emergency generators are routinely topped off with fuel as needed. A tank truck with a 100 gallon fuel tank is used for this purpose and is performed in this manner:
      1. Facilities Management (FM) Maintenance Mechanic fuels the 100 gallon fuel tank at the FM fueling station.
      2. FM Maintenance Mechanic drives to each location and fills a 5 gallon yellow plastic gas can from the 100 gallon fuel tank.
      3. FM Maintenance Mechanic opens cap on the emergency generator tank and manually tops off the tank with fuel.
   b) Discharge drainage controls (secondary containment and other procedures for control of discharge). Secondary containment information for each generator is located in Figure HK-15.
      • A spill kit is located at the FM fueling station and in the FM Maintenance Garage in case of a discharge while someone is fueling.
      • An absorbent pad is placed underneath 5 gallon yellow gas can when being filled.
      • An absorbent pad is placed near the tank cap during fueling in case of spill.
      • A spill kit is located in the FM tank truck with 100 gallon fuel tank.
   c) Containment or diversion: Figure HK-15 contains information on the types of containment for each generator.
      • Sorbent materials are immediately available in several locations:
        1. FM Fueling Station: Drain cover
        2. FM Maintenance Garage: Spill booms, kitty litter
        3. Weight Room along service road behind Wade King Student Recreation Center: spill pads, spill booms, clay absorbent, 1.5’x1.5’ square drain cover.
        4. FM Tank Truck with 100 gallon fuel tank contains a spill kit
        5. Shannon Point Marine Center – Mechanical Room 1 of ME Building and in shed behind Maintenance Mechanic onsite quarters: Spill booms, absorbent material and pads, 20 gal and 60 gal waste drums.
6. Environmental Health Safety (EHS) Department:
   o Environmental Studies Rm 72: spill pads, spill booms, spill pillows, Plug N Patch Kit in Cabinet 4, chemical sorbent, oil sorbent, neutralizing sorbent, hazmat bags and ties,
   o Engineering Technology Haz Mat Storage Shed: 85 gallon salvage drum, spill pads, spill booms
   o Chemistry Building Waste Room – spill booms and pads
   o Biology Building Waste Room: spill pads, spill booms, hazmat bags and ties
   o Physical Plant Connex: 30 gallon poly overpack drums, 55 gallon metal drums

   • Manual and Mechanical Transfer Pumps are available in several locations:
     1. FM Outdoor Maintenance has trash pumps
     2. FM Plumbing Services has mechanical sump pumps
     3. EHS has manual transfer pumps

3. Countermeasure for discharge discovery, response and cleanup
   Western is capable of responding to and cleaning up oil discharged from its emergency generators and transformers.
   a) Reporting information on discharge is provided in Figure HK-14.
   b) Procedures used when a discharge occurs and checklist are provided in Figure HK-13.

4. Methods of disposal for recovered materials
   In the event of an oil spill, any and all recovered materials will be disposed of in accordance with the Dangerous Waste Regulations Chapter 173-303 of the Washington Administrative Code (WAC).

5. Prediction of oil discharge from equipment failure
   Western has never experienced equipment failure such as loading, unloading equipment, tank overflow, rupture or leakage. Figure HK-15 includes a prediction of the direction of flow. Total quantity of oil which could be discharged as a result of major equipment failure is shown in Figure HK-15 as the quantity of oil in each generator. Worst case rate of flow would be all oil in several minutes.

6. Periodic integrity testing of oil containers 55 gallons and over and integrity and leak testing of valves and piping.
   FM does a monthly visual check of each generator and its piping.

7. Inspections, Tests, and Records
   Inspection and tests are required in accordance with written procedures of the facility. Written procedures and record of inspections and tests, signed by supervisor or inspector, are kept for three years on the FAMIS database. Emergency generators are inspected monthly on FM’s preventative maintenance system.

8. Security
   Each facility is locked and/ or guarded when the facility is unattended. Each generator is in a locked building or in locked storage when located outside.
The master flow and drain valves and other valves permitting direct outward flow of the generator's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status. The starter control on each oil pump is locked when in the “off” position. The starter control is located at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status. This only applies to the FM tank truck with 100 gallon fuel tank. The oil pump in truck is locked in canopy except when in use. The facility piping loading/unloading connections are securely capped when not in service or when in standby service for an extended time.

The facility is lighted so as to assist in the discovery of discharges occurring during hours of darkness, both by operating and non-operating personnel. The facility is also lighted to prevent discharges through acts of vandalism. Rooms that have emergency generators are lit when in use and not lit when not occupied. When located outside, generators are in normal exterior lighting for the area.

The facility has a University Police department that is available 24 hours a day and 7 days a week.

9. Facility tank/car tank truck
   This section is not applicable.

10. Field constructed above-ground container
   In the event that the emergency generators undergo repairs, alteration, reconstruction or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, an evaluation for risk of discharge will be done and appropriate actions will be taken. All emergency generators are manufactured and not field constructed. For any leaks that occur in the tanks, Western will use a vendor that provides licensed tanks and no field repairs would occur.

11. Additional requirements from more stringent state rules
   This section is not applicable.

(2) Waste Oil at Engineering Technology (ET)

1. Physical Layout of the Facility
   a) Description – Located east of ET, waste oil is stored in the ET Yard. The 55 gallon drums of waste oil are on secondary containment pads and covered from the weather.

   b) Diagrams – Refer to Figure HK-17 for layout of waste oil and hydraulic oil. Drums of oil do not have any connecting pipes.

   c) The type of oil is waste oil and hydraulic oil and the quantities are 55 gallon drums.

2. Discharge prevention measures
   a) Procedures for routine handling of products (loading, unloading, and facility transfers):

      Waste oil is poured into drum in small amounts to be stored until drum is full. When drum is full, Safety-Kleen is requested to remove the oil from the drum while onsite. Safety-Kleen is responsible for this transfer.

   b) Discharge drainage controls - 55 gallon drums of waste oil are placed on secondary containment.
Western Washington University   Hazard Annex K: Hazmat, Gas Leak, Oil Spill
ADDENDUM 2: Oil Prevention Control and
Countermeasure Plan

3. **Countermeasure for discharge discovery, response and cleanup**
Western is capable of responding to and cleaning up oil discharged from its drums of oil.

   a) Reporting information on discharge is provided in Figure HK-14.

   b) Procedures used when a discharge occurs and checklist is provided in Figure HK-13.

4. **Methods of disposal for recovered materials**
In the event of an oil spill, any and all recovered materials will be disposed of in accordance with the Dangerous Waste Regulations [Chapter 173-303](#) of the Washington Administrative Code (WAC).

5. **Prediction of oil discharge from equipment failure**
Western has never experienced drum failure such as loading, unloading equipment, tank overflow, rupture or leakage. The Figure HK-17 includes a prediction of the direction of flow. Worst case rate of flow would be all oil in several minutes.

6. **Periodic integrity testing of oil containers 55 gallons and over**
ET faculty and staff inspect the drum for integrity each time they enter the shed the drum is in.

7. **Inspections, Tests, and Records**
No records or documentation of inspections are kept.

8. **Security**
The ET yard is fully fenced and locked when the facility is unattended.

   The facility is lighted so as to assist in the discovery of discharges occurring during hours of darkness, both by operating and non-operating personnel. The facility is also lighted to prevent discharges through acts of vandalism.

9. **Facility tank/car tank truck**
This section is not applicable.

10. **Field constructed above-ground container**
This section is not applicable.

11. **Additional requirements from more stringent state rules**
This section is not applicable.

(3) **Petroleum Products at Facilities Management Garage**

1. **Physical Layout of the Facility**
   
   a) Description –
   
   55 Gallon Drums-Located in the Facilities Management Garage at 915 26th Street, 55 gallons drums of virgin oil are located in a secondary containment pad in Room 101 and a 55 gallon drum of used brake fluid in Room 101D that has a drain that leads to an oily water separator.

   Fuel Tanks (above ground) - A 1,000 gallon tank holding diesel fuel and a 500 gallon tank holding premium gasoline are located in the Maintenance Fuel Station.

   b) Diagrams of the 55 gallon drums of virgin and used oil, and fuel tanks are in the Figure HK-17
c) The type of oil or fuel in each container and its storage capacity is included in Figure HK-18.

2. Discharge prevention measures
   a) Procedures for routine handling of products (loading, unloading, and facility transfers):

   55 Gallon Drums:
   Oil drums are transferred on and off vendor's truck using a fork lift and securing loop. Oil is pumped out of the drums via connections attached to the drum and permanent hoses to area of use. Material is dispensed using controls attached to the hoses.

   Fuel Tanks (above ground):
   The vendor delivers the fuel to the tanks and is in charge of the delivery, including procedures and clean-up of any spills.

   Discharge of the fuel into vehicles is performed via fuel nozzles similar to that at commercial gas stations. Automatic fuel shutoff is installed should a vehicle depart without operator disconnection.

   b) Discharge drainage controls –
   55 Gallon Drums:
   • Dams and booms are kept available to place around drains to prevent oil from entering drains.
   • Absorbent mats, kitty litter, and a clean-up kit are available onsite.
   • All drains in Room 101 lead to an oily water separator.
   • Biozyme is used to dissipate oil as needed.

   Fuel Tanks (above ground):
   • The delivery vendor trains its drivers to properly pump to minimize spilling and provides spill kits with its trucks.

   c) Containment or diversion –
   55 Gallon Drums:
   • Secondary containment is provided for the 55 gallon drums of virgin oil, with a tertiary containment in the form of an oily water separator and absorbent material.
   • All drains in the FM garage drain to the oily water separator. In Room 101D, the floor is sloped so that oil is directed into the drain and would not leave the room.

   Fuel Tanks (above ground):
   • The delivery driver is present during pumping operations. The driver is trained how to cleanup spills and spill absorbent, booms, and other equipment are readily available onsite in the event of a leak or spill.
   • Both fuel tanks are double-walled and electronically monitored for any leakage between the walls.

3. Countermeasure for discharge discovery, response and cleanup
   55 Gallon Drums:
   Oil drums are inspected on a weekly basis by EHS, as well as drums are in a visible area where many people are able to notice any discharge.

   Fuel Tanks (above ground):
   The fuel tanks are electronically monitored for leakage and an alarm sounds should a leak be detected. The tanks are near and visible to all persons that are refueling so that any leaks are likely to be seen and/or smelled promptly.
4. **Methods of disposal for recovered materials**
   In the event of an oil spill, any and all recovered materials will be disposed of in accordance with the Dangerous Waste Regulations [Chapter 173-303](#) of the Washington Administrative Code (WAC).

5. **Prediction of oil discharge from equipment failure**
   Western has never experienced drum failure such as loading, unloading equipment, tank overflow, rupture or leakage. Figure 17 includes a prediction of the direction of flow. Worst case rate of flow would be all oil in several minutes. Total quantity of gasoline which could be discharged as a result of major equipment failure is shown in Figure HK-18 as the quantity of gasoline in each tank. Worst case rate of flow would be all gasoline or diesel in delivery truck or tank in several minutes.

6. **Periodic integrity testing of oil containers 55 gallons and over**
   **55 Gallon Drums:**
   Weekly inspections on signs of compromised drum integrity of drums and leakage and in the surrounding area are performed. Any and all necessary actions are documented and taken in a timely fashion.

   **Fuel Tanks(above ground):**
   Weekly automatic leak testing is done by the tank's monitoring system. The Environmental Protection Agency requires monthly reports of these weekly tests. Observation shafts are available for sniff tests if required as well.

7. **Inspections, Tests, and Records**
   **55 Gallon Drums:**
   Weekly inspections on integrity of drums and surrounding area are performed by EHS. Written procedures and record of inspections and tests, signed by supervisor or inspector, are kept for three years in the Environmental Health & Safety Office.

   **Fuel Tanks (above ground):**
   Written procedures and record of inspections and tests, signed by the FM Automotive Maintenance Supervisor, are kept for three years.

8. **Security**
   The FM garage is fully fenced and locked when the facility is unattended. University Police periodically drive by to ensure there is no vandalism.

   The facility is lighted so as to assist in the discovery of discharges occurring during hours of darkness, both by operating and non-operating personnel. The facility is also lighted and secured to prevent discharges through acts of vandalism.

9. **Facility tank/car tank truck**
   This section is not applicable.

10. **Field constructed above-ground container**
    This section is not applicable.

11. **Additional requirements from more stringent state rules**
    This section is not applicable.
12. Bulk Storage Containers (CFR 112.12)  
Fuel Tanks (above ground):  
All containers have secondary containment.  

All containers are tested for integrity on a regular schedule and whenever repairs are made.  
A visual inspection is done taking into account container size, design, container support,  
container foundation, signs of deterioration, discharges, and accumulation of oil inside  
containment areas. Record inspections are kept under usual and customary business  
practices.  

Visible discharges from all containers will be promptly corrected and any accumulation of  
oil in diked areas will be removed.

(4) Transformers/Oil Switches  
1. Physical Layout of the Facility  
   a) Description - Figure HK-19 includes all the transformers and oil switches on campus and  
      outlying facilities. The table describes the building, location, description, the fuel capacity  
in gallons, secondary containment and security. Note: Transformers at Hannegan Rd.,  
Lakewood, Alumni House, and 32nd St. (Administrative Services Center) are all owned,  
maintained and logged in their OSPCC Plan by Puget Sound Energy.  
b) Diagrams – Figure HK-20 includes diagrams for each transformer.  
c) The type of oil in each container and its storage capacity - Transformer and switch oil,  
composed of mineral or silicone oil, is stored in all the transformers and oil switches on  
Main Campus, Physical Plant and Shannon Point Marine Center. The storage capacity for  
each of these transformers is listed in Figure H K-19.

2. Discharge prevention measures  
   a) Procedures for routine handling of products (loading, unloading, and facility transfers):  
      The Electric Shop does not normally handle the product. Approximately one cup  
is taken from each transformer every three years for sampling. The sample is sent  
to a testing company who then disposes of the product. The transformers are not  
refilled after sampling. A level indicator is sufficient in determining low levels of  
oil.  
   b) Discharge drainage controls (secondary containment and other procedures for control  
of discharge):  
      There is minimal need to open the transformers or oil switches, usually only  
during once every three year inspections. A plug or valve is all that is opened to  
      drain small amounts of oil for testing and inspection.  
   c) Containment or diversion – Spill absorbent, booms, and other equipment are readily  
available in the event of a leak or spill. Each FM truck carries a spill kit and there are three  
large spill kits, one at SMATE, FM Marshalling yard, and at Shannon Point. See Figure HK- 
19 for locations and type of secondary containment.  

3. Countermeasure for discharge discovery, response and cleanup  
Western is capable of responding to and cleaning up oil discharged from its transformers.  
   a) Reporting information on discharge is provided in Table HK-14.  
   b) Procedures used when a discharge occurs and checklist are provided in Table HK-13.

4. Methods of disposal for recovered materials
5. Prediction of oil discharge from equipment failure
Western has never experienced equipment failure such as loading, unloading equipment, tank overflow, rupture or leakage. Figure HK-20 includes a prediction of the direction of flow. Total quantity of oil which could be discharged as a result of major equipment failure is shown in Figure HK-19 as the quantity of oil in each transformer. Worst case rate of flow would be all oil in several minutes.

6. Periodic integrity testing of oil containers 55 gallons and over
Integrity testing is not performed on transformers. A temperature and pressure vacuum gauge is on each transformers holding over 55 gallons of oil with the exception of the transformers at Birnam Wood and Fairhaven. These gauges are read at least once per year. If the gauge is not within normal range, then the integrity is questioned.

7. Inspections, Tests, and Records
Inspections are performed at least once each year on Facilities Management’s Preventative Maintenance System. Included in the inspection are visual notes, gauges, and integrity of the unit. Written procedures and record of inspections and tests, initiated by the inspector, are kept for three years at Facilities Management in a FAMIS (inventory control/job cost program) database.

8. Security
Each transformer is either in a locked room or cabinet, or a special wrench is required.

The master flow and drain valves and other valves permitting direct outward flow of the transformer’s contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

Some transformers are located in lit areas and some are not in lit areas. Those in unlit areas are near dormitories making the discovery of a discharge somewhat likely. Other that someone seeing the oil spill, another method is that once a transformer runs dry it will produce a bussing noise.

The facility has a University Police department that is available 24 hours a day and 7 days a week.

9. Facility tank/car tank truck
This section is not applicable.

10. Field constructed above-ground container
This section is not applicable.

11. Additional requirements from more stringent state rules
This section is not applicable.

(5) Animal Fats and Vegetable Oil
1. Physical Layout of the Facility
a) Description – Figure HK-21 includes all the grease disposal units on campus. The table describes the building, location, description, the oil capacity in gallons and secondary containment.

b) Diagrams –Figure HK-22 includes diagrams for each grease disposal unit.

c). The type of oil is liquid fryer oil. The storage capacity for each grease disposal unit is in Figure HK-21.
2. Discharge prevention measures
   a) Procedures for routine handling of products (loading, unloading, and facility transfers):

   Waste fryer oil:
   - Waste oil is drained from fryers into approved transport containers once a week.
   - It is then transported into large storage bins on the Viking, Ridgeway and Fairhaven Commons loading docks.
   - Staff is trained on proper handling procedures and what to do in the event of a spill.
   - All spills are cleaned up immediately and an absorbent is applied. All of this waste is properly disposed of, either in Food Plus recycling or if contaminated objects are not recyclable, into solid waste.
   - In the event of a large spill, all oil is first diverted away from any drains or porous surfaces, then cleaned up appropriately.

   Grease Interceptors:
   - Bayside Services provides pump and removal of grease waste from the grease interceptors two times each year.

   b) Discharge drainage controls –
   - Standard BioDiesel is the contractor that removes fryer oil. All drivers are trained to properly pump unit to minimize spilling, how to respond to a spill and to regularly inspect containers for any leaks or signs of wear. Any damaged units are replaced promptly.
   - Bayside Services is the contractor that pumps and removes grease waste from the grease interceptors. All drivers are trained to properly pump to minimize spilling and inspect the containers for leaks.

   c) Containment or diversion –
   - Spill kits are available in each Standard BioDiesel truck in the event of a leak or spill. Drivers are trained how to respond to a spill.

3. Countermeasure for discharge discovery, response and cleanup
   Western inspects grease interceptors every 3 months for discharges. Western is capable of responding to and cleaning up oil discharged from its grease disposal units.

   a) Reporting information on discharge is provided in Table HK-14.

   b) Procedures used when a discharge occurs and checklist are provided in Table HK-13.

   Standard BioDiesel, the contractor for fryer oil removal, inspects oil transport containers regularly for leaks, wear, or damage. All trucks are equipped with spill kits and drivers are trained in spill response.

4. Methods of disposal for recovered materials
   In the event of an oil spill, any and all recovered materials will be disposed of in accordance with the Dangerous Waste Regulations Chapter 173-303 of the Washington Administrative Code (WAC).

5. Prediction of oil discharge from equipment failure
   Western has never experienced equipment failure such as loading, unloading equipment, tank overflow, rupture or leakage. Figure HK-22 includes a prediction of the direction of flow. Total quantity of oil which could be discharged as a result of major equipment failure
6. Periodic integrity testing of oil containers 55 gallons and over
   Fryer Oil-
   - Standard Biodiesel owns all waste fryer oil containers and is responsible for testing.
   Grease Interceptors-
   - The grease interceptors are 8" thick concrete vaults that are underground. These are not integrity tested.

7. Inspections, Tests, and Records
   Fryer Oil:
   - Waste fryer oil containers are inspected for visual signs of leakage whenever waste oil is transferred into them. In addition, containers are inspected for leakage, wear, or damage regularly by Standard Biodiesel drivers.

   Grease Interceptors:
   - The vaults are inspected by Western every 3 months. Inspection records are kept at Facilities Management in a FAMIS (inventory control/job cost program) database.

8. Security
   The facility is lighted so as to assist in the discovery of discharges occurring during hours of darkness, both by operating and non-operating personnel. The facility is also lighted to prevent discharges through acts of vandalism.

   The facility has a University Police department that is available 24 hours a day and 7 days a week.

9. Facility tank/car tank truck
   Not applicable, Standard BioDiesel and Bayside Services are responsible for these.

10. Field constructed above-ground container
    Not applicable for waste fryer oil containers.

11. Additional requirements from more stringent state rules
    Not applicable for waste fryer oil containers.

12. Bulk Storage Containers (40 CFR 112.12)
    Standard BioDiesel owns the waste oil containers and are responsible for inspection, testing, and replacement of leaking, worn, or damaged containers.

    The grease interceptors are 8" thick concrete vaults that are underground. The vaults are inspected by Western every 3 months. Inspection records are kept at Facilities Management in a FAMIS (inventory control/job cost program) database.

(6) Personnel, Training and Discharge Prevention Procedures
1. Emergency Generators – Academic and Auxiliary Maintenance Supervisors are responsible for providing training for all oil handling personnel in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, contents of the facility Spill Prevention Control and Countermeasure (SPCC) Plan, applicable pollution control laws, rules and regulations.

2. Petroleum Products at FM garage – Automotive Maintenance Supervisor is responsible for providing training for all oil handling personnel in the operation and maintenance of equipment
to prevent discharges, discharge procedure protocols, contents of the facility SPCC plan, applicable pollution control laws, rules and regulations.

3. **Waste Oil at ET** – ET Dept Scientific Technician reporting to department head is responsible for providing training for all oil handling personnel in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, contents of the facility SPCC plan, applicable pollution control laws, rules and regulations.

4. **Transformers and Oil Switches** – Electrical Shop Supervisor is responsible for providing training for all oil handling personnel in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, contents of the facility SPCC plan, applicable pollution control laws, rules and regulations.

5. **Animal Fats and Vegetable Oil** – Aramark is responsible for providing training for all oil handling in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, contents of the facility SPCC plan, applicable pollution control laws, rules and regulations.

<table>
<thead>
<tr>
<th><strong>(7) Contact list and phone numbers</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>Contact information</strong></td>
</tr>
<tr>
<td>Western (Facility) Oil Spill Response Coordinator</td>
<td>(360)650-6512</td>
</tr>
<tr>
<td>National Response Center</td>
<td>(800)424-8802 or <a href="http://www.nrc.uscg.mil/nrchp.html">http://www.nrc.uscg.mil/nrchp.html</a></td>
</tr>
<tr>
<td>Washington Emergency Management Division:</td>
<td>(800)258-5990 OR (800)OILS-911</td>
</tr>
<tr>
<td>Department of Ecology, Northwest Region</td>
<td>(425)649-7000</td>
</tr>
<tr>
<td>Bellingham Fire Department</td>
<td>911</td>
</tr>
<tr>
<td>Western Environmental Health &amp; Safety</td>
<td>(360)650-3064</td>
</tr>
<tr>
<td>Western Viking Union Lakewood Manager</td>
<td>(360)650-2900</td>
</tr>
<tr>
<td>Western Facilities Management Dispatch</td>
<td>(360)650-3420</td>
</tr>
<tr>
<td>Western University Residences and Aramark</td>
<td>(360)650-4418</td>
</tr>
<tr>
<td>Western University Police</td>
<td>(360)650-3555</td>
</tr>
</tbody>
</table>

**Oil Spill at Underground Storage Tanks (55 gallons+)**

The U.S. Environmental Protection Agency (EPA), acting in accordance with requirements of the Federal Water Pollution Control Act, has established criteria for an oil pollution prevention program for Non-transportation Related Onshore and Offshore Facilities. The regulations are contained in the Code of Federal Regulations Title 40, Part 112 ([40 CFR 112](https://www.cfr.gov)).
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ADDENDUM 2: Oil Prevention Control and Countermeasure Plan

Washington State has adopted these regulations which are found in the Washington Administrative Code (WAC), Part 173-180. Underground storage facilities in excess of 42,000 gallons (1000 barrels) are covered where the location is such that a spill “could reasonably be expected to discharge oil in harmful quantities, as defined in 40 CFR, Part 110, into or upon the navigable waters of the United States or adjoining shorelines.” Paragraph 110.3(b) goes on to define a harmful discharge into navigable waters as one which would:

“(b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.”

Owners of facilities to which the foregoing applies are required to prepare an Oil Spill Prevention Control and Countermeasure Plan (OSPPCP) to prevent oil spills and to establish procedures for handling oil spills in the event they do occur.

Underground storage tanks are also regulated by the U.S. Environmental Protection Agency (EPA) in Title 40 CFR, Part 280 and by the State of Washington in WAC 173-360. Under Part 173-360-110 (h) the University’s heating oil tanks are exempt from regulation, except release reporting requirements.

“(h) UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred gallons are subject to the release reporting requirements of WAC 173-360-372.”

Gasoline and diesel tanks stored at Facilities Management (915 26th street) are subject to WAC 173-360, underground storage tank regulations, but are not subject to WAC 173-180, Oil Spill Control requirements. These tanks are included in this spill plan to ensure maximum environmental protection beyond regulatory requirement.

Fuel oil at the Steam Plant is subject to spill prevention control and countermeasure plans according to WAC, Part 173-180. The potential for oil spills due to human error is minimal since oil is rarely burned. During the last several years, oil was not burned and no shipments of oil were needed to refill the tanks. In the last twenty-seven years (1985-2012), no oil spill has occurred.

Since 1985 when the original plan was written, the facilities and procedures at both the Steam Plant and Facilities Management motor fuel tanks have been upgraded to minimize the potential for escape of material into Bellingham Bay.

Commitment

University policy U5950.01, Health, Safety and Environmental Protection mandates that the University comply with all federal and state environmental laws. To that end, the University commits personnel, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Spill Prevention Control and Countermeasures Plan Facility Layout

Underground storage tanks are present on the main campus near the Steam Plant at 309 East College Way and at the Facilities Management facility at 915 26th Street. Diagrams of these facilities can be found on in Figure HK-23 showing details of the facility, tanks, pumps, and piping.

(i) Container Storage and Type of Oil

Steam Plant Fuel Oil Tanks: Present storage at the Steam Plant on the main campus is provided by two older underground fuel oil tanks (placed in 1946) and two newer tanks (placed in 1972). The older storage tanks are cylindrical in shape, 9 feet 6 inches inside diameter by 38 feet long, and each has a volume of 20,000 gallons. The newer storage tanks are cylindrical in shape, 11 feet 6 inches inside diameter by 56 feet long, and each has a volume of 43,500 gallons.
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All four fuel oil tanks are located below grade level under the parking area on the north corner of the Steam Plant. None of the tanks are protected by galvanic or impressed current cathodic protection systems. The two older and smaller tanks are both enclosed in concrete secondary containment, lined with sand. The two new, larger tanks are likely enclosed in concrete as well, but documentation is unclear and access is difficult to assist in determination.

All fuel oil tanks have 4 inch screwed fill caps which connect to piping which extends to the bottom of the tank to reduce the generation of static electricity. Each tank has a 3 inch vent which terminates approximately 4 feet above grade on the northwest corner of the Steam Plant building.

All piping between the fuel oil storage tanks and the Steam Plant is enclosed in concrete trenches or bunker type crawl spaces. No oil, steam, or condensate piping is run direct burial.

All oil piping is schedule 40, black steel. Asbestos has been removed from the piping.

Fittings are generally screwed, with some flanged connections. Main and spare positive displacement screw pumps circulate oil from the tanks to the burners at each boiler and back to the tanks. All piping and specialty items have been installed in accordance with good engineering practice. Specialty items generally are of steel with minimum use being made of bronze or cast iron.

A condensate inspection tank or “look box” has been installed in the pit area. Bunker grade fuel oil (fuel oil #5) is maintained at the proper temperature for pumping and burner operation by temperature-controlled suction heaters in each oil tank and by in-line fuel oil heaters downstream of the fuel oil circulating pumps. The old tank suction heaters use circulating hot water heated by steam converter to heat the oil. The new tank suction heaters use steam to heat the oil. Pressure relief valves are installed to automatically bypass excess oil and prevent the build-up of excessive pressures downstream of the fuel oil pumps.

Facilities Management Motor Fuel Storage Tanks: Present fuel storage at 915 26th Street is provided by:

- A double-walled, 8,000 gallon underground tank for unleaded gasoline, certified by the Steel Tank Institute and meeting Underwriter’s Laboratory-58 requirements. The tank and monitoring system are built in accordance with API 1615 and UL-58 specifications.
- A double-walled, 1,100-gallon underground tank for diesel fuel certified by the Steel Tank Institute and meeting Underwriter’s Laboratory-58 requirements. The tank and monitoring system are built in accordance with API 1615 and UL-58 specifications.

The two underground motor fuel storage tanks are located south of the Facilities Management building where state-owned vehicles are refueled.

Tanks bear the Underwriters Laboratory (UL) and Sti-P3 labels. Tanks are carbon steel construction with fiber reinforced plastic (FRP) underground piping. The tanks have a Sti-3 cathodic protection and an automatic leak detection system, “Protection Proven number 2” that are in compliance with UL-58 requirements. The tanks satisfy and exceed WAC 173-360 for safe storage. Three old motor fuel tanks have been decommissioned and properly disposed of.

Both tanks have 4 inch hinged fill caps which connect to non-sparking aluminum piping which extends to the bottom of each tank. Each tank has a vent which terminates approximately 10 feet above grade.

(2) Discharge Prevention

Steam Plant Fuel Oil Tanks: Oil is delivered by truck and trailer rigs, at most once per year. Quick closing valves are provided for manually shutting off oil flow to the unloading hose. A supervisor is present during oil delivery and is familiar with procedures for shutting off delivery equipment oil flow in the event the delivery driver, for any reason whatsoever, becomes
incapacitated and incapable of functioning. Keys to the oil fill connections are located in the shift supervisor’s office so that the oil delivery truck driver is required to make contact with plant operating personnel before oil can be put into the tank.

1. Oil deliveries are made in response to requests from supervisory personnel at the heating plant. Fuel oil orders are placed only when the tank to be filled can hold the entire tank truck capacity (6,300 gallons) to minimize delivery orders. No deliveries have been made since the early 1990’s since oil is only used during test burns once a year.

2. Oil Transfer: Tank suction heaters are used to heat the fuel oil before it leaves the tanks. The old tank suction heaters use hot water to heat the oil while the new tank suction heaters use 50 PSIG steam. Oil is transferred using gravity rather than pumping. Oil is not normally transferred by gravity or pump from one storage tank to another although it is possible to make transfers if desired. The return oil flow from the burner headers can be directed back to any of the four storage tanks. Operation of pumps and routing of return header flow is controlled manually by plant operating personnel.

The flow of steam and hot water is controlled by an automatic temperature controller which causes the desired set point temperature to be maintained. In addition to the suction heaters, two in-line oil heaters are used for temperature trim control for proper combustion in the boilers.

Steam condensate from the new tank suction heaters and in-line heaters is continuously drained to the sewer when oil is being fired in the boilers. The hot water used for heat in the old tanks is circulated in a closed system to and from a steam converter with a circulation pump. A condensate “look box” or inspection tank is used to frequently inspect this condensate when oil is being burned.

Steam flowing into the suction heaters or in-line heaters is modulated automatically by control valves to control temperature. Under conditions where the steam is condensing in the heater coils at a greater rate than it is being admitted by the control valves, pressures will drop below that of the oil and oil contamination of condensate will occur if a leak develops in the heater coils.

All tanks are filled directly from tank trucks or truck and trailer rigs with the standard 4 inch diameter hose carried on the vehicle. Piping and components for transferring or circulating oil are adequate.

All tanks satisfy the requirements for safe storage and are exempt from regulations for underground storage tanks, except release reporting.

During annual boiler shutdown and inspection, sorbents are used to soak up spilled fuel oil when the burner piping is disconnected. Washing down with water to the drainage system is not permitted.

**Facilities Management Motor Fuel Storage Tanks**

Gasoline and diesel fuel are delivered by tank trucks. The unloading operation is similar to any commercial service station refueling operation. Quick closing valves are provided for manually shutting off fuel flow to the unloading hose. Delivery truck drivers are trained in Department of Transportation protocols and are State certified. Delivery trucks are also equipped with a spill prevention boom, absorbent material, and storm drain plugs. Fuel delivery orders are minimized because spills are most likely to occur during fuel delivery.

A drain plug is installed at the storm drain during refueling operations, although it is unlikely that the fuel would reach a navigable waterway because of low vapor pressure due to evaporation.
A major spill during tank truck unloading operations could enter the storm drain system or earth around the fueling station. A major spill would initially provide a greater flammability hazard than pollution to Bellingham Bay.

The fuel tanks are double walled and electronically monitored once a week for leakage and an alarm sounds should a leak be detected.

(3) Discharge/ Drainage controls

The stormwater drainage system on Western’s campus feeds into two, underground collection and settling basins. Each basin holds 88,000 cubic feet of stormwater and settles the heavy solids. Effluent from the basins is piped under Bill McDonald Parkway into two stand-alone, redundant bioswales. These bioswales are east and west of Taylor Creek. They consist of grass-lined ditches and pea gravel and plant filters to remove silt and fines prior to entering Taylor Creek. This treated stormwater travels to Connelly Creek and ultimately is discharged into Bellingham Bay.

Steam Plant Fuel Oil Tanks:

The campus storm drain system described above is the means by which spilled or leaked oil could be transported to ecologically sensitive areas. The possibility of spillage from inadvertently returning oil to the wrong tank or by transferring oil into a full tank could result from human error. A written procedure is in place to minimize this possibility. Supervisors are present when this procedure is performed. The interruption of such flows is necessary to prevent oil from reaching Bellingham Bay.

There is currently no subsurface drainage system or ground water sounding wells to check for tank-to-soil leakage. Fuel oil tank high level alarms have been installed.

System security and provisions to prevent spilled oil from entering the drainage system are considered adequate. Detection systems to monitor for high tank levels, tank leakage and oil contaminated condensate have been installed. A program of system monitoring by operating personnel has been initiated.

The truck fill area above the storage tanks is surfaced with concrete. The adjoining lower elevation area contains two area drains and is surfaced with asphalt. These catch basins connect to the campus storm drainage system on the west side of the Steam Plant building. Temporary storm drain covers (2) are placed when receiving oil from a tank truck.

The pit area in the northwest corner of the Steam Plant which contains fuel oil pumps and in-line heaters is located directly over a water drainage sump. Six-inch curbing has been constructed around the 24 in. manhole in pit. The fuel oil supply and return valves in the pit have been color coded. Three floor drains in the pit which allow spillage or leakage of oil or water to flow into the sump have plugs available for installation when pumping oil. Drainage from other areas of the Steam Plant is also routed to the drainage sump.

Oil level in all four fuel oil tanks is continuously monitored by a pneumatic tank level indicating gage. The level in each tank can also be checked manually by fill sounding tubes in the truck fill area. Automatic level indicators are used at each tank. The current system is adequate, except that an automatic monitoring system for pipe leakage is not in place.

Although a cathodic protection system would insure against leakage for an indefinite period of time, there is no evidence of on-going corrosion or leakage at this time.

The selection of materials for piping and components and the protection against overpressure minimizes the chances of spillage due to physical failure of materials. From an operational standpoint the fill connections at the storage tanks are adequate. No spills have occurred to date.
(4) Countermeasures for Discharge Discovery

A spill countermeasure program has been initiated for containment and cleanup of spills before oil reaches the drainage system. Oil spill containment equipment storage is presently at the Steam Plant.

To facilitate the reporting of and response to oil discharges, critical water use areas of concern include Connelly Creek and Bellingham Bay.

Materials for the containment of spilled oil to prevent its reaching the drainage system and ultimately discharging into Bellingham Bay are stored at the Steam Plant. The materials include:

a. A minimum of 9 - 48-pound pails of granular Plug N’ Dike. The granular Plug N’ Dike can be used as a barricade to stop the spread of oil or petroleum products.


c. A minimum of 10 cartons of Oil Snare. Oil Snare can be used to recover spilled oil.

d. A minimum of 1 bundle/100pads Plug N’ Dike. Absorbent pads size 16”x20” for small & large area oil spill containment & clean up.

e. A minimum of 2 rolls of 3 M T-100 absorbent materials. 3M oil sorbent can be used as an oil boom or as floor pads to catch oil drips from piping or machinery.

f. A minimum of 25 heavy duty plastic bags. Plastic bags can be used to hold and transport absorbents saturated with petroleum products.

g. A minimum of four floor expanding drain plugs. For use in the steam plant low point pit area drains. Note: Plugs to be put in place before any oil operations.

Annex K: Haz Mat Response, Gas, and Oil Spills provides the definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are involved in planning and directing oil removal operations.

For the purpose of early detection and timely notification of an oil discharge, Facilities Management personnel are instructed to call University Police. University Police investigate and notify Environmental Health & Safety (EHS) personnel. EHS staff responds as described in Annex K: Haz Mat Response, Gas, and Oil Spills.

The University’s Safety Information Book, Section 2 for EHS contains a current list of names and telephone numbers of responsible persons and alternates on call to receive notification of an oil discharge as well as the names, telephone numbers of the organizations and agencies to be notified when an oil discharge is discovered.

Annex K: Haz Mat Response, Gas, and Oil Spills and Annex G: Communications and Information Technology contain information on access to a reliable communications system for timely notification.
Western Washington University   Hazard Annex K: Hazmat, Gas Leak, Oil Spill
ADDENDUM 2: Oil Prevention Control and Countermeasure Plan

of an oil discharge as well as the capability for interconnection with communications systems established under State and National plans.

Annex K: Haz Mat Response, Gas, and Oil Spills presents the established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the local, regional or State authority.

The university has the resource capability to address oil spills which will be committed during any future oil discharge. These provisions include:

a. On-campus oil spill equipment that is listed in Section (4) Countermeasures for Discharge Discovery of this Oil Spill at Underground Storage Tanks within the Oil Spill Prevention Control and Countermeasure Plan addendum of Annex K. Additional spill equipment, as defined in the Safety Information Book, Section 2 for EHS is present on campus. The Whatcom County Special Emergency Response Program (SERP=hazardous materials response team) has additional materials available. Exact specifications for SERP resources are beyond the scope of this document.

b. The equipment listed in Section (4) Countermeasures for Discharge Discovery of this Oil Spill at Underground Storage Tanks within the Oil Spill Prevention Control and Countermeasure Plan addendum of Annex K. is adequate to contain the maximum oil discharge which is assumed to be a small leak (<50 gal) during refilling of fuel tanks.

c. Section (6) Contact List of this Oil Spill at Underground Storage Tanks within the Oil Spill Prevention Control and Countermeasure Plan addendum of Annex K describes development of agreements and arrangements for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.

The university has provisions for well-defined and specific actions to be taken after discovery and notification of an oil discharge.

a. The specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel can be found in Annex K: Haz Mat Response, Gas, and Oil Spills.

b. The Director of Environmental Health & Safety (EHS) is the qualified oil discharge response coordinator who is charged with the responsibility and authority for directing and coordinating response operations. Additionally, the EHS director requests assistance as needed from Federal authorities operating under existing national and regional plans.

c. The preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations can be found in Appendix 1: Direction and Control and Annex G: Communication and Information Technology of the University's Comprehensive Emergency Management Plan.

d. Provisions for varying degrees of response effort depending on the severity of the oil discharge can be found in Appendix 1: Direction and Control.

e. Taylor Creek, Connelly Creek and Bellingham Bay are the only water use areas that may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all users.

Procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances are presented in the Incident Command System Finance Section Chief's Job Aid.

For any additional required containment that Western is unable to manage, a contractor is requested (see Section (6)) to provide all necessary countermeasures and cleanup.

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(5) **Methods of Disposal of Recovered Materials**

Absorbent materials are used to contain petroleum products. Disposal of materials containing spilled oil are arranged by the Environmental Health and Safety office. The University complies with Department of Transportation regulations in Title 49 Code of Federal Regulations (CFR) and USEPA Regulations in Title 40 CFR.

(6) **Contact List**

All spills of oil or petroleum products into navigable waters must be immediately reported by the spiller to the National Response Center (NRC). The NRC will contact appropriate local USCG or Environmental Protection Agency (EPA) offices. Notifying state offices does not relieve the spiller from federal requirements to notify the NRC.

**National Response Center (NRC)**
1-800-424-8802 Toll Free

**The Washington Emergency Management Division (EMD) 24-hour Emergency Spill Response:** 1-800-258-5990 or 1-800-OILS-911

**The Washington State Department of Ecology Northwest Regional Office**
1-425-649-7000

If the nature of the spill is such that additional containment effort is needed, the following contact is provided:

**NRC Environmental Services/NRC**
Seattle (800) 337-7455
Jim Riedel General Manager

(7) **Oil Spill Countermeasure and Containment Procedures**

1. **Equipment Failure Predictions**

   In case of loading, unloading and tank overflow, Western predicts:

   a) **Direction** – Towards storm drain nearby. Storm drain covers are kept nearby so in the event of a spill, they can be placed to stop any discharge into drain. Spill kits are located on the fueling island.

   b) **Rate of Flow** – A catastrophic failure of a tank would create a very high rate of flow, but is unlikely. A slow rate of flow is expected for most forms of leakage. Due to regular leakage tests at the Steam Plant, this would be found quickly and repaired. For Facilities Management Motor Fuel Tanks, any leakage from the primary tank is electronically monitored and would immediately sound an alarm.

   c) **Total quantity of oil that could be discharged from facility** – Worst case scenario is that all oil, gasoline, or diesel in the container would be discharged in several minutes. An automatic shutoff system is in place should a vehicle depart without operator disconnection.

2. **Containment Systems**

   Refer to Section (3) above Discharge/Drainage Controls.
3. Inspection, Tests, and Records
   Inspection
   The underground storage tanks are not available for visual inspection. The area around the facility is inspected for localized dead vegetation, puddles containing spilled or leaded material, and settling. Visible piping is visually inspected for droplets of stored material, discoloration, corrosion, bowing of pipe between supports, and evidence of stored material seepage from valves or seals. Fuel levels are checked weekly to test for leakage.

   Response equipment maintained at the Steam Plant is visually inspected for accessibility and condition.

   Steam Plant
   Inspections of emergency response equipment maintained by the Environmental Health and Safety office are performed as specified for the item, generally on a monthly basis. Inspection records are maintained at the Environmental Health and Safety office.

   The oil piping and the condensate inspection tank “look box” are inspected during normal rounds of each shift (4 to 8 times per shift).

   Steam Plant Facility
   No system for automatic monitoring for leakage exists. In-plant piping is inspected every hour around the clock by operating personnel. Oil piping external to the plant is inspected when oil is being received.

   Facilities Management
   Tank monitoring system automatically performs a weekly leakage test and at all times will alarm should any hydrocarbon be sensed between tank walls. Weekly leakage tests are recorded, and an annual inspection by and report to EPA is provided.

   Records
   Records of emergency exercises and training are maintained by the Environmental Health and Safety office, as are chemical waste disposal records.

(8) Personnel, Training, Discharge Prevention Procedures

1. Personnel
   The Steam Plant Chief Engineer and Facilities Management Equipment Technician are responsible for discharge prevention and reporting.

2. Training
   The Steam Plant Chief Engineer and Facilities Management Equipment Technician are responsible for providing train oil handling personnel involved with petroleum tank filling or maintenance annually. Training is in accordance with current regulations. Topics include:
   - Operation and maintenance of equipment to prevent discharges
   - Discharge procedure protocols
   - Applicable pollution control laws, rules and regulations
   - General facility operations
   - Contents of Western’s OSPCC plan.
   Training for personnel pumping gasoline into vehicles is not required.
3. Discharge Prevention Procedures

As noted above, Western includes discharge prevention in annual training to assure adequate knowledge of Western’s OSPCC Plan.

Steam Plant Facility

During annual boiler shutdown and inspection, sorbents are used to soak up spilled fuel oil when the burner piping is disconnected. Washing down with water to the drainage system is not permitted. Steam Plant personnel are responsible to notify appropriate personnel if a spill is found. The Environmental Health and Safety office is responsible for directing spill countermeasure activities.

Facilities Management

Fueling procedures are the same as at a regular commercial fueling station. Automatic fuel shutoff is installed should a vehicle depart without operator disconnection. From an operational standpoint the fill connections and unload procedures are adequate. No spills have occurred to date.

(g) Security

b. Both Facilities Management and Steam Plant fuel and oil handling, processing or storing areas are locked. Facilities Management gates are locked after normal business hours. Steam Plant exterior areas are locked when not in use. The Steam Plant facility is staffed 24 hours per day, 7 days per week.

c. Master flow and drain valves are secured so that they remain in the closed position when not operating.

d. Starter controls on each oil pump are locked in the “off” position. They are accessible only to authorized personnel when not operating.

e. Facility piping connections are capped securely when not in service or in standby for extended time.

f. University Police patrol the campus 24 hours per day, 7 days per week to minimize vandalism and other unwanted activities.

g. Exterior lighting is present at both the Steam Plant and Facilities Management that assists in discovery of discharges during off hours and prevention of discharges through acts of vandalism.

h. Present security provisions described above are deemed adequate to minimize the spill potential which could result from acts of vandalism or sabotage.

i. Personnel access holes to the fuel oil tanks and tank fill caps are locked and well lighted.

Steam Plant Facility

Existing security provisions are confined largely to the portion of the system inside the central heating plant. This is staffed continuously throughout the year by operating personnel and doors are locked to unauthorized personnel during swing and graveyard shifts. Locks have been installed on new fuel oil tank fill caps. The bulkhead personnel access hole cover above old fuel oil tanks has been secured with a lock.

Facilities Management Facility

For security purposes all tank fill caps are padlocked closed. The fuel station has a lockable security fence for after-hours operations and is patrolled regularly by University Police 24-hours per day, 7 days per week.
(10) **Facility Tank Car and Tank Truck/ Unloading Rack**

Facility tank cars, tank trucks, and unloading racks are not present at Western's campus. Vendor's tank trucks come to campus to deliver petroleum products to underground storage tanks.

(11) **Future Improvements**

The following upgrades are planned, but have not yet been achieved at the Steam Plant

1. Core drill inspection holes in the north and west walls of the pit.
In the event of a spill or accidental release of fuel oil or other combustible material on premises, Western personnel follow the procedural checklist outlined below.

**For an Incidental Oil Spill:**

An incidental spill is a minor spill that can be contained with materials and personnel on hand, with very low risk of drainage to a storm drain system or soil. Procedures to follow in response to an incidental spill are as follows:

**Checklist for First Responding Department (Department who owns material/oil)**

- Stop the spill source.
- Shut off any ignition sources.
- Contact Western EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police).
- Initiate containment and cleanup, concentrating on not allowing drainage to any storm drains nearby.

Package the waste in a 5 gallon bucket or other secure packaging. Label the waste generated from the cleanup with a waste label. Fax or mail in a Hazardous Waste/ Surplus Chemical Collection Request Form to Environmental Health & Safety (EHS) so that EHS can collect your materials.

If you have any questions, or need more cleanup materials, call Western EHS at 360-650-3064.

**For a Minor Oil Spill:**

A minor spill is a spill large enough that it will likely flow to local curbed areas (without storm drain inlets) or soil. An outside contractor will typically be needed to clean up a large spill and contaminated areas. Therefore EH&S must be contacted as an intermediary and to help with spill assessment and response. However, no oil will reach nearby waterways, so the spill does not require notification of the National Response Center and other water quality authorities. Procedures to follow in response to a minor spill are as follows:

**Checklist for First Responding Department (Department who owns material/oil)**

Contact Western EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police).

- Stop the spill source as possible with plug and patch or place absorbent directly under leak. Locations of absorbent material are listed below.
- Shut off any ignition sources.
- Use oil containment equipment (e.g. socks, booms, plywood, sandbags, drain plugs, and tape) to prevent spill from running into storm and sewer drains. Keep oil confined if it runs over soil.
- Use oil absorbing equipment to absorb the spill on the surface as much as possible.
- Utilize non-sparking tools and an empty drum for disposal, clean up, and pick up all spill fuel oil and oil-soaked absorbent material and place it in the drum for later disposal. Secure lid and ring over the drum to contain any fuel vapors.
- If the nature of the spill is such that additional containment effort is needed, the following contact is provided:

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Phone Number</th>
<th>Contact Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRC Environmental Services/NRC</td>
<td>Seattle</td>
<td>(800) 337-7455</td>
<td>Jim Riedel-General Manager</td>
</tr>
</tbody>
</table>

- Stand by to help with spill assessment and cleanup.
- Arrange for further clean up, packing and disposal of all the wastes generated by the spill.

**Oil Spill:**

A major spill has some risk of reaching navigable waters via storm drains or overland flow. It requires fast response from an outside contractor for containment and cleanup, as well as notification of the National Response Center and
other water quality authorities.

*Note that a spill small in volume can qualify as a "major" spill. For example, a spill of two gallons of oil at Viking Union Lakewood might drain directly to Lake Whatcom; if there is any real risk of it doing so, it qualifies as a "major" spill. The National Response Center must be notified (by EH&S) if there is any visible oil sheen on any local natural body of water, i.e. stream, river or lake. Procedures to follow in response to a major spill are as follows:*

**Checklist for First Responding Department (Department who owns material/oil)**

Contact Western EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police.)

Stop the spill source. Locations of absorbent material are listed below:

- **Shut off any ignition sources.**
- Use oil containment equipment (e.g. plywood, sandbags, drain plugs, and tape) to prevent spill from running into storm and sewer drains or into soil.
- Use oil absorbing equipment to absorb the spill on the surface as much as possible.
- Utilize non-sparking tools and an empty drum for disposal, clean up and pick up all spill fuel oil and oil-soaked absorbent material and place it in the drum for later disposal. Secure lid and ring over the drum to contain any fuel vapors.
- If the nature of the spill is such that additional containment effort is needed, the following contact is provided:

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Phone Numbers</th>
<th>Contact Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC Environmental Services/NRC</td>
<td>Seattle</td>
<td>(800) 337 7455</td>
<td>Jim Riedel-General Manager</td>
</tr>
</tbody>
</table>

- **Stand by to help with spill assessment, cleanup and notification of authorities (or if it is a spill that is small in volume, refer your incidental spill response protocol.)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Absorbent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM Fueling Station</td>
<td>Drain cover</td>
</tr>
<tr>
<td>FM Maintenance Garage</td>
<td>Spill booms, kitty litter</td>
</tr>
<tr>
<td>Weight Room along service road behind Wade King Student Recreation Center</td>
<td>Spill pads, spill booms</td>
</tr>
<tr>
<td>FM Tank Truck with 100 gallon fuel tank</td>
<td>Spill kit</td>
</tr>
<tr>
<td>Shannon Point Marine Center – Mechanical Room 1 of ME Building and in shed behind Maintenance Mechanic onsite quarters</td>
<td>Spill booms, absorbent materials and pads, 20 gallons and 60 gallons waste drums</td>
</tr>
<tr>
<td>EHS Department - Env. Studies Bldg. Rm 72</td>
<td>Spill pads, spill booms, spill pillows, Plug N Patch Kit in Cabinet 4, chemical sorbent, oil sorbent, neutralizing sorbent, hazmat bags</td>
</tr>
<tr>
<td>EHS Department – ET Haz Mat Storage Shed:</td>
<td>85 gallon salvage drum, spill pads, spill booms,</td>
</tr>
<tr>
<td>EHS Department – Chemistry Building Waste Room 141</td>
<td>Spill pillows, spill pads, vermiculite, mops, brooms</td>
</tr>
<tr>
<td>EHS Department – Biology Building Waste Room 131A</td>
<td>Spill pad, spill booms, hazmat bags &amp; ties</td>
</tr>
</tbody>
</table>
Western Washington University  
Hazard Annex K: Hazmat, Gas Leak, Oil Spill  
ADDENDUM 2: Oil Prevention Control and Countermeasure Plan

<table>
<thead>
<tr>
<th>EHS Department – Physical Plant Connex</th>
<th>30 gallon poly overpack drums, 55 gallon metal drums</th>
</tr>
</thead>
</table>

Most Facilities Management vehicles have small spill kits

<table>
<thead>
<tr>
<th>Locations of Manual and Mechanical Transfer Pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM Outdoor Maintenance – Physical Plant</td>
</tr>
<tr>
<td>FM Plumbing Services – Physical Plant</td>
</tr>
<tr>
<td>EHS – Chemistry Building Waste Room, Biology Building Waste Room, Connex – Physical Plant,</td>
</tr>
</tbody>
</table>

Checklist for Facilities Management: Reporting and Follow Up
- Assist in cordoning off area.
- Provide personal protective equipment (PPE), containment, and materials.
- Work with Environmental Health & Safety (EHS) on containment and cleanup.

Checklist for University Police: Reporting and Follow Up
- Regulate traffic.
- Assist in cordoning off area.
- Arrange medical assistance.
- Assist in evacuation if necessary.
- Investigate.

EHS or Supervisory Reporting and Follow-up
- Arrange for further clean up, packing and disposal of all the wastes generated by the spill.
- Assess personal protective equipment (PPE).
- Ensure use of personal protective equipment (PPE).
- Complete the Western Oil Spill/ Leak Report in Table HK-3 of the Oil Spill Prevention and Countermeasure Plan addendum
- For flammable material, monitor vapor concentrations.
- From The Emergency Response Guidebook, determine size of area to cordon off and possible evacuation.
- Evaluate affected personnel for possible medical response.
- Investigate the source and causes of the incident and determine the best permanent corrective actions to avoid reoccurrence of the incident.
- Critique (see Appendix 8: Training and Exercises-After Action Report of CEMP for template) the spill response efforts and revise associated procedures.
- Replenish or replace any spill kit(s), tools or emergency response items spent or lost during the spill response incident.

Ensure all required verbal and written reports are made to SERC, Whatcom Unified LEPC, WA Dept. of Ecology, WA Emergency Management Division, and National Response Center

HAZ K-51
**Report received from:**

Name ___________________________ Date reported ________________

Address ___________________________ Time reported ________________

Telephone ___________________________ Received by ___________________________

**Address of Oil Spill/Leak Location**

Phone of the facility: ___________________________

**Description of Problem:**

- **Date and Time of discharge** ____/__/____  ____AM/PM
- **Type of material discharged** ___________________________  unknown  ☐
- **Estimates of total quantity discharged** ___________________________
- **Source of discharge** ___________________________
- **Description of all affected media** ___________________________
- **Cause of the discharge** ___________________________
- **Damages or injuries caused by the discharge** ___________________________
- **Actions being used to stop, remove, and mitigate the effects of the discharge** ___________________________

**Is an evacuation needed?** ☐ Yes  ☐ No

**Names of individuals and/or organizations who have also been contacted**

<table>
<thead>
<tr>
<th>Action Required</th>
<th>Phone</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dispatch Facilities Management staff</td>
<td>650-3420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Dispatch Environmental Health &amp; Safety</td>
<td>650-3064</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Call Bellingham Fire Department</td>
<td>911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Call Department of Ecology (as applicable for Reportable Quantity)</td>
<td>(425) 649-7000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Notify WA Emergency Management Division</td>
<td>(800) 258-5990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Report spill to National Response Center</td>
<td>(800) 424-8802</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Incident resolved by:**

HAZ K-52
Figure HK-15

Emergency Generators at Western

A table of emergency generators is linked below. Double click the excel icon to view the table.

WWU Generators for EMP OSPCC_6.21.12

Figure HK-16

PowerPoint of Emergency Generators

A PowerPoint with information on emergency generators is linked below. Double click the icon to view the information in PowerPoint.
Western Washington University

Hazard Specific Annex K: Hazmat, Gas Leak, Oil Spill

ADDENDUM 2: Master Meter Guide

Figure HK-17

PowerPoint of Petroleum Products at ET and Facilities Management

A PowerPoint with information on petroleum products at Western is linked below. Double click the icon to view the information in PowerPoint.

Western Washington University

Petroleum Containers over 55 gallons
As of October 30, 2012

Figure HK-18

Table of Virgin Oil at Facilities Management Garage

<table>
<thead>
<tr>
<th>Type</th>
<th>Building</th>
<th>Location</th>
<th>Description</th>
<th>Capacity (gal)</th>
<th>Direction of Flow</th>
<th>Secondary Containment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>FM</td>
<td>Fueling Station</td>
<td>Aboveground tank</td>
<td>500</td>
<td>South</td>
<td>Double walled</td>
</tr>
<tr>
<td>Diesel</td>
<td>FM</td>
<td>Fueling Station</td>
<td>Aboveground tank</td>
<td>1,000</td>
<td>South</td>
<td>Double walled</td>
</tr>
<tr>
<td>Brake</td>
<td>FM</td>
<td>Rm 101D</td>
<td>55 gal drum</td>
<td>55</td>
<td>Drain in room</td>
<td>No</td>
</tr>
<tr>
<td>Engine Oil</td>
<td>FM</td>
<td>Rm 101</td>
<td>2-55 gal drum</td>
<td>55</td>
<td>Southwest</td>
<td>133 gal pad</td>
</tr>
<tr>
<td>Auto Transmission Fluid</td>
<td>FM</td>
<td>Rm 101</td>
<td>2-55 gal drum</td>
<td>55</td>
<td>Southwest</td>
<td>133 gal pad</td>
</tr>
</tbody>
</table>

HAZ K-55
Figure HK-19
Western Transformers
A table with information on specific transformers on campus is linked below. Double click the icon to view the information in PowerPoint.

transformer_switch
listings_7.31.12.xls

Figure HK-20
PowerPoint of Transformers
A PowerPoint with information on transformers at Western is linked below. Double click the icon to view the information in PowerPoint.
### Figure HK-21

**Animal Fats and Vegetable Oils at Western Dining Services**

<table>
<thead>
<tr>
<th>Building</th>
<th>Location</th>
<th>Description</th>
<th>Capacity (gal)</th>
<th>Direction of Flow</th>
<th>Secondary Containment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viking Commons</td>
<td>Loading Dock</td>
<td>Waste liquid fryer oil</td>
<td>300</td>
<td>North</td>
<td>No</td>
</tr>
<tr>
<td>Ridgeway Commons</td>
<td>North of Loading Dock</td>
<td>Waste liquid fryer oil</td>
<td>275</td>
<td>North</td>
<td>No</td>
</tr>
<tr>
<td>Fairhaven Commons</td>
<td>East side of Loading Dock</td>
<td>Waste liquid fryer oil</td>
<td>300</td>
<td>Northwest</td>
<td>No</td>
</tr>
</tbody>
</table>

### Grease Interceptors at Western Dining Services

<table>
<thead>
<tr>
<th>Building</th>
<th>Location</th>
<th>Description</th>
<th>Capacity (gal)</th>
<th>Direction of Flow if spilled</th>
<th>Secondary Containment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viking Union/Viking Commons</td>
<td>Loading Dock</td>
<td>Waste grease</td>
<td>32,000</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Ridgeway Commons</td>
<td>Loading Dock</td>
<td>Waste grease</td>
<td>200</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Fairhaven Commons</td>
<td>Loading Dock</td>
<td>Waste grease</td>
<td>27,000</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

### Figure HK-22

**PowerPoint of Animal Fats and Vegetable Oils Disposal Units**

A PowerPoint with information on Animal Fats and Vegetable Oils is linked below. Double click the icon to view the information in PowerPoint.
Figure HK-23
PowerPoint of Steam Plant

A PowerPoint with architect’s drawings of Western’s Steam Plant is linked below. Double click the icon to view the information in PowerPoint.

Western Washington University
Steam Plant Drawings
As of October 31, 2012

Environmental Health and Safety