Mercer Island Disaster Debris Management Plan

December 2011

Prepared by

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1. INTRODUCTION

Glossary

Critical Infrastructure: Assets, systems, and networks, whether physical or virtual, so vital that their incapacitation or destruction would have a debilitating effect on security, economic security, public health or safety.

Debris-causing Incident: An unplanned incident caused by natural or human means that creates debris.

Debris Clearance: Clearing roads and other critical infrastructure by pushing debris to the roadside to accommodate emergency traffic.

Debris Management Site (DMS): A location where debris is sorted, processed, reduced in volume, and/or disposed of.

Debris Monitoring: Actions taken by applicants in order to document eligible quantities and reasonable expenses during debris activities to ensure that the work complies with the contract scope-of-work and/or is eligible for Public Assistance grant reimbursement.

Debris Removal: Picking up debris and taking it to a Debris Management (DMS) site, composting facility, recycling facility, permanent landfill, or other reuse or end-use facility.

Disaster Debris: Items and materials broken, destroyed, or displaced by a natural or human caused disaster. Examples of debris include, but are not limited to, vegetative waste, construction and demolition material, and personal property. See Section Six: Debris Classification, for the definitions of specific debris types.

Disaster Debris Management: Actions related to the management of disaster debris including assessment, clearance, removal, sorting, reduction, hauling, and disposal.

EOC: Emergency Operations Center

Force Account: The Federal Emergency Management Agency (FEMA) uses the term “Force Account” to refer to a jurisdiction’s own personnel and equipment.

Hazardous Waste: Waste with properties that make it potentially harmful to human health or the environment. Hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA). In regulatory terms, a RCRA hazardous waste is a waste that (1) appears on one of the four hazardous wastes lists or (2) exhibits at least one of the following four characteristics: ignitability, corrosivity, reactivity, or toxicity. See http://www.epa.gov/osw/hazwaste.htm.

Household Hazardous Waste: according to WAC 173-350-100, means any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management. Reference http://apps.leg.wa.gov/wac/default.aspx?cite=173-350-100
**Initial Damage Assessment:** The initial damage assessment is used to determine the magnitude and impact of an incident’s damage. Also referred to as a “pre-Presidential Damage Assessment,” it is often the first assessment a jurisdiction does to determine the impact of an incident.

**Lifeline Transportation Route:** Routes identified by a jurisdiction that provide primary access for emergency response, evacuation, and damage assessment.

**Major Arterial:** Moderate or high-capacity roads that provide direct service between communities or parts of larger cities and are needed to aid in response and recovery operations.

**Minor Arterial:** Routes that receive moderate traffic flow and carry a mix of local and through traffic.

**Moderate Risk Waste (MRW):** according to WAC 173-350-100, means solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter. Reference [http://apps.leg.wa.gov/wac/default.aspx?cite=173-350-100](http://apps.leg.wa.gov/wac/default.aspx?cite=173-350-100).

**National Response Framework:** A framework developed to facilitate the delivery of all types of federal assistance to states following a disaster. It outlines the planning assumptions, policies, concept of operations, organizational structures, and specific assignments and agencies involved in federal assistance to supplement state, tribal, and local efforts.

**PIO:** Public Information Officer

**Preliminary Damage Assessment (PDA):** A joint assessment used to determine the magnitude and impact of an event’s damage. A FEMA/state team will usually visit local applicants and view their damage first-hand to assess the scope of the damage and estimate repair costs. The state uses the results of the PDA to determine if the situation is beyond the combined capabilities of the state and local resources and to verify the need for supplemental federal assistance. The PDA also identifies any unmet needs that may require immediate attention.

**Recovery:** The phase of emergency management that encompasses activities and programs implemented during and after response that are designed to return the entity to its usual state or to a “new normal.”

**Response:** Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.

**Right-of-Entry (ROE):** The document by which a property owner confers to a jurisdiction or their contractor the right to enter onto private property for a specific purpose without committing trespass.
**Right-of-Way (ROW):** The portions of land over which facilities such as highways, railroads, or power lines are built. It includes land on both sides of the facility up to the private property line.

**Seattle Urban Area Security Initiative (UASI) Region:** Geographic region of King, Pierce, and Snohomish counties and the jurisdictions, special purpose districts, private and public organizations, cities, and tribes that make up the counties.

**Solid Waste Collection Company:** Private entities that provide daily municipal solid waste service through the transportation and/or disposal of solid waste.

**UASI Debris Management Plan Sponsor:** A solid waste agency in the Seattle UASI Region that maintains a Washington State Comprehensive Solid Waste Management Plan. This includes Snohomish County Solid Waste Division, King County Solid Waste Division, Pierce County Public Works and Utilities, and Seattle Public Utilities Solid Waste Utility.

**UASI Debris Management Plan Stakeholder:** Any city, county, state, or tribal organization in the Seattle UASI Region that has an active role in debris management, including solid waste agencies, local emergency management entities, and local public health departments/districts.
# Acronyms and Abbreviations

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<td>AAR</td>
<td>After-Action Report</td>
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<td>Animal, Plant and Health Inspection Service</td>
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<td>CAMU</td>
<td>Corrective Action Management Unit</td>
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<td>CDL</td>
<td>Construction, Demolition, and Land-clearing</td>
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<td>CEQ</td>
<td>Council on Environmental Quality</td>
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<td>CERCLA</td>
<td>Comprehensive Environment Response, Compensation, and Liability Act</td>
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<td>HIVA</td>
<td>Hazard Identification and Vulnerability Assessment</td>
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<td>ISO</td>
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<td>LHWMP</td>
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<td>MOU</td>
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Section 1: Introduction

1.1 Purpose

The City of Mercer Island recognizes that natural and human caused disasters have the potential to create debris that can disrupt the quality of life for its citizens, and complicate disaster response and recovery following such disasters. The City of Mercer Island also recognizes that planning for such disasters can lessen the impact on the community, economy, and the environment. Therefore, the City of Mercer Island has developed this plan to facilitate a rapid response and recovery to debris causing incidents.

1.2 Mission

This Disaster Debris Management Plan provides direction to facilitate and coordinate the management of debris following a disaster in order to:

- Identify and address planning and staff training needs prior to a debris causing event.
- Mitigate against potential threats to the lives, health, safety, welfare, and economic and environmental well being of the impacted area.
- Expedite recovery efforts in the impacted area.
- Identify threats of significant damage to improved public or private property.

1.3 Scope

This Disaster Debris Management Plan covers the response and recovery to all debris-causing incidents within the jurisdictional boundaries of the City of Mercer Island. This plan also covers additional tasks required to maintain jurisdictional disaster debris management readiness, including training, exercises, and plan maintenance.

1.4 Alignment with Other Plans

National Response Framework

The National Response Framework (NRF) provides the concept of operations for federal response to events by listing the responsibilities for each federal agency and outlining how federal agencies will interact with other public-sector agencies at all levels, the private sector, and nongovernmental organizations (NGOs). The NRF also emphasizes the importance of personal preparedness by individuals and households. This plan aligns with

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1 http://www.fema.gov/emergency/nrf/
the Emergency Support Functions (ESF) #3: Public Works and Engineering Annex,\(^2\) and ESF #14: Long-Term Community Recovery and Mitigation Annex\(^3\) of the Department of Homeland Security’s (DHS) NRF by providing for coordination of disaster debris operations through all levels of government using the National Incident Management System\(^4\) (NIMS) organization structure.

**Washington State Comprehensive Emergency Management Plan**

The Washington State Comprehensive Emergency Management Plan\(^5\) (CEMP) provides the concept of operations for state agency response to disaster events by listing the responsibilities for each agency and outlining how state agencies will interact with each other and other regional and local public-sector agencies. This plan aligns with the CEMP ESF #3: Public Works and Engineering Annex, and ESF #14: Long-Term Community Recovery and Mitigation Annex, by providing operational instructions to organize disaster debris operations at the local level.

**King County Disaster Debris Management Plan**

Information is available on King County’s Emergency Management website:

For more information on King County’s debris management, contact:

UASI Disaster Debris Management Program Manager
Kathryn Howard
King County Office of Emergency Management
3511 NE 2nd Ave
Renton, Washington 98056
206-296-3830
Kathryn.Howard@kingcounty.gov

Additionally:

Local Hazardous Waste Management Program in King County (LHWMP)
Office of the Program Administrator
150 Nickerson St., Suite 100
Seattle, WA 98109-1658
Business Waste Line: 206-263-8899
Household Hazards Line: 206-296-4692

Information is available at:
http://www.lhwmp.org/home/aboutus/planupdate.aspx

The City of Mercer Island Emergency Plans
This plan is designed to stand-alone, but it aligns with other plans including the City of Mercer Island’s Emergency Management Plan and the City of Mercer Island’s Hazard Mitigation Plan.

1.5 Plan Maintenance and Update
This plan was assembled by the City of Mercer Island. Ongoing maintenance of the plan is the responsibility of Officer Jennifer Franklin, the Plan Manager.

Plan Revisions
As changes in staffing, organization, and external factors can occur, this plan will be reviewed semiannually prior to the fire season (April) and prior to the storm season (September), and updated as needed. This semi-annual plan review schedule aligns with the UASI Regional Disaster Debris Management Plan review schedule. To the extent possible, mid-review period changes to the plan will be avoided. In the event a revision is required outside of the normal review period, it is the responsibility of the Plan Manager to ensure that revised pages are distributed to plan holders. During plan review, specific attention will be directed to key plan components, including specific assigned roles and responsibilities, contact information for internal staff and external resources, and the location and status of identified Debris Management Sites (DMS).
**Section 2: Situations and Assumptions**

This chapter provides an overview of the types, amounts, and distribution of natural or human-caused incidents that may occur in the City of Mercer Island. It also provides tools to estimate debris volumes following an incident. Finally, it provides a list of the planning assumptions that were used to develop this plan.

### 2.1 Types of Hazards

The City of Mercer Island is susceptible to a variety of natural or human-caused incidents that may create disaster debris. A listing of potential debris causing incidents and the types of most common debris are listed in Table 2-1.

**TABLE 2-1**

<table>
<thead>
<tr>
<th>Incident</th>
<th>Debris Characteristics</th>
<th>Regional Probability</th>
<th>Debris Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind Storm</td>
<td>Primarily vegetative waste; may also include construction/demolition materials from damaged or destroyed structures, some municipal solid waste from damaged structures. Extended power outages may result in large amounts of putrescible waste from private homes and grocery stores.</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Flooding</td>
<td>Construction/demolition waste, municipal solid waste, and problem waste, including sediment, vegetative waste, animal carcasses, and hazardous materials deposited on public and private property. Much of the debris from flooding events may be considered problem waste because of contamination from wastewater, petroleum, or other substances.</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Earthquake</td>
<td>Primarily construction/demolition waste and municipal solid waste intermixed with problem waste.</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Urban, Wildland, and Wildland/Urban Interface Fires</td>
<td>Burned vegetative waste, burned construction/demolition waste, and problem waste, including ash and charred wood waste and ash covered items.</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Ice Storms</td>
<td>Primarily vegetative waste from broken tree limbs and branches. May also include construction/demolition waste and putrescible waste from extended power outages.</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Volcano</td>
<td>Primarily ash, mud, and ash covered items. May also include construction/demolition waste.</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Tsunami or Seiche</td>
<td>Sediment and construction/demolition waste possibly contaminated with problem waste, including wastewater, petroleum, or other hazardous materials.</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Landslides</td>
<td>Sediments and construction/demolition waste possibly contaminated with problem waste.</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
### TABLE 2-1
Characteristics of Disaster Events Possible in The City of Mercer Island

<table>
<thead>
<tr>
<th>Incident</th>
<th>Debris Characteristics</th>
<th>Regional Probability</th>
<th>Debris Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Disease</td>
<td>Variable amounts of vegetative debris that might require special handling as problem waste with specific disposal characteristics.</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Animal Disease</td>
<td>Variable amounts of putrescible waste that might require special handling as problem waste with specific disposal instructions.</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Nuclear, Chemical, or Biological Accident</td>
<td>Various amounts of contaminated soil, water, construction/demolition waste, and/or municipal solid waste that would require special handling as problem waste with specific disposal instructions.</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Nuclear, Chemical, or Biological Attack</td>
<td>Various amounts of contaminated soil, water, construction/demolition waste, and/or municipal solid waste that would require special handling as problem waste with specific disposal instructions.</td>
<td>Moderate</td>
<td>High</td>
</tr>
</tbody>
</table>

This information was compiled from multiple sources including the City of Mercer Island Hazard Identification and Vulnerability Assessment (HIVA) and UASI Regional Disaster Debris Management Plan.

### 2.2 Debris Estimates

The types and amounts of debris produced by an incident depend on the magnitude, duration, and intensity of the incident itself. The potential impacts resulting from two different debris scenarios were considered when creating this plan. The first is a wind storm that has the potential to create a low to medium amount of debris, and the second is a significant earthquake that has the potential to create a high amount of debris.

**Windstorm Debris Events**

Historically, wind storms occur one to five times a year in the City of Mercer Island. These events can create a low to medium amount of debris made up predominantly of vegetative waste, but may also include overhead wire service components, construction and demolition debris, white goods, and putrescibles depending on the size of the event and secondary impacts such as power outage.

The City of Mercer Island contains a mix of urban and rural land that will create different amounts of vegetative debris during a wind storm event. Historically this region has created the highest volumes of debris following similar events. In 2006 a wind storm with gusts to 50-70 miles per hour created approximately 5,000 cubic yards of vegetative debris.
Earthquake Debris Events

Historically, earthquakes with significant magnitude to create disaster debris occur approximately every ten to twenty years in the Puget Sound Region. Past events have created a low to medium volume of disaster debris but have the potential to create much higher levels of debris. For example the 1994 Northridge earthquake in Los Angeles, CA created 7 million cubic yards of disaster debris.

In the 2001 Nisqually earthquake, damage sustained in the City of Mercer Island was primarily residential. Specifics on damage and the corresponding data are available in Mercer Island’s City Emergency Management Plan (CEMP).

2.3 Situation and Assumptions

This section describes the situation and assumptions that were used during the development of this plan.

Situation

The plan situation is made up from known facts or observations used to develop the plan. The following situation factors were considered when developing this plan:

- Natural and man-made disasters such as earthquakes, wind storms, flooding, industrial accidents, and terrorist attacks precipitate a variety of debris that includes, but is not limited to trees and other vegetative organic matter, building/construction material, appliances, personal property, mud, and sediment.

- The quantity and type of debris generated from any particular disaster will be a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

- The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of removal and disposal methods utilized to address the debris problem, including how quickly the problem can be addressed, and the associated costs that will be incurred.

Assumptions

Assumptions are unknown but expected events or actions that are used to develop the plan. The following assumptions were made during the development of this plan:

- A major natural disaster may require the removal of debris from public or private lands.

- The amount of debris resulting from a major natural disaster may exceed the City of Mercer Island’s removal and disposal capabilities.

- If a debris event should occur, an accurate assessment of the disaster must be made as soon as practical.

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6 [http://www.pnsn.org/INFO_GENERAL/faq.html#1a](http://www.pnsn.org/INFO_GENERAL/faq.html#1a)
• The City of Mercer Island may contract for additional resources to assist in the debris removal, reduction, and disposal capabilities.

• Local, state, and federal agencies may have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short as well as long-term, following a major natural disaster.
Section 3: Applicable Rules and Regulations

This chapter provides an overview of the state and local regulations and policies that affect how the City of Mercer Island handles disaster debris including debris reduction and Debris Management Sites (DMS) and neighborhood collection site operations. This chapter also addresses the environmental and policy considerations for reducing, recycling and disposing of the disaster debris at the DMS staging sites.

3.1 Planning

The City of Mercer Island has identified 8 locations to serve as DMS and neighborhood collection sites within the City of Mercer Island’s boundaries. A representative from the local health department has reviewed these locations on a preliminary basis, and will authorize these sites prior to engaging in debris removal operations. The City of Mercer Island will notify the health department prior to activating the DMS/neighborhood collection sites.

3.2 Response

The City of Mercer Island will initiate DMS site preparation activities during the response phase. A preliminary plan will be developed for reducing, recycling and disposing of the debris based on general estimates of the type of material generated by the event. The City of Mercer Island may decide to reduce the debris via air curtain incineration or grinding. Once a preliminary determination has been made, this plan will be communicated to the environmental officials for their guidance on the applicability of regulations to the operations and monitoring of the DMS sites and disposition of the disaster debris.

The site preparation activities will be initiated by the Debris Removal Manager. In the event that disaster debris crosses over the City of Mercer Island’s boundaries, the Debris Removal Manager will communicate with contacts in neighboring jurisdictions and King County to coordinate efforts in understanding the rules and regulations that will affect operations at the DMS sites.

For specifics on what prompts the city of Mercer Island staff to initiate action in a disaster or emergency, refer to Mercer Island’s City Emergency Management Plan (CEMP).

Contact information for the key environmental agencies is provided in Appendix A, Debris Resources.
3.3 Recovery

This section summarizes rules and regulations that apply to the recovery phase of disaster debris management.

Waste Management Priorities and Recycling

The 1989 Waste Not Washington Act (ESHB 1671) revisions to RCW 70.95 established waste reduction and recycling as the priority methods of managing waste in the State of Washington. The City of Mercer Island will make reduction and recycling the highest priorities for managing disaster debris. The Debris Removal Manager will coordinate with the debris hauling contractors to ensure maximum segregation for recyclable materials, and make sure that debris reduction equipment (chipping/grinding/incineration) is operating properly and within the regulations of PSCAA and the local fire department.

Air Quality and Incineration as a Waste Reduction Method

During the recovery phase, the following measures will be taken by the Debris Site Supervisor:

- Monitoring of dust and ensuring proper dust suppression measures are implemented.
- Oversight of any air curtain incineration units. This activity will be coordinated with PSCAA. Any air curtain incinerators will have setbacks from on-site storage areas for incoming debris and structures. Wood ash will also be stored on-site with setbacks from storage areas for incoming debris, and processed mulch or tub grinders. Wood ash will be wetted prior to removal from the air curtain incinerator and placed in storage. The specific requirements will be provided by PSCAA.

Household Hazardous Waste Management

The City of Mercer Island will set up household hazardous waste, appliance and special waste collection areas. Household hazardous waste should be collected separately and disposed of at a licensed disposal facility. Contractors listed with the county household hazardous waste management program will be contacted for safely disposing of household hazardous debris. These contractors are listed in Appendix A, Debris Resources.

The City of Mercer Island has 8 pre-designated locations to serve as Debris Management Sites and neighborhood collection sites located throughout the city. After a disaster, the pre-designated DMS/neighborhood collection sites would be evaluated to see which ones are usable, safe, and accessible. Residents of the City of Mercer Island will be notified which locations are open to utilize and serve as DMS/neighborhood collection sites.

White good debris that contains ozone depleting refrigerants, mercury, or compressor oils need to have such materials removed by a certified technician before recycling. White goods will be properly disposed of by a licensed disposal company.

The PSCAA will have regulatory authority over the demolition of structures that contain asbestos or lead-based paint.
Section 4: Concept of Operations

This section provides information on how the City of Mercer Island will carry out debris management operations, including: response levels, organization, roles and responsibilities, communications strategies, and health and safety strategies.

4.1 Debris Management Response Levels

Debris management operations are categorized into three response levels. The current response level of the City of Mercer Island will be established by the Incident Commander or Debris Manager, and is triggered by the geographic scope and impact of an actual or anticipated incident.

Level One: Routine Operations
A level one incident corresponds to day-to-day emergencies requiring minimal coordination and assistance. These include incidents such as small landslides, minor flooding, or a building collapse. The situation can be efficiently and effectively supported with existing resources and there is no foreseen need to proclaim a local emergency.

Level Two: Medium Impact Disaster
Level two incidents are situations requiring more than routine coordination and assistance, and generally involving multiple jurisdictions. These include incidents such as moderate earthquakes, minor or moderate flooding in multiple locations, and winter storms with snow, ice, or high winds. The situation may require mutual aid or contract resources, and it may be necessary to proclaim a local emergency.

Level Three: High Impact Disaster
Level three incidents are incidents that require a high degree of coordination and generally involve state and federal assistance. These include incidents such as large earthquakes, severe flooding, or severe winter storms. In most cases, a local emergency will be proclaimed.

Level Four: Catastrophic Disaster
Level four incidents are incidents that result in the partial or complete destruction of local government and require state and federal assistance. These include incidents such as catastrophic earthquakes, extremely severe flooding, or catastrophic human-caused attacks. This would always require a local proclamations of emergency and in most cases a Federal disaster declaration.

4.2 Debris Management Operational Phases

Response to debris management events are characterized by the three phases described as follows and may overlap based on the incident.
Increased Readiness

The City of Mercer Island will move to the increased readiness phase when a natural or
human-caused incident capable of creating disaster debris threatens the region. During this
time, staff will complete the following tasks:

- Review and update plans, standard operating procedures, generic contracts, and
  checklists relating to debris removal, storage, reduction, and disposal operations.
- Alert local departments that have debris removal responsibilities to ensure that
  personnel, facilities, and equipment are ready and available for emergency use.
- Relocate personnel and resources out of harm's way and stage in areas where they can
  be effectively mobilized.
- Review potential local, regional, and DMS sites that may be used in the response and
  recovery phases in the context of the impeding threat.
- Review resource listing of private contractors who may assist in debris removal process.
  Make necessary arrangements to ensure their availability in the event of the disaster.

Response

Debris management response operations are designed to address immediate or short-term
effects of a debris causing incident. During the response phase, staff will initiate the
following tasks:

- Activate debris management plan and coordinate with damage assessment team.
- Begin documenting costs.
- Begin debris clearance from transportation routes, based on debris removal priorities.
- Coordinate and track resources (public and private).
- Establish priorities regarding allocation and use of available resources.
- Identify and activate temporary debris storage and reduction sites (local and regional).
- Address any legal, environmental, and health issues relating to the debris removal
  process.
- Continue to keep public informed through the PIO.

Recovery

Debris management response operations are designed to return the community to normalcy
following a debris causing incident. During the recovery phase, staff will initiate the
following tasks:

- Continue to collect, store, reduce, and dispose of debris generated from the event in a
  cost-effective and environmentally responsible manner.
- Continue to document costs.
4. CONCEPT OF OPERATIONS

- Upon completion of debris removal mission, close out debris sorting and reduction sites by developing and implementing the necessary site restoration actions.
- Perform necessary audits of operation and submit claim for federal assistance.

4.3 Incident Command System

The City of Mercer Island will use the Incident Command System to structure debris management response, as outlined in the City of Mercer Island Comprehensive Emergency Management Plan (CEMP). Based on the size and scope of the incident, debris management staff may act in multiple roles. In an incident that predominantly entails debris operations, for instance, the Debris Manager may act as the Incident Commander or Operations Section Chief. During larger and more complex incidents, the Debris Manager may be assigned to the Operations Section as a branch director or group supervisor.

4.4 Roles and Responsibilities

This section identifies roles and responsibilities for internal and external agencies during a disaster debris incident.

The City of Mercer Island Departments

Supporting disaster debris management operations will involve multiple departments and divisions internally within the City of Mercer Island. Mercer Island’s City Emergency Management Plan (CEMP) contains the specifics and roles for each of the following city departments and divisions: Public Works, Office of Emergency Management, Police Department, Planning Department, Fire Department, Roads Department, Parks Department, Purchasing Department, Finance Department, Information Technology Department, and the Health Department.

External Agencies

Washington State Department of Agriculture (WSDA): The WSDA supports the producers, distributors, and consumers of food and agriculture products in Washington. During a disaster WSDA may provide support and advice to local health departments/districts and solid waste agencies, as needed, regarding the disposal of plant and animal waste.

Washington State Department of Ecology (Ecology): Ecology is responsible for the protection of Washington’s environment. Ecology provides statewide regulation of municipal solid waste and hazardous waste. During a disaster, Ecology may support and advise local health departments and solid waste agencies, as needed, regarding disaster debris operations. Ecology may also issue temporary permits or recommend to the governor that certain regulations be suspended, if necessary, to hasten response and recovery.

Washington State Department of Health (DOH): The DOH manages programs and creates regulations to protect citizens’ health by limiting exposure to environmental hazards. During a debris-causing incident, DOH will assist local health authorities, as requested, to
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ensure appropriate steps are being taken to maintain the health of the state’s citizens and workers.

**Washington State Emergency Management Division (WAEMD):** The WAEMD may assist The City of Mercer Island by facilitating the governor’s disaster proclamations, facilitating EMAC requests, requesting Federal Disaster Declarations, and administering FEMA public and individual assistance requests. During the response phase of debris management, the WAEMD can ensure that facilities are operating in compliance with federal and state regulations and can determine priorities for handling and removal.

**Washington State General Administration (GA):** GA is the primary state agency responsible for Emergency Support Function (ESF) #3: Public Works and Engineering under the Washington State Comprehensive Emergency Management Plan, which includes coordination of logistical and engineering support for state facilities. During a debris-causing incident, GA primarily supports state agencies, but would also provide resources to local requests that are coordinated through the Washington State Military Department Division of Emergency Management.

**Washington National Guard:** The Washington National Guard may provide equipment, personnel, and technical assistance to protect the State of Washington. During debris-causing incidents, National Guard resources provide security for equipment staging and debris sorting and reduction sites, limited electrical power and sheltering, traffic control, and aerial reconnaissance. National Guard resources are available after local resources have been exhausted through a request to the State Emergency Management Division.

**Washington State Patrol (WSP):** WSP is the lead law enforcement agency within the State of Washington. During a debris-causing incident, WSP supports local law enforcement with evacuation of persons and property, coordination (along with the Washington Department of Natural Resources) of disaster firefighting and firefighting resources through the Washington State Fire Mobilization Plan, and augmentation of local law enforcement resources.

**Puget Sound Clean Air Agency (PSCAA):** The PSCAA is responsible for regulating air quality in Puget Sound. During debris-causing disasters, the PSCAA provides advice on outdoor burning of debris and the removal and disposal of debris containing asbestos. They also provide information and possible monitoring of air quality for debris operations that create large quantities of dust. Depending on the disaster severity, PSCAA can suspend part or all of the Washington Clean Air Act or Regulations I, II, and III.

**United States Department of Agriculture (USDA):** The USDA Natural Resource Conservation Service (NRCS) provides technical and financial assistance to private land owners, land users, communities, and state and local governments in planning and implementing conservation systems that conserves soil, water, and other natural resources. NRCS is limited in its authority with debris-related activities; it is limited to either runoff retardation or soil erosion prevention in response to an imminent threat to life or property resulting from a sudden impairment in the watershed. Typically, this includes debris within, or in close proximity, to a channel.

The USDA Animal, Plant and Health Inspection Service (APHIS) may provide support under the Veterinary Service Program and the Plant Protection and Quarantine Program.
Both public and private lands are eligible under these programs, which provide assistance to federal and state agencies, tribes, local agencies such as The City of Mercer Island, and private landowners to manage animal and plant health. This is accomplished by collecting and providing information, conducting or supporting treatments, and providing technical assistance for planning and program implementation.

**United States Coast Guard (USCG):** The USCG, under the Ports and Waterways Safety Act (33 U.S.C. § 1221), is responsible for keeping waterways safe and open. While there is no specific language stating that the USCG is responsible for debris removal from waterways, the USCG has been tasked in the past to assist in waterway and marine transportation system recovery.

**United States Department of Defense (DOD):** The Seattle UASI Region has numerous DOD facilities with equipment and personnel that may be requested in response to a debris-causing incident. Requests for these assets are coordinated through the Washington State Military Department Division of Emergency Management and are only available after all local private and public resources have been nearly or completely exhausted.

**United States Army Corps of Engineers (USACE):** The USACE is the lead agency for ESF #3, Public Works and Engineering, of the NRF, which includes debris management. During a Presidentially declared disaster, the USACE may supply technical assistance to local responders for completing debris removal. The USACE also has contract resources available to support local debris management operations.

**United States Environmental Protection Agency (EPA):** EPA may provide technical assistance and advice on collection, reduction, and disposal of contaminated debris and other hazardous materials during debris management operations. EPA also has contract resources available to assist with collection, management, and disposal of hazardous materials.

**Federal Emergency Management Agency (FEMA):** FEMA is the federal agency charged with coordinating emergency management functions in the federal government. In catastrophic disasters, FEMA may provide direct federal assistance to support performance of local, tribal, and state governments activities related to debris clearance, removal, and disposal. The response capabilities of local, tribal, and state governments must be exceeded before this level of assistance can be provided. Following a Presidential declaration, FEMA may elect to use its mission assignment authority to task other federal agencies with debris clearance, including the USACE and EPA.

**Contractors and Vendors**

Contractors and vendors are often used to augment local resources in support of debris management operations.

1. **Solid Waste Collection Companies**

Solid waste collection companies are private entities that provide daily municipal solid waste service through the transportation and/or disposal of solid waste. During debris-causing incidents, these companies can be tasked with maintaining existing municipal solid
waste service, as well as potentially providing additional resources to assist with debris clearing, processing, and disposal activities.

2. Debris Management Contractors
Debris management contractors provide additional resources to assist with debris clearance, removal, separation, and disposal during debris-causing incidents. These contractors can be put under contract prior to an incident to ensure efficient response during or after an actual incident or event. Federal agencies, such as the United States Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA), may also have contract resources available to assist with debris management operations.

3. Debris Management Monitoring Contractors
Debris monitoring contractors provide oversight and documentation of debris management operations. This may include supervising other debris management contractors, documenting debris clearance and disposal operations for potential reimbursement, and operations of temporary debris sorting and reduction sites.

Appendix A, Debris Resources, provides a list of pre-qualified contractors that can be used to support debris management operations.

4.5 Additional Resources
This section lists additional resources that are available to support the City of Mercer Island debris management resources.

Local, County, and State Resources
Additional resources may be available from jurisdictions neighboring the City of Mercer Island and county departments. Section 5.5 addresses existing mutual aid agreements that can be utilized to obtain additional resources.

Federal Resources
When an impacted state or local government does not have the regional capability required to respond to a presidentially declared disaster, a request for Technical or Direct Federal Assistance may be made. The approved request is called a Mission Assignment, and can only be requested by Washington State. A Mission Assignment is a work order issued by FEMA to another federal agency directing completion of a specific assignment in anticipation of, or response to, a Presidential declaration of a major disaster or emergency.

There are two Emergency Support Functions (ESFs) that perform debris-related activities under FEMA Mission Assignments:

- **ESF #3 – Public Works and Engineering** is responsible for infrastructure protection, emergency repair, and restoration. This group provides engineering services and construction management, and serves as a critical infrastructure liaison. The United States Army Corps of Engineers is the lead agency for ESF #3.

- **ESF #10 – Oil and Hazardous Material Response** is responsible for responding to oil and hazardous material issues, environmental safety, and short- and long-term cleanup.
The two most commonly deployed agencies that deal with these debris related activities are the United States Environmental Protection Agency (EPA) and the United States Coast Guard (USCG).

- **ESF #11 – Animal and Plant Disease and Pest Response** is responsible for coordinating an integrated Federal, State, Tribal, and local response to an outbreak of a highly contagious or economically devastating zoonotic (animal) disease, an outbreak of a highly infective exotic plant disease, or an economically devastating plant pest infestation. This ESF is coordinated by the United States Department of Agriculture (USDA).

All Mission Assignments have the following requirements:

- The community must demonstrate that required disaster-related efforts exceed state and local resources.
- The scope of work must include specific quantifiable measurable tasks.
- FEMA must issue the Mission Assignment.

### 4.6 Emergency Communications Strategy

The City of Mercer Island debris management staff will utilize the following methods to communicate with Mercer Island residents, businesses, and city personnel, as well as with outside agencies and jurisdictions, during a debris-causing event:

1. The City of Mercer Island radio system
2. The City of Mercer Island website
3. Cellular phone
4. Cellular phone direct-connect
5. Email
6. Short Message Service (SMS) messages (i.e. text messages)
7. Informational sandwich board signs will be posted throughout Mercer Island

### 4.7 Health and Safety Strategy

Debris operations involve the use of heavy equipment to move and process various types of debris. Many of these actions can pose safety hazards to emergency response and recovery personnel as well as the public. In addition to those safety hazards, exposure to certain types of debris, such as building materials that contain asbestos and mixed debris that contains hazardous materials, can pose potential health risks to emergency workers.

All debris operations shall be done in compliance with the health and safety requirements found in the City of Mercer Island’s Health and Safety Plan Supplement. A copy of this plan is included as Appendix F. The Health and Safety plan enables the agency and their contractors to avoid accidents during debris recovery operations and to protect workers.
from exposure to hazardous materials. The health and safety strategy establishes minimum safety standards for the agency and contractor personnel to follow. In addition, the strategy provides emergency workers with information on how to identify hazardous conditions and specific guidelines on the appropriate and proper use of personal protective equipment (PPE).

To facilitate compliance, the health and safety strategy specifies how the safety information will be disseminated to all Mercer Island emergency employees and contractors, and how compliance with minimum safety standards will be monitored. The strategy also includes specific corrective actions to be taken if workers do not comply with the minimum safety standards.
Section 5: Current Resources, Staff Development and Responsibilities

This chapter addresses the internal and external resources that the City of Mercer Island has for debris clearance, removal, and disposal.

5.1 Staff

Debris operations staff is responsible for directing debris operations during and after an incident. The size and composition of staff needed to deal with debris clearance, removal and disposal depends on the magnitude of the disaster. Debris removal staff likely will be comprised of a combination of full-time personnel, personnel from other agencies, and/or contractors depending on the requirements of the incident.

During an incident, staff may be needed to assume one or more roles, including the following:

- **Debris Removal Manager**: A Debris Removal Manager coordinates all debris removal activities related to an incident. Activities include communication among other members of the disaster management team, communication of project status activity and reporting, and dissemination and implementation of policy directives to debris removal personnel. This role is fulfilled by the Maintenance Director.

- **Debris Collection Supervisor**: A Debris Collection Supervisor oversees collection activities prior to debris arrival at the disposal site and coordinates the debris routing, staffing, and field reporting activities. This role is fulfilled by the Streets Maintenance Manager.

- **Debris Site Supervisor**: A Debris Site Supervisor manages one or more Debris Management Sites (DMS) and is responsible for overseeing waste separation and environmental protection concerns, as well as filling out paperwork and reporting documentation. This role is fulfilled by the Streets Generalist.

- **Finance, Administration, and Logistical Staff**: These positions track time for personnel, equipment, and incident costs. These positions also assist with contracting and purchasing resources, completing documentation required for reimbursement of expenses, and provides check-in for demobilizing resources. This role is fulfilled by the Accounting Manager.

Additional specialized staff may be needed to act as technical specialists during planning, response, and recovery for a debris-causing incident. These include the following:

- **Debris Management Subject Matter Expert (SME)**: A debris management SME provides information and advice to command staff working in the operations and planning sections to help guide disaster operations. This role is fulfilled by the Maintenance Director.
• **Quality Assurance Personnel:** Quality Assurance Personnel ensures the debris operations are cost effective. They do this by monitoring the type and amount of debris during collection, sorting, reduction, and disposal.

• **Structural Engineer:** A Structural Engineer oversees, inspects, and assesses impacted structures and makes appropriate recommendations on building condemnation and demolition. This role is fulfilled by the Building Official.

• **Legal Staff:** Legal department staff conducts reviews and manages all legal matters in the debris management planning process. In addition to advising the debris management planning staff, the legal department may also perform the following tasks:
  - Contract review
  - Right-of-entry permits
  - Community liability
  - Indemnification
  - Condemnation of buildings
  - Land acquisition for DMS sites
  - Site closure/restoration and insurance

  This role is fulfilled by the Assistant City Attorney.

• **Public Information Officer:** A Public Information Officer (PIO) familiar with debris management issues should be assigned to the Incident Commander or Joint Information Center (JIC), as necessary. Responsibilities include coordinating with PIOs of other agencies to keep the public informed about all debris removal activities and schedules. Immediately after a disaster and throughout the removal and disposal operation, the PIO is responsible for arranging for public notification of all ongoing and planned debris clearance, removal, and disposal activities. This role is fulfilled by the Deputy City Manager.

Appendix A, *Debris Resources*, summarizes some of the City of Mercer Island personnel positions and their potential role during debris management operations.

A contact list for the City of Mercer Island personnel is located in the Emergency Operations Center (EOC).

### 5.2 Equipment

During an incident, agency equipment such as trucks, rubber tire loaders, graders, chippers, chain saws, small cranes, dozers and backhoes may be needed to assist with debris clearance and removal operations. Most often these resources will be used for debris clearance from public rights of way in cooperation with the City of Mercer Island’s contract solid waste hauler(s).

The City of Mercer Island has a wide range of equipment that is available for debris operations and management.
5.3 Technology
The City of Mercer Island has a variety of tools that can be used to assist with debris operations. An example of one such tool is as follows:

GIS Mapping and Modeling: Geographic Information System mapping and modeling can be used to estimate debris volumes and distributions, plan debris clearance operations, and identify debris clearance priorities.

5.4 Contract Resources
During an incident it may be necessary to contract with other resource providers to augment the City of Mercer Island’s debris management staff and equipment. These resources can be used to assist with specific tasks such as debris clearance or DMS site management, or can be hired to manage the entire debris removal and disposal process.

Section 7, Contracted Resources, provides instructions for contracting additional resources prior to and during an incident.

It should be noted that contractors cannot be awarded pre-disaster/stand-by contracts with mobilization costs or unit costs that are significantly higher than what they would be if the contract were awarded post-disaster.

5.5 Mutual Aid and Interlocal Agreements
There are a variety of agreements the City of Mercer Island has in place and can enact to ensure adequate resources and staffing are available during a debris incident. Agreements applicable to a debris incident are listed in table 5-1 (below), including details on how the agreement is activated and what requirements are placed on both parties.

Notable for mutual aid is the Washington State Intrastate Mutual Aid Compact as well as current legislation found within the Revised Code of Washington (RCW).
### TABLE 5-1
Existing Agreements

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Type</th>
<th>Participation Requirement</th>
<th>Service Requirement</th>
<th>How Activated</th>
<th>Types of Resources Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Public Works Emergency Response Mutual Aid Agreement</td>
<td>Mutual Aid</td>
<td>Voluntary</td>
<td>Voluntary</td>
<td></td>
<td>Public Works equipment and staff</td>
</tr>
<tr>
<td>Emergency Management Assistance Compact</td>
<td>Mutual Aid</td>
<td>Voluntary</td>
<td>Assistance is obligatory &quot;provided that it is understood that the state rendering aid may withhold resources to the extent necessary to provide reasonable protection for such state.&quot;</td>
<td>Governor declares state of emergency, resources requested through WAEMD.</td>
<td>All types of resources, including debris clearance equipment and staff</td>
</tr>
<tr>
<td>Washington State Intercounty Mutual Aid Agreement</td>
<td>Mutual Aid</td>
<td>Voluntary</td>
<td>Lending county acts as an independent contractor of borrowing county in the performance of voluntary emergency assistance during any type of emergency. Reimbursement will be made by Borrower to Lender for costs and labor incurred by Lender beyond the first 8 hours of an asset’s use.</td>
<td>Requests for emergency assistance shall be directed to the designated contact person(s) on the contact list provided by the Party Counties.</td>
<td>Equipment, supplies, personnel, or direct provision of services</td>
</tr>
<tr>
<td>Washington State Fire Mobilization Plan</td>
<td>Mutual Aid</td>
<td>Voluntary</td>
<td>Voluntary</td>
<td>The local fire chief, through the regional coordinator, makes a request for mobilization to the State Emergency Operations Center. The chief of the Washington State Patrol makes a decision on mobilization in consultation with the governor’s chief of staff. Reimbursement by the WSP will take place for any labor or resources</td>
<td>Firefighters and equipment needed to manage fires, disasters, or other incidents – this is an all-risk agreement.</td>
</tr>
<tr>
<td>Agreement</td>
<td>Type</td>
<td>Participation Requirement</td>
<td>Service Requirement</td>
<td>How Activated</td>
<td>Types of Resources Available</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Draft Washington State Law Enforcement Mobilization Plan</td>
<td>Mutual Aid</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Plan expressly notes that it is not a replacement for local mutual aid agreements and the resources available from such agreements must be expended before a mobilization request will be granted.</td>
<td>Unknown</td>
</tr>
<tr>
<td>King County: Solid Waste Interlocal Agreements</td>
<td>Interlocal Agreement</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Solid Waste Disposal Resources</td>
</tr>
<tr>
<td>King County: Regional Disaster Plan for Private and Public Agencies in King County</td>
<td>Mutual Aid</td>
<td>Voluntary, signatures on file</td>
<td>Resource lending and borrowing are defined in the Omnibus Financial and Legal Agreement.</td>
<td>Local emergency proclamation by The City of Mercer Island. Then request is made.</td>
<td>Any type requested. Must have expended local and zone resources first.</td>
</tr>
</tbody>
</table>
5.6 Disposal Facilities
During an incident it may be necessary to utilize a variety of resources to dispose of different types of debris. Appendix A, Debris Resources, addresses disposal locations near the City of Mercer Island. Keep in mind that the amount and type of debris each facility accepts may change based on the size and severity of the incident.

5.7 Recycling and Composting Facilities
During an incident it may be necessary to utilize a variety of resources to recycle, compost, or otherwise reduce different types of debris. These resources provide an alternative to divert waste from landfills and may provide additional economic and environmental benefits. Appendix A, Debris Resources, addresses disposal locations near the City of Mercer Island. Keep in mind that the types of waste each facility accepts or is approved to accept may change based on the size and severity of the incident.

5.8 Staff Development and Responsibilities
This chapter lists staff roles that jurisdictions in the Seattle UASI Region will need to manage debris removal in the event of a disaster. This chapter describes the specific roles that jurisdiction staff may assume to plan for and respond to debris-causing incidents in order to ensure efficient response and recovery operations.

Staff Development
Each jurisdiction should assign staff to develop and maintain their operational disaster debris management plans and support debris management operations during an incident. Staff should be assigned to these roles prior to an incident so that proper training and planning can take place.

Plan Ownership and Maintenance
A single person or group within each jurisdiction should be responsible for the creation and maintenance of an operational disaster debris management plan for their jurisdiction. This person or group is responsible for directing the creation of the plan and ensuring it is updated and exercised based on the specifications within the plan. Appendix D, Operational Debris Management Plan Template, provides jurisdictions with a template to being the creation of their jurisdiction’s operational disaster debris management plan.

Debris Operations Staff
Debris operations staff are responsible for directing debris operations during and after an incident. During an incident, staff with debris management experience may need to assume one or more roles, including the following:
• **Debris Management Subject Matter Expert (SME):** A debris management SME provides information and advice to incident command staff working in the operations and planning sections to guide disaster operations.

• **Debris Collection Supervisor:** A Debris Collection Supervisor oversees collection activities prior to arrival at the disposal site and coordinates the debris routing, staffing, and field reporting activities.

• **Debris Removal Manager:** A Debris Removal Manager manages and coordinates debris removal activities related to an incident, and ensures communication among other members of the disaster management team, communication of project status activity and reporting, and dissemination and implementation of policy directives to debris removal personnel.

• **Debris Site Supervisor:** A Debris Site Supervisor manages a DMS site and is responsible for overseeing waste separation and environmental protection concerns, as well as filling out paperwork and reporting documentation.

• **Finance, Administration, and Logistical Staff:** Tracks time for personnel and equipment, tracks incident costs, assists with contracting and purchasing resources, completes documentation required for reimbursement of expenses, and checks in and demobilize resources.

### 5.9 Other Specialized Staff Resources

Additional specialized staff may be needed to act as technical specialists during planning, response, and recovery for a debris-causing incident. These include the following:

• **Quality Assurance Personnel:** Quality Assurance Personnel ensures the cost-effective and efficient monitoring of response and recovery operations.

• **Structural Engineer:** A Structural Engineer oversees, inspects, and assesses impacted structures and makes appropriate recommendations on condemnation and demolition of buildings.

• **Legal Staff:** Legal staff leads review and all legal matters in the debris management planning process. In addition to advising the debris management planning staff, the following tasks must also be performed by the legal department:
  
  - Contract review
  - Rights-of-entry permits
  - Community liability
  - Indemnification
  - Condemnation of buildings
  - Land acquisition for TDSR sites
  - Site closure/ restoration and insurance

• **Public Information Officer:** A PIO familiar with debris management issues should be assigned to the Incident Command staff, JIC or JIS, as necessary. Responsibilities include coordinating with other public information officers of other agencies to keep the public
informed about all debris removal activities and schedules. Immediately after a disaster and continually throughout the removal and disposal operation, the PIO should arrange for public notification of all ongoing and planned debris clearance, removal, and disposal activities. Additional information on public information strategies in included in Section 12, Public Notification and Communications Plan.

5.10 Training and Exercises

To ensure consistent and comprehensive debris management operations, all jurisdictions in the Seattle UASI Region should periodically review the Disaster Debris Management Plan with all potential plan participants, including private companies franchised or contracted to provide debris management service during a disaster.

General Emergency Management Training

Staff participating in disaster debris management operations should have general emergency management training, as well as position-specific training depending on their roles and as identified in their jurisdiction’s National Incident Management System (NIMS) implementation and training plan.

General emergency management training requirements are developed as part of the NIMS. Identified staff should complete the following courses:

- IS-700 NIMS: An Introduction (available online)
- IS-800 NRP: An Introduction (available online)
- ICS-100: Introduction to NIMS ICS for Operational First Responders (available online)
- ICS-200: Basic All-Hazards NIMS ICS for Operational First Responders (classroom)
- ICS-300: Intermediate NIMS ICS7 (classroom)

These requirements are listed as part of the Fiscal Year 2007 NIMS Training Requirements and the 2008 Five-Year NIMS Training Plan. Additional information on position-based NIMS training requirements is available from FEMA (see Appendix B, Online Resources, for more information on NIMS training requirements).

Position-Specific Training

Specific training may be required depending on specific staff roles and positions. FEMA provides several online classes that may be applicable to debris management staff, including IS-632, Introduction to Debris Operations, in FEMA’s Public Assistance Program, and IS-630, Introduction to the Public Assistance Program. FEMA’s Emergency Management Institute offers classroom training in debris management (E202 Debris Management).

Exercises

Procedures for disaster debris removal can be tested and exercised through discussion-based or operational-based exercises. The purpose of these types of tests and exercises is to determine the overall efficiency and effectiveness of the operational procedures in a disaster.

1 ICS-300 is recommended for strike team leaders, task force leaders, unit leaders, division/group supervisors, and branch directors, and is recommended for emergency operations center staff (FEMA 2008a).
scenario. These procedures can be exercised separately, or as part of another exercise. At a minimum, operational exercises should be conducted every 4 years. Plans should be modified based on AARs and corrective-action reports.

### 5.11 Credentialing and Resource Typing

As part of federal NIMS compliance objectives (FEMA 2008b), the United States Department of Homeland Security (DHS) is currently developing a nationwide credentialing system and position-specific resource typing metrics that will provide positive identification and verify baseline knowledge and experience criteria for emergency response and recovery professionals. Some of these criteria will be specific to debris management. Jurisdictions should work with the WAEMD to adopt a credentialing system that is compatible with the NIMS and tracks the position descriptions and proposed qualifications of all staff who will participate in emergency management operations and disaster debris operations.

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1 ICS-300 is recommended for strike team leaders, task force leaders, unit leaders, division/group supervisors, and branch directors, and is recommended for emergency operations center staff (FEMA 2008a)
Section 6: Debris Collection and Hauling Operations

This section provides information on disaster debris response and recovery operations, including: damage assessment, debris collection, and the establishment of debris management sites (DMS).

6.1 Damage Assessment and Debris Estimates

Damage assessment is the systematic process of gathering preliminary estimates of disaster debris quantities and composition; damage costs; and general descriptions of the locale, type, and severity of damage sustained by both the public and private sectors. Initial damage assessments are usually completed within 36 hours of an incident by local, state, federal, and volunteer organizations and provide an indication of the loss and recovery needs. The initial damage assessment is the basis for determining the level of state and federal assistance needed, as well as the types of assistance necessary for recovery. The assessment and may take longer depending on the City of Mercer Island or the Region’s ability to respond to life, safety, and property concerns. Information about the Washington Emergency Management Division’s (WAEMD) Public Assistance Damage Assessment program, including the applicable forms to complete the assessment, is included in Appendix K, Washington Public Assistance Damage Assessment, of this plan.

The debris assessment should accomplish all of the following:

- Estimate the quantity and mix of debris.
- Estimate damage costs.
- Determine impact on critical facilities.
- Identify impact on residential and commercial areas.
- Identify what additional resources are needed for response and recovery.

FEMA Preliminary Damage Assessment

A preliminary damage assessment (PDA) report is a more detailed assessment that is completed following the initial damage assessment if it is suspected that the incident has, or will, overwhelm local resources and require federal assistance. The PDA serves two purposes, as follows:

- The PDA provides reliable damage estimates, which are used as a basis in applying for assistance and, where justified, the governor’s request for a Presidential Disaster Declaration.
- The PDA provides for the effective implementation of state and federal disaster relief programs, if a Declaration is made.

The PDA is completed by a team of officials from FEMA, the Washington Emergency Management Division, county and local officials, and the U.S. Small Business...
Administration. Usually it takes approximately thirty days to complete and compile a PDA and route it through the Governor’s office to FEMA.

6.2 **Debris Clearance and Removal Guidelines**

The City of Mercer Island has developed the following guidance for prioritizing debris removal:

1. **Life Safety**
2. **Situation Stabilization**
3. **Property Protection**
4. **Economic Stability and Environmental Protection**

These guidelines will dictate planning, response, and recovery during disaster debris creating events.

6.3 **Debris Removal Priorities**

The City of Mercer Island has developed the priorities for debris clearance. Circumstances, such as crime scene preservation and accident investigation, may require a delay of debris clearing during disaster operations until approved can be obtained from local or federal law enforcement officials.

1. **Clear Emergency Access Routes – Lifelines.** Lifelines are those routes in a traffic network that provide access for emergency responders, alternate and evacuation routes, and damage assessment routes. Lifelines should include areas identified for potential staging, temporary shelters, and other resources available in the community that support emergency response. The City of Mercer Island will work closely with the county and neighboring cities to identify priorities for clearing transportation access routes.

2. **Clear Access to Critical Facilities and Infrastructure.** Assets, systems, and networks, whether physical or virtual, so vital that their incapacitation or destruction would have a debilitating effect on security, economic security, public health or safety. These typically include hospitals, fire stations, police stations, and emergency operation centers, as well as cellular and land-line telephone services, drinking water and power utilities, and sanitation facilities.

3. **Clear Major Freeways or Arterial Routes.** Major freeways and arterial routes are portions of the public transportation network that are needed to aid in response and recovery operations, but may not have been cleared as an emergency access route.

4. **Clear Areas Necessary for Movement of Goods and Services/Economic Restoration.** These areas include those portions of the public transportation network necessary for effectively transporting goods and services throughout the Region that are not included in one of the previous categories. These may include access to warehouses, airports, seaports, and major business districts.
5. **Clear Minor Arterial Routes.** These routes include those portions of the public transportation network that receive moderate traffic flows, but are not included in one of the previous categories.

6. **Clear Local Routes.** These areas include those portions of the public transportation network in residential neighborhoods that are not included in one of the previous categories.

Appendix D, *Lifelines and other Debris Clearance Priorities*, addresses debris removal priorities.

### 6.4 Debris Operations

Debris-clearing and removal operations predominately focus on public roads and other critical infrastructure; they should be prioritized based on the methodology listed in Section 6.3 of this plan.

**Debris Clearance**

Initial debris clearance will focus on removing debris from public property based on the priorities listed in Section 6.3. Additional debris clearance from private or commercial property may be necessary if the debris presents a health or safety risk to the community.

Appendix A, *Debris Resources*, lists additional resources that can be used to clear and haul disaster debris following an incident. Items to be considered during debris clearance and collection include the following:

- **Debris composition**: Commingling of debris creates problems with reduction and recycling techniques, which may impact future reimbursement. Whenever possible, immediate action should be taken to prevent or reduce commingling of debris during debris collection operations.

- **Location of debris**: There will often be different reimbursement and operational guidelines for debris clearance on public property, private residential, and private commercial property. While debris clearance on private property is not usually a reimbursable expense, the City of Mercer Island has cleared debris from private property in the past when it presented a health or safety risk to the community.

**Collection Methods**

Based on the types and distribution of debris, several collection methods are available during a debris causing incident:

**Curbside**: Residents may be asked to place their debris at the edge of the right of way for pickup. If curbside pickup is used, residents should be instructed to separate their debris into multiple categories including municipal solid waste, vegetative waste, construction and demolition debris, household hazardous waste, and putrescibles.

**DMS Site or Drop Box**: Residents may be asked to bring disaster debris to collection sites to temporarily store, segregate, and process debris before it is hauled to its final disposal site. If possible, the sites should remain at the same location for each debris-causing incident and
should be included in the incident communication strategy. Facilities that can be used for drop-off’s include debris drop boxes, DMS sites, landfills, and transfer stations.

6.5 Debris Management Sites

Site Management

DMS Site preparation and operation may be managed by the City of Mercer Island or a contractor. To meet overall debris management strategy goals and to ensure that the site operates efficiently, a site manager, debris monitoring personnel, and safety personnel should be assigned for each site. Appendix A, Debris Resources, lists the City of Mercer Island personnel identified for staffing of each of these positions, with responsibilities as follows:

- **Site Manager**: The site manager is responsible for supervising day-to-day operations, maintaining daily logs, preparing site progress reports, and enforcing safety and permitting requirements during site operations. The site manager is also responsible for scheduling the environmental monitoring and updating the site layout. The site manager has oversight of the activities of the debris removal contractors and the onsite debris processing contractors to ensure that they comply with the terms of their contracts.

- **Monitoring Staff and Assignments**: Regional monitors (whether the city of Mercer Island employees or contractors) should be placed at ingress and egress points to quantify debris loads, issue load tickets, inspect and validate truck capacities, check loads for hazardous waste, and perform quality control checks. The specific duties of the monitors would depend on how debris is collected.

- **Safety Personnel**: Safety personnel are responsible for traffic control and ensuring that site operations comply with local, state, and federal occupational safety regulations.

Establishment and Operations Planning

Whenever possible, DMS sites should be identified and established prior to an incident to allow appropriate planning and permitting to be completed. The City of Mercer Island has 8 pre-designated locations to serve as DMS/neighborhood collection sites.

Permits

Section 3. Applicable Rules and Regulations, provides a discussion of the applicable permits necessary for establishing and operating DMS sites.

Debris Management Site Locations

The City of Mercer Island has 8 locations pre-designated as DMS sites for use during disaster debris operations that meet the criteria discussed below. For the appropriate form to use at DMS sites, see Appendix C, DMS Site Inventory.
Locating Additional Debris Management Sites

When identifying additional DMS sites, planning staff should first consider sites that already have solid waste permitting and, secondly, public lands to avoid costly land leases. Existing disposal or recycling facilities close to lifelines and major access routes are ideal DMS sites. Sites owned by the City of Mercer Island that will not require extensive repair costs, such as parks, vacant lots, or sports fields, should be considered as well. State-to-state or county-to-county agreements may provide solutions for public land lease; however, if these are not available, planning staff should develop criteria for identifying potential private property locations for the DMS sites. Private land easements should be reviewed by the legal staff to avoid extensive damage claims upon site closeout. Additional selection considerations for DMS sites include the following:

- Proximity to the sources of disaster debris; as close as possible
- Large enough to accommodate a storage area, a sorting area, and volume reduction operation area
- Hard, preferably non-porous, surface such as a paved parking lot
- Accessible by main transportation routes with good ingress and egress to accommodate heavy truck traffic
- Outside of environmentally sensitive areas, such as wetlands or well-fields
- Reuse and recycling possibilities, including: timber agreements, mulch and chip disposal in the agriculture community and fuel sources for incinerators or heating. Recycling success will depend on the types of debris and the local recycling environment.

Site Preparation:

Develop a Memorandum of Understanding, a Memorandum of Agreement, or lease/use agreement, if required. Establish lined temporary storage areas for materials (including ash, household hazardous waste, fuels, and other materials) that can contaminate soils, groundwater, and surface water. When possible, set up plastic liners under stationary equipment, such as generators and mobile lighting plants. This should be included as a requirement in the scope of work if DMS site preparation will be contracted out. The topography and soil/substrate conditions should be evaluated to determine the best site layout. When planning for site preparation, the designer should consider ways to make site closure and restoration easier. Upon site closeout, the uncontaminated soil can be re-spread to preserve the integrity of the tillable soils. Operations that modify the landscape, such as substrate compaction and over-excavation of soils when loading debris for final disposal, adversely affect landscape restoration. Identify who would be responsible for updating the initial baseline data and develop an operation layout to include ingress and egress routes.

Site Layout

The efficiency and the overall success of the DMS site operations are determined by how the site is designed. Significant accumulation of debris should not be allowed to occur at temporary storage sites because of environmental and safety concerns, such as the risk of fire. Moreover, permits for such sites may impose maximum capacity restrictions. While FEMA recommends 100 acres as the minimum size for DMS site, this may be altered due to
facility availability. Additional debris management sites may be necessary if actual debris quantities flowing into the site are greater than the site storage and processing capacity.

**Operational Boundaries**

Operational boundaries are the boundaries or areas that clearly define the different use areas on the DMS site. In establishing the operational boundaries, the DMS site design staff may consider using earthen berms, temporary barriers, or other physical restrictions. This aids traffic circulation and keeps the backlog of debris to a minimum.

Common operational areas include the following:

- Reduction
- Recycling
- Tipping areas (unloading)
- Loading areas for processed debris to go to its final disposition
- Drop-off centers for the public (this may include vegetative, recycling, or construction and demolition debris)
- Household hazardous waste storage
- Monitoring tower and/or scale locations at both the ingress and egress points
- Equipment, fuel, and water storage
Separation of the areas listed above should be clearly delineated and defined. Maximum separation helps to reduce conflicts in use. As operations proceed, these areas may change with the various types of debris. The reduction, recycling, tipping, and loading areas need ample room for large equipment operations. The design should consider the possibility of multiple pieces of equipment engaging in the same activity at one time. Depending on the scale of operations, each debris stream may have its own tipping area and should be designed accordingly.

General public drop-off areas for recycling, reduction, and construction and demolition debris may be included within a DMS site. These public use areas should be carefully designed for passenger vehicle traffic and public safety. Account for all weight or volume of materials received from public drop-off to ensure accurate and complete records for all debris received to the site by source.

Household hazardous waste storage should be located in a safe location close to the public drop-off center, yet restricted, so that qualified personnel can process the waste appropriately. The design staff may consider constructing an impermeable lining and earthen berms to contain spills and prevent surface water runoff from leaving the area.

Monitoring towers should be located at ingress and egress points. Monitoring towers should be constructed of durable structural materials. The structures should be designed to withstand active and static loads. A stepladder is not an acceptable monitoring tower.

Equipment and fuel should have a designated storage area and signs posted appropriately. The fuel storage areas need to be designed to contain spills. For dust and fire suppression, water should be readily available throughout the site at all times and must be identified appropriately.

**Traffic Patterns**

Traffic circulation should be well defined throughout the entire DMS site. Although traffic signs and barricades aid in directing traffic, the planning staff may also consider flag personnel to help direct traffic. Drivers unfamiliar with the new environments, routes, and rules will need assistance to safely navigate through the site.

Optimally, the designed traffic pattern should allow trucks to enter and exit through different access points, as long as each is monitored. Haulers are typically paid by the volume or weight of a load. The load is evaluated when entering the site, based on a percentage of the full capacity of the truck. Stationing monitors at ingress and egress points ensures that every truck releases the entire load prior to leaving the site. This prevents debris left in a truck from a previous load from being counted again in a subsequent load. The empty trucks that enter the site to remove the processed (reduced) debris should enter and exit through an access point other than that of all other traffic. This reduces the site management and debris monitor confusion regarding debris being deposited or removed from the site.

**Environmental Monitoring Program:**

Additional data should be collected on a continuous basis during site operations to support site closeout and quality assurance. The data can be compared to the previously established information in order to determine any remediation that may be necessary.
DMS site operations may expand, contract, or shift on the site. It is important to track reduction, hazardous waste collection, fuel, and equipment storage in order to sample soil and water for contaminants. Periodically, map or sketch out activity locations so that areas of concern can be pinpointed later for additional sampling and testing.

If the site is also an equipment staging area, monitor fueling and equipment repair to prevent and mitigate spills (e.g., petroleum products and hydraulic fluids). Include clauses in the contract scope of work to require immediate cleanup by the contractor.

**Site Closure**

After the site operations are complete, the property (either the City of Mercer Island-owned or leased) must be restored to its pre-activity environmental state. Restoration of a site involves removing all traces of the operations and possible remediation of any contamination that may have taken place during the operations. Debris, processing equipment, storage tanks, protection berms, and other structures constructed on the site should be removed from the site upon completion of all debris removal and processing operations.

**Site Evaluation and Restoration**

Final restoration of the landscape must be acceptable to the landowner, within reasonable expectations. Therefore, plan the landscape restoration as early as possible, preferably incorporating provisions within the lease.

The final environmental site evaluation is an extension of the environmental monitoring program. Testing, similar to that which is done for the baseline study, should be conducted to confirm that the site has been returned to its pre-activity state. Test samples should be taken at the same locations as those of the initial assessment and monitoring program. However, if warranted, additional test samples may be needed at other locations on, or adjacent to, the site.

Based on the results of the testing, additional remediation may be required before the owner takes final acceptance of the site. The lease agreement should have provisions to release the City of Mercer Island from future damages when the site is returned to its original condition, or when final acceptance is received from the owner.

**Neighborhood Collection Sites**

DMS sites may also be Neighborhood Collection Sites. The City of Mercer Island may establish neighborhood collection sites to support disaster debris operations. These sites are used to collect debris from a small area and transport them to an established DMS site, or a recycling or disposal facility. Guidelines for locating and establishing neighborhood collection sites will be developed with the local health department.

**6.6 Debris Reuse, Reduction, and Disposal Methods**

Numerous methods are available that reduce the overall volume of disaster debris and limit the amount of debris remaining for landfill disposal.
Recycling and Reuse

Recycling and reuse strategies involve diverting material from the disposal stream and reusing it. The recycling and reuse of disaster debris is most often limited to metals, soils, and construction and demolition debris. Recycling and reuse debris types are described below.

- **Metals**: Most nonferrous and ferrous metal debris is suitable for recycling. Metal maulers and shredders can be used to shred trailer frames, trailer parts, appliances, and other metal items. Ferrous and nonferrous metals are separated using an electromagnet and then sold to metal recycling firms.

- **Soil**: Soil can be combined with other organic materials that will decompose over time. This procedure produces significant amounts of material, which can be sold, recycled back into the agricultural community, or stored onsite to be used as cover when the site is returned to its pre-incident state. In agricultural areas where chemical fertilizers are used heavily, recovered soil may be too contaminated for use on residential or existing agricultural land. The City of Mercer Island should consult with their local health department to establish what monitoring and testing is necessary to ensure that soil is not contaminated with chemicals. If the soil is not suitable for agricultural or residential use, it may ultimately need to be disposed of at a permitted landfill.

- **Construction and Demolition**: Concrete, asphalt, and masonry products can be crushed and used as base material for certain road construction products, or as trench backfill. Debris targeted for base materials needs to meet certain size specifications as determined by the end user. Clean wood products used in construction can also be chipped or ground and used as mulch or hog fuel.

- **Composting**: Composting is the controlled decomposition of organic materials, such as leaves, grass, wood, and food scraps, by microorganisms. The result of this decomposition process is compost, a crumbly, earthy smelling, and soil-like material. Yard trimmings and food scraps make up about 25 percent of the waste generated in the average household; composting can greatly reduce the amount of waste that ends up in landfills or incinerators. A section of DMS sites should be reserved to receive compost material after a disaster. Composting can be used not only for backyard garden soil additives, farmlands, highways, and other landscaping projects, they can also be put to many innovative uses. The City of Mercer Island may use composting to reduce organic material need and be aware of, and prepared to mitigate, several hazards, which include spontaneous combustion of piles and vector control for rodents.

**Volume Reduction Methods**

Volume reduction methods reduce the volume of disaster debris to decrease impact on disposal facilities or create opportunities to reuse debris. Appendix A, Debris Resources, has a list of contractors that can provide these services during an incident. Descriptions of volume reduction methods are as follows:

- **Chipping and Grinding**: Chipping and grinding reduces the volume of some debris types by as much as 75 percent. This method is commonly used to reduce the volume of disaster debris, including vegetative debris, construction demolition debris, plastics,
rubber, and metals. Clean wood can also be reduced and used for mulch, while other debris such as plastic and metals can be chipped to reduce the overall volume of the material prior to transportation or disposal. The benefit of using a reduction method can be increased by identifying alternate uses for the residual material. The ability to use recycled wood chips as mulch for agricultural purposes, fuel for industrial heating, or in a cogeneration power plant helps to offset the cost of the chipping and grinding operations. The City of Mercer Island may use chipping and grinding to reduce the volume of vegetative debris and must be careful to ensure that contaminants such as plastics, soils, rocks, and special wastes are not present in the vegetative debris to be processed. Care must also be taken when reducing construction and demolition debris to ensure that it does not contain hazardous materials, such as asbestos. Appendix A, Debris Resources, lists resources that provide chipping and grinding services.

- **Incineration:** Curtain pit incineration, portable incinerators, and controlled incineration in rural areas are all methods for reducing disaster debris. Because of air quality concerns in the region, incinerating debris is not generally considered a viable reduction strategy. The decision to use incineration as a reduction strategy for some types of debris would be made by the PSCAA, as outlined in Chapter 3, Legislation and Policies, of this plan. The following subsections discuss the various incineration methods.

  - **Hog Fuel Incinerators:** Hog fuel is made up of a specific grade of ground-up wood and bark. It varies in size, generally somewhere between 1/2-inch and 6-inch screen size. In the Pacific Northwest, wood and paper processing companies that use hog fuel to fuel boilers have facilities for storing hog fuel. These companies may purchase surplus storm debris that is processed into hog fuel, depending on market conditions and their existing supply, which is lowest in the spring. Depending on the quality of the material used to create the hog fuel, the Puget Sound Clean Air Agency (PSCAA) may need to relax the permit restrictions for any hog fuel burners that burn hog fuel processed from disaster debris. Appendix A, Debris Resources, includes a list of hog fuel burners in the region.

  - **Air Curtain Pit Incineration:** Air curtain pit incineration offers an effective means to expedite the volume reduction process, while substantially reducing the environmental concerns caused by open-air incineration. The air curtain incineration method uses a pit constructed by digging below grade or building above grade (if a high water table exists) and a blower unit. The blower unit and pit comprise an engineered system that must be precisely configured to function properly. The blower units deliver air at predetermined velocities and capacities. The blower unit must have adequate air velocity to provide a “curtain effect” to hold smoke in and to feed air to the fire below. A 20-foot long nozzle provides air at a velocity of over 120 miles per hour and will deliver over 20,000 cubic feet of air per minute to the fire. The air traps smoke and small particles, recirculating them to enhance combustion, which takes place at over 2,500 degrees Fahrenheit.

  - **Pre-permitted Portable Incinerators:** Portable incinerators use the same methods as air curtain pit incinerator systems. The only difference is that portable incinerators use a pre-manufactured pit instead of an onsite constructed earth/limestone pit. Portable air curtain incinerators are the most efficient incineration systems available...
due to the fact that the pre-manufactured pit is engineered to precise dimensions to complement the blower system. The pre-manufactured pit requires little or no maintenance compared to earth or limestone constructed pits, which are susceptible to erosion. Portable air curtain units are ideal for areas with high water tables and sandy soils and areas where smoke opacity must be kept to a minimum.

- **Rural Controlled Incineration:** Controlled open-air incineration is a cost-effective method for reducing clean, woody debris in rural areas. The City of Mercer Island should consult with their local fire departments and the PSCCA to determine what permits are necessary for rural incineration. Ash from rural incineration may be used as a soil additive; however, local health departments and agricultural extension personnel should be consulted to confirm whether this is allowed in any specific The City of Mercer Island. The controlled open-air incineration option should be terminated if mixed debris enters the waste stream.

**Problem Waste Processing and Disposal**

Problem waste, such as pathogenic waste; white goods; household hazardous waste; or biological or nuclear waste, requires additional handling before it can be processed or disposed of and will vary depending on the type and scope of the debris-causing incident. During debris processing, problem waste should be removed and stored in a secure location until it can be disposed of properly. Because of their prevalence during debris-causing incidents, several types of waste warrant further discussion:

- **Household Hazardous Waste (HHW):** HHW has been prevalent during past disaster debris causing incidents. Strategies need to be developed to collect and store HHW during disaster debris operations.
- **White Goods:** White goods (including refrigerators) are commonly discarded after debris-causing incidents because they no longer function or as a result of extended power outages that cause their contents to decompose. Refrigerators are often processed in groups to remove the refrigerant along with any food waste, before being recycled.
- **Electronic Waste (E-waste):** E-waste may contain a variety of potentially toxic chemicals, including heavy metals and polychlorinated biphenyls (PCBs). EPA has specifically classified cathode ray tube (CRT) monitors as hazardous waste, and other electronic components may also qualify. Whenever possible, E-waste should be separated from other waste and recycled by an E-waste processor.
- **Treated Wood:** Treated wood includes different types of building material, including telephone poles, railroad ties, fence posts, and wood used to construct docks. Care needs to be taken to ensure treated wood is not chipped, shredded, mulched, composted, incinerated, or disposed of in unlined landfills during processing and disposal.
- **Gypsum Drywall:** When gypsum deteriorates in landfills it can create hydrogen sulfide gas, which poses an explosion and inhalation hazard. Large amounts of drywall are often created during storms and floods. Landfill managers must be aware of this and implement the proper precautions. If possible, gypsum drywall should be recycled rather than disposed of in a landfill.
• **Asbestos:** Regulations for asbestos handling are well established by several different local, state, and federal agencies, including Ecology and the PSCAA. After a major debris-causing incident, asbestos inspections may not be possible prior to demolition, resulting in an increased risk to public health. The City of Mercer Island should work with the PSCAA and local public health agencies to ensure waste that possibly contains asbestos is properly handled and disposed of.

• **Human Waste:** Following a disaster that disables water, sewer, or septic systems, citizens may have human waste stored in containers that requires disposal. This is considered bio-hazardous waste that cannot be included in the debris stream. Close cooperation is necessary between emergency managers, local public health officials, and utility personnel to properly collect and dispose of this waste.

Whenever possible, the City of Mercer Island should attempt to segregate hazardous substances from the waste stream as early in processing as possible in order to prevent contamination of larger amounts of waste. The City of Mercer Island undergoing any cleanup effort that includes hazardous waste should consult with their local hazardous waste staff, public health officials, and EPA to ensure the protection of public health.

### 6.7 Debris Management Operations Monitoring

Debris monitoring operations document the debris clearance and removal operations, including the location and amount of debris collected. Monitoring is needed to ensure that the any debris removal contractor(s) are performing the scope of work required by the contract, and to determine eligibility for FEMA reimbursement.

Debris monitoring can be accomplished by the City of Mercer Island staff, or by a debris monitoring contractor hired by the City of Mercer Island. Contact information for debris management contractors is included in Appendix A, *Debris Resources*.

The key elements to record when monitoring and documenting debris operations include:

- Type of debris collected
- Amount of debris collected
- Original collection location
- Equipment usage
- Staff labor hours

**Documentation and Reporting Requirements**

During the operation of DMS sites, any operations that will have a bearing on site closeout need to documented, such as petroleum spills at fueling sites; hydraulic fluid spills at equipment breakdowns; discovery of household hazardous waste; and commercial, agricultural, or industrial hazardous and toxic waste storage and disposal. This information will be used during site closeout operations.
6.8 Debris Management Contractor Monitoring

All of the City of Mercer Island’s contracts for debris operations should establish a contract monitoring plan. The purpose of this plan is to protect a municipality’s financial interest. Monitoring debris removal operations achieves two objectives:

- Verification that the work completed by the contractor is in the contract scope of work
- Documented justification, as required, for Public Assistance grant reimbursement

Contractor monitoring can be accomplished by the City of Mercer Island staff, or by a separate contract company. Failure to document eligible work and costs may jeopardize Public Assistance Program funding. In federally declared disasters, FEMA periodically validates a region’s monitoring efforts to ensure that eligible debris is being removed and processed efficiently. Sample debris monitoring forms are included in Appendix E, Debris Management Monitoring Forms.

Considerations for Unit Price Contracts

A unit price contract requires that all trucks be accurately weighed, or measured and numbered, and that all truckloads be documented. Full-time trained contract monitors are usually necessary for this type of contract to keep an accurate account of the actual quantities of debris transported (in either cubic yards or tons). Monitors must be available at debris pickup locations to ensure the debris being picked up is eligible. In addition, this type of contract requires the contractor to provide or construct an observation stand at all reduction and disposal sites so the contract monitor can certify the load. If scales are used, monitors must also ensure that proper weights are registered before and after trucks have been emptied. The following conditions for unit price payments also apply:

- If unit price payments are based on weight, a truck scale must be available at the disposal site for weighing trucks. The weight of an empty truck must also be confirmed.
- If unit price payments are based on volume, monitors must verify truck capacities and inspect trucks for proper loading and compaction.

Load Tickets

The term “load ticket” refers to the primary debris-tracking document. A load ticket system tracks the debris from the original collection point to the DMS site or landfill. By positioning debris monitors at each point of the operations (collection, DMS site, and/or final disposition), the eligible scope of work can be properly documented. This process enables the City of Mercer Island to document and track debris from the initial collection location, to the DMS, and to final disposal locations. If the City of Mercer Island uses a contract hauler, this ticket often verifies hauling activities and can be used for billing purposes. Load tickets should be multi-copy and sequentially numbered. All copies of load tickets presented for payment must match in order for payments to be made. A sample load ticket is included in Appendix E, Sample Debris Management Monitoring Forms.
6. DEBRIS COLLECTION AND HAULING OPERATIONS

Truck Certification and Periodic Recertification
Prior to beginning contract work, each truck must be certified. Certification includes a record of the following:

- Volume of the truck bed in cubic yards or empty truck weight
- Truck license number
- Any identification number assigned by the owner
- A short description of the truck

Monitors may need to be trained in order to measure truck capacities for certification purposes. Recertification of the hauling trucks on a random and periodic basis should be implemented for contract compliance and reimbursement considerations. A listing of certified trucks should be maintained by debris monitors to ensure that truck identifications have not been altered. A sample truck certification form is included in Appendix E, Sample Debris Management Monitoring Forms.

Awareness of Improper Unit Price Contractor Strategies
Monitors must be aware of the following techniques, which have been used by contractors to take advantage of unit price contracts during the debris cleanup process:

- Reporting improper truck volumes
- Adding improper debris to a load to increase weight (i.e., steel, boulders, excess soil, or concrete)
- Soaking debris with water
- Tipping half of the load
- Switching a truck number
- Using large fuel tanks that are almost empty on initial weigh-in and full when delivering debris
- Adding steel plates or other weights to the bottom of the truck bed

Considerations for Time and Materials Contracts
For time and materials contracts, the City of Mercer Island must document the length of time that equipment and personnel is used, and must ensure that equipment and personnel are being used efficiently. FEMA does not reimburse for "down time" of equipment or personnel. A sample Time and Materials Contract is included in Appendix I, Sample Contracts. FEMA form 90-123 Force Account Labor, is included in Appendix B to track labor hours for contract and the City of Mercer Island employees.

Considerations for Debris Monitoring Contracts
Debris monitoring contractors can be used to monitor and document debris operations, to manage other debris management contractors, or to operate the City of Mercer Island’s complete debris management operation.
When developing scopes of work for debris management contractors, or when evaluating their performance, the following should be considered and evaluated:

- Documentation of the type of debris collected
- Documentation of the amount of debris collected
- Documentation of the original collection location
- Measurement and certification of truck capacities (recertify on a regular basis)
- Completion and physical control of load tickets (in monitoring towers and the field)
- Validation of hazardous trees, including hangers, leaners, and stumps (use appropriate documentation forms)
- Confirmation that trucks are accurately credited for their load.
- Confirmation that trucks are not artificially loaded to maximize reimbursement (e.g., debris is wetted or debris is fluffed instead of compacted)
- Confirmation that hazardous waste is not mixed in with loads.
- Confirmation that all debris is removed from trucks at the DMS
- Notification to project manager if improper equipment is mobilized and used
- Notification to project manager if contractor personnel safety standards are not followed
- Notification to project manager if general public safety standards are not followed
- Notification to project manager if completion schedules are not on target
- Confirmation that only debris specified in the scope of work is collected and identification of work as potentially eligible or ineligible
- Monitoring of site development and restoration of the DMS
- Confirmation that daily loads meet permit requirements
- Confirmation that work stops immediately in an area where human remains or potential archeological deposits are discovered
- Notification to project manager if debris removal work does not comply with all local ordinances, as well as state and federal regulations
- Completion of a pre- and post-event environmental assessment of each DMS site
Section 7: Contracted Resources

This section provides information on establishing and maintaining contracts for debris management services including debris clearance, removal, processing, and disposal.

7.1 Existing Debris Management and Solid Waste Contracts

Section 5, Current Resources, addressed contracts the City of Mercer Island can use to augment their existing resources during a debris creating incident. Prior to engaging additional resources for debris collection and hauling it is imperative that the City of Mercer Island consult with its current solid waste collection company. The current solid waste company is granted a garbage certificate from the Washington Utilities and Transportation Commission (WUTC) that provides them the authority to collect waste in a defined service area. If additional resources are needed to collect debris and the franchised solid waste collection company is unable to provide adequate resources the City of Mercer Island can contract with another company, but only after the company has been granted a temporary garbage certificate from the WUTC. The provision of temporary garbage certificates is discussed in RCW 81.77.110.

7.2 Contract Debris Management Resource Needs

Contracts and resources were addressed in Section 5, Current Resources. However, the City of Mercer Island has identified that additional resources may be needed in these areas to support a disaster debris operations:

- Right of Way (ROW) vegetative debris removal
- ROW construction and demolition debris removal
- ROW household hazardous waste collection and disposal
- ROW tree trimming and clearing
- General debris collection
- General debris hauling
- Debris processing and reduction
- Commercial and private property demolition and debris removal
- Commercial and private property sediment removal
- Debris Management Site (DMS) management
- Debris monitoring and inspection

Contracts have been or are being developed to address these needs.
7.3 Emergency Contracting and Procurement Procedure

It is advisable for the city of Mercer Island to contract for debris management resources prior to a debris causing incident or to pre-qualify contractors who may perform debris management operations. If emergency contracts have to be established during an event the following general emergency contract rules apply:

- The contractor must be licensed and bonded
- The contractor must have adequate insurance
- The contract must comply with state and Federal procurement standards including provisions of 44 CFR Part 13
- The contractor cannot be on the Washington State Department of Labor and Industries Debarred Contractors list

In addition, the city of Mercer Island has emergency contracting and procurement procedures that must be followed.

Types of Contracts

When developing contracts for emergency work it is advised that the scope of work reference terms such as “eligible work,” “work eligible under FEMA Public Assistance regulations, policies, and guidance,” “work performed on public property and/or public rights-of-way,” or other similar elements if the performed work is to be potentially reimbursed by FEMA. The type of contract used to supply debris management services will vary depending on the type of work to be performed and how soon after the incident the work is planned. The three recommended contract vehicles for debris operations are:

Time and Materials Contract: Under a time and materials contract, the contractor is paid based on time spent and resources used in accomplishing debris management tasks. Time and materials contracts are extremely flexible and especially suitable for early debris right-of-way clearance jobs and hot spot cleanups. For reimbursement purposes, FEMA recommends that the use of time and materials contracts be limited to the first 70 work hours after a disaster.

Unit Price Contract: A unit price contract is based on weight (tons) or volume (cubic yards) of debris hauled. This kind of contract should only be used when the scope of work is not well defined. It requires close monitoring of debris collection, transportation, and disposal to ensure that quantities are accurate. A unit price contract may be complicated by the need to segregate debris for disposal.

Lump Sum Contract: A lump sum contract is used when the scope of work is clearly defined and the areas of work are specifically quantified. Lump sum contracts require the least monitoring by the contracting City of Mercer Island.

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The following contract vehicles should not be used because they do not meet FEMA contracting guidelines:

**Cost plus Percentage of Cost:** A cost-plus-percentage-of-cost contract is one whereby the contractor is compensated for work performed, such as a time and materials contract, but also compensated an additional percentage of that compensation.

**Conditional upon Federal Reimbursement:** This kind of contract only reimburses contractors if the region receives federal funding and is not an eligible contract under FEMA guidelines.

**Piggyback Contracts:** When the City of Mercer Island uses another City of Mercer Island contract it is referred to as “piggybacking” on their contract. Variables associated with scopes of work and costs generally make this an option to be avoided.

**Competitive Bid Process**
In some situations, such as clearing road for emergency access (moving debris off the driving surface to the shoulders or rights-of-way), or removal of debris at a specific site, FEMA allows for awarding a non-competitive contract for site-specific work “only if the emergency is such that the contract award cannot be delayed by the amount of time required to obtain competitive bidding”⁹.

During an emergency it is possible to develop an expedited process to competitively bid work. In the past the city of Mercer Island has developed scopes-of-work, identified contractors that can do the work, made telephone invitations for bids, and received competitive bids.

It is also important to note that in the city of Mercer Island where solid waste collection is regulated by the WUTC, contracting with additional resources for debris collection and hauling may only be pursued if the WUTC-certified hauler is unable to provide service, and only after the replacement contractor has been issued a temporary garbage certificate by the WUTC. The provision of temporary garbage certificates is discussed in RCW 81.77.110.

It should be noted that a debris removal contract should only be signed after it has been reviewed by the city of Mercer Island’s legal representative. Additionally, FEMA does not certify, credential, or recommend debris contractors.

Section 8: Private Property Demolition and Debris Removal

Private property debris removal refers to the demolition and removal of disaster debris on private commercial or residential property. Private property demolition and debris removal is generally not eligible for reimbursement under the FEMA Public Assistance Program; however, under specific circumstances private property demolition and removal may be reimbursed. The following section provides information on the process to demolish and remove disaster debris on private property with or without owner consent and outlines the procedures that the city of Mercer Island will need to follow in order to potentially receive expense reimbursement through the Public Assistance Program.

8.1 Debris Removal and Demolition Permitting and Procedures

Following a debris causing incident, the city of Mercer Island may need to enter private property to demolish private structures made unsafe by disasters in order to eliminate immediate threats to life, public health, and safety. The demolition of privately owned structures deemed unsafe, and subsequent removal of demolition debris, may be required when the following conditions are met:

- The city of Mercer Island building official identifies that the structure is unsafe and poses an immediate threat to the public. An unsafe structure is so damaged or structurally unsafe that partial or complete collapse is imminent.
- The city of Mercer Island demonstrates that it has the authority and legal responsibility to enter private property to perform the demolition. The legal basis for this responsibility must be established by law, ordinance, or code at the time of the disaster and must be relevant to the post-disaster condition representing an immediate threat to life, public health, and safety, not merely defining the applicant’s uniform level of services.
- A legally authorized official has ordered the demolition of unsafe structures and removal of demolition debris.

The condemnation and demolition of structures must comply with existing City of Mercer Island condemnation and demolition procedures unless expedited procedures are in place due to the severity of the incident. Additional information on condemnation and demolition are provided below.

Demolition Documentation

The following documents should be collected and/or completed prior to demolition in order to comply with the city of Mercer Island regulations and conform to FEMA reimbursement guidelines.

- **Verification of ownership** ensures that the proper site and owner are identified and that the owner is aware of the nature of the scheduled building assessment.
- **Right-of-entry form** is signed by the property owner, which allows the building official to enter the property to complete the assessment. It often contains a hold harmless
agreement that documents the property owner’s promise that he or she will not bring legal action against the applicant if there is damage or harm done to the property. A sample Right of Entry form is included in Appendix H of this plan.

- **Building official assessment** is the documentation of the damage to the structure and the description of the threat to public health and safety. This assessment often contains the building official’s determination as to whether the structure should be condemned, repaired or demolished. This may be in the form of an official structural assessment.

- **Verification of insurance information** allows the applicant to pursue financial compensation if the property owner’s homeowner insurance policy covers demolition and debris removal.

- **Archeological review** outlines the archeological low-impact stipulations for demolition and debris removal activities; it also highlights the implications for the applicant if they fail to comply with the guidelines.

- **Environmental review** ensures that adverse impacts to protected environmental resources are minimized or avoided when removing debris from the proposed site. These reviews should be acceptable to the appropriate resource agency. Wetland and other water resources, hazardous materials, and habitats of endangered species are among the resources of most frequent concern.

- **Washington State Historical Preservation Office Review** confirms that the Washington State Historic Preservation Officer has been notified and correspondence has been received to absolve the area of any historic significance.

- **Photos** show the disaster-damaged condition of the property prior to the beginning of the demolition work. This is generally one or more labeled photographs that confirm the address and identified scope of work on the property. If it is determined that a structure needs to be demolished, additional documentation may be required for the applicant’s legal protection as well as the public’s health and safety during the demolition and debris removal operations.

- **Letter or notice of condemnation** is a document signed by the building official that outlines the specific threat to public safety and health.

- **Notice of demolition** is issued to inform the property owner when the demolition will begin and shall be posted in advance to provide a reasonable period of time for personal property to be removed. The applicant should attempt to notify the property owner, if not already contacted, through direct mail and local media.

- **Notice of intent to demolish** is normally provided for the public health and safety of neighboring residents. This notice is conspicuously posted on the structure to be demolished.

**Inspections**

A few days prior to the demolition, a city of Mercer Island representative should conduct an inspection of the site. The inspector should take photographs at each site visit for their records. These inspections and verifications generally include the following:
8. PRIVATE PROPERTY DEMOLITION AND DEBRIS REMOVAL

- **Water and sewer/septic tank inspection** to verify the utilities have been terminated and isolated from the proposed sphere of influence during the demolition operations. The inspector should verify that all other utilities have been terminated during the same visit.

- **Occupancy inspection** is conducted immediately prior to demolition to ensure that no one is physically in the building.

- **Open void inspection** is performed if the structure has a basement that is to be filled. This inspection will be conducted once the above-grade structure is gone and the inspector can visually see the entire below-grade excavation.

- **Post-demolition inspection** is completed once the structure is demolished, the debris is removed, and the site is graded.

**Debris Removal and Demolition of Private Property without Owner Consent**

If a privately owned structure meets the requirements for demolition but the consent by the owner is not obtained, an abbreviated and expedited procedure shall take place. The procedure should consist of the following:

- A notice describing the area and/or parcel of land where debris removal will take place shall be published in the Mercer Island Reporter (based upon the most expedient publication deadline) at least seven (7) calendar days prior to the beginning of the debris removal. During this seven (7) day period, property owners shall have the right and opportunity to go upon their property and remove such items as they deem appropriate, under rules promulgated by the City of Mercer Island.

- A notice shall be clearly posted in the area where debris removal will take place. The media will be advised of this action so as to give the broadest public notice. The notice shall contain the following information:
  - A general description of the area where debris removal shall take place.
  - The date and time when debris removal will begin.
  - The name and telephone number of the office where the property owner can secure information with regard to the debris removal.
  - A statement of the reason for the debris removal.

- In addition to requirement of publishing the above referenced notice, an attempt must be made to identify and contact the owner of the structure. (Attempt to contact shall only be required to consist of those measures reasonable and possible based upon the state of available records and communication channels, which may have been severely diminished as a consequence of the disaster).

- A determination by a designated officer of the planning department that the structure is unsafe, unfit for human habitation, or presents a danger to the public in its existing state.

- The posting of a notice of condemnation on the structure containing a phone number and physical address where the owner can contact the city of Mercer Island designating
the date of posting of the condemnation notice, and stating the time period available prior to demolition for contacting the city of Mercer Island,

- A waiting period of seven (7) days from the posting of the notice for a property owner to contact the city of Mercer Island and present compelling evidence to the Director of the planning department stating why the condemned structure should not be removed.
- At the next the city of Mercer Island Council meeting following said seven (7) day period, a public hearing shall be held. Upon confirmation of adjudication of condemnation of a structure, the structure shall be demolished.

If an owner does contact the city of Mercer Island as provided in the notice and the Director of the Building Department does not conclude that the evidence presented by the owner alleviates the danger to the public, an owner aggrieved of this process may appeal to the city of Mercer Island Council by written notice to the council prior to the demolition of the structure; however, while the city of Mercer Island officials should make every effort to schedule demolitions in a sector to allow time for such an appeal, no appeal shall be allowed to jeopardize the health and safety of the rest of the citizens by causing a postponement of demolition beyond the next city of Mercer Island Council meeting following the filing of such an appeal, unless postponement is ordered by the city of Mercer Island.

8.2 Special Considerations

Navigation Hazard Removal

Damage to the city of Mercer Island marinas and navigable waterways can include abandoned sunken boats and other debris that may impede navigation. Marine debris removal will be coordinated with the Mercer Island Marine Patrol and United States Coast Guard. Debris removal may also include assistance from marine salvage contractors, commercial divers, and certified surveyors to ensure that navigation hazards are removed safely and efficiently.

The two main challenges with navigation hazards are 1) locating the debris, and 2) finding the legal owners. Marinas can be visually inspected by helicopter or by boat. Sonar or dive teams may need to be employed for submerged vessels. A location or flotation marker may be helpful in order to keep vessel positions documented. The legal owner’s information may be obtained by using a vessel’s registration number and marina records.

Vehicles and Vessels

Vehicles, vessels, and other legally registered personal property present challenges if abandoned following an event due to their need to be individually processed and stored until they can be sold or destroyed based on an official declaration of abandonment. The city of Mercer Island must follow all local and state laws that apply to the impoundment, and the resulting salvage, or sale of the vehicle or vessel. The city of Mercer Island has identified the following procedure to impound and handle abandoned vehicles.

- Abandoned vehicles or vessels that are left and present a public nuisance will be tagged with a readily visible notification sticker. The sticker shall contain the following information:
- The date and time the sticker was attached.
- The identity of the individual tagging the vehicle.
- A statement that if the vehicle is not removed within twenty-four (24) hours from the time the sticker is attached, the vehicle may be taken into custody and stored at the owner's expense.
- The address and telephone number where additional information may be obtained.

- If the vehicle has current Washington registration plates, the city of Mercer Island shall check the records to learn the identity of the last owner of record and shall make a reasonable effort to contact the owner by telephone in order to give the owner the information on the notification sticker.
- If the vehicle is not removed within twenty-four (24) hours from the time the notification sticker is attached, the city of Mercer Island may take custody of the vehicle and provide for the vehicle's removal to a safe location. This location may include an impound yard or the yard of a registered tow-truck operator.

After a vehicle has been impounded, the city of Mercer Island will again notify the registered and legal owner that the vehicle has been declared abandoned in accordance with RCW 46.55.110. If the registered or legal owner has not contacted the city of Mercer Island within fifteen (15) days, the vehicle or vessel will either be junked, or sold at auction.

8.3 Eligibility of Private Property Demolition and Debris Removal Costs

In some cases, the costs of performing demolition of private structures may be eligible for Public Assistance grant funding. FEMA will consider alternative measures to eliminate threats to life, public health and safety posed by disaster-damaged unsafe structures, including fencing off unsafe structures and restricting access, when evaluating requests for Public Assistance grant funding for demolition work. The Public Assistance staff must also concur that the demolition of unsafe structures and removal of demolition debris are in the public interest.

Eligible costs for FEMA Public Assistance associated with the demolition of private structures may include, but are not limited to, the following:

- Capping wells
- Pumping and capping septic tanks
- Filling in basements and swimming pools
- Testing and removing hazardous materials from unsafe structures, including asbestos and household hazardous wastes.
- Securing utilities (electric, phone, water, sewer, etc.)
• Securing permits, licenses, and title searches. (Fees for permits, licenses, and titles issued directly by the applicant are not eligible unless it can be demonstrated that the fees are above and beyond administrative costs).

• Demolition of disaster-damaged outbuildings, such as garages, sheds, and workshops determined to be unsafe.

**Ineligible** costs associated with the demolition of private structures include:

• Removal of slabs or foundations, except in very unusual circumstances, such as when disaster-related erosion under slabs on a hillside causes an immediate public health and safety threat.

• Removal of pads and driveways.

Structures condemned as safety hazards before the disaster are not eligible for demolition and subsequent demolition debris removal under Public Assistance grant authority.

**Vehicles**

For the removal of vehicles and vessels to be eligible for Public Assistance Grant Funding, the following conditions must be demonstrated:

• The vehicle or vessel presents a hazard or immediate threat that blocks ingress/egress in a public-use area.

• The vehicle or vessel is abandoned, e.g. the vehicle or vessel is not on the owner’s property and ownership is undetermined.

• The city of Mercer Island followed local ordinances and state laws listed above by securing ownership.

• The city of Mercer Island verified chain of custody, transport, and disposal of the vehicle or vessel.

**Commercial Property**

The removal of debris from commercial property and the demolition of commercial structures are generally not eligible for Public Assistance grant funding. It is assumed and expected that these commercial enterprises retain insurance that can and will cover the cost of debris removal and/or demolition. However, in some cases as determined by the Federal Coordinating Officer (FCO), the removal of debris from private commercial property and/or the demolition of private commercial structures by a state or local government may be eligible for FEMA reimbursement only when such removal is in the interest of the public.

**Duplication of Benefits**

FEMA is prohibited from approving funds for work that is covered by any other source of funding. Therefore, the city of Mercer Island will take reasonable steps to prevent such an occurrence and will verify that insurance coverage or any other source of funding does not exist for private property debris removal work and the demolition of private structures.

The Right of Entry form included in Appendix H of this document has a clause stating that a
private property owner will re-pay the city of Mercer Island the amount of insurance proceeds received for any debris removal or demolition work performed.

If the property owner indicates that they have insurance that will cover all or part of the cost for debris removal and structure demolition, the insurance proceeds must be used as the first source of funding. Public Assistance grant funding may be eligible for the remainder of the cost of the eligible work after insurance proceeds are recouped from the property owner.
Section 9: Public Information and Communication Plan

The goal of the public information strategy is to ensure that the residents are given accurate and timely information for their use and their own individual planning purposes. If information is not distributed quickly, rumors and misinformation spread and erode confidence in applicant management of the recovery operations. This section provides information on the city of Mercer Island Public Information Strategy to assist in debris management operations.

9.1 Public Information Officer

The incident command structure for all debris incidents should include a Public Information Officer (PIO) to distribute information and educate citizens about the debris operations. Section 5, Current Resources, contains a description of the role and responsibilities of a PIO. The positions the city of Mercer Island staff can assume in the event of an emergency is listed in the Emergency Operations Center (EOC).

9.2 Communication and Public Education Strategy Prior to an Incident

The city of Mercer Island has developed a public information campaign around disaster debris causing incidents. The campaign is a coordinated effort to provide information to the city of Mercer Island employees, stakeholders, and the public prior to, during, and after a debris causing incident. The campaign introduces debris-causing incidents and includes the following elements:

- Develop messages based on situation including debris pick-up schedules, disposal methods and ongoing actions to comply with federal, state, and local environmental regulations, disposal procedures for self-help and independent contractors, restrictions and penalties for creating illegal dumps, curbside debris segregation instructions, public drop-off locations for all debris types and contact information.

- Following review and approval by the Incident Commander, distribute information through available channels including but not limited to the City website, RPIN, press releases, and email. When applicable, messages will also be distributed through signage and flyers.

Special Waste Considerations

Special waste items are those that need special handling, treatment, and disposal due to their hazardous potential, large volumes, or other problematic characteristics. Pre-scripted messages have been developed to provide the public with information on:

- How to identify Special Waste
- Why they should separate Special Waste
- Precautions to be taken if placing Special Waste in the Right of Way
9.3 Public Information Strategy during an Incident

The city of Mercer Island’s public information staff will provide information to media outlets and the public during an incident. These activities may be provided solely by the city of Mercer Island or through the cooperation of multiple jurisdictions.

Coordination with the Joint Information Center (JIC)

Communications should be coordinated through the Joint Information Center (JIC) or Joint Information System (JIS); if a JIC or JIS has not been established, coordination should take place through each the city of Mercer Island’s PIOs.

If a JIC is established during a debris-causing incident, a city of Mercer Island debris liaison or technical specialist will report to the JIC to assist the PIOs. The debris operations liaison will provide current information on such topics as:

- Cleanup instructions
- Status of cleanup
- Locations of drop-off or collection sites
- How to source-separate waste
- Handling procedures
- Illegal dumping provisions
- Addressing complaints regarding debris piles or illegal dumping

Pre-scripted Information

Debris management public information products should use various types of information vehicles (print, radio, internet, etc.) and include pre-scripted information concerning topics, such as:

- Debris pick-up schedules
- Disposal methods and ongoing actions to comply with federal, state, and local environmental regulations
- Disposal procedures for self-help and independent contractors
- Restrictions and penalties for creating illegal dumps
- Curbside debris segregation instructions
- Public drop-off locations for all debris types
- Process for answering the public’s questions concerning debris removal

Appendix L contains a message template for debris removal.
9. PUBLIC INFORMATION STRATEGY

Distribution Strategy
The public information strategy should include methods to disseminate the prepared information to the general public. This can be accomplished in a number of ways. The following are suggested vehicles for dissemination of information:

- **Media** – Local television, radio, newspapers, or community newsletters
- **Internet Site** – Regional Public Information Network (RPIN), www.mercergov.org
- **Direct Outreach** – Door hangers, direct mail, fact sheets, signage

The public information staff must take advantage of every information vehicle available if power, utilities, and other infrastructure have been damaged. Often, the best carriers of information are the responders in the field. The general public recognizes their role and frequently asks questions regarding the operations. Stocking the equipment and trucks with flyers, pamphlets, and other print media allows responders to perform their duties while also satisfying the public’s need for information. The Emergency Operations Center (EOC) and Public Information Officer (PIO) have a contact list for the media.

9.4 Public Notification and Communication Plan

This section is designed to help jurisdictions in the Seattle UASI Region develop a plan to communicate effectively with the public before, during, and after a debris-causing incident, and to collaborate with neighboring jurisdictions to deliver coordinated public messages.

Communication and Public Education Strategy Prior to an Incident

Prior to an event, Jurisdictions should develop a public information campaign around disaster debris-causing incidents. The campaign is a coordinated effort to provide information to jurisdiction employees, stakeholders, and the public prior to, during, and after a debris-causing incident. Jurisdictions should develop a public information campaign that introduces debris-causing incidents and includes the following:

- Identification of a debris-causing incident communications strategy
- Creation of debris management presentation designed for different audiences including policy makers, jurisdiction employees, and community groups.
- Development of material to be passed out prior to a disaster including pamphlets and fact sheets, press releases and tie-ins with other jurisdiction public information campaigns.
- Identification of anticipated issues during an event through message mapping, and creation of talking points, press releases, and disaster specific information.

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10 [http://www.rpin.org/rpinweb/](http://www.rpin.org/rpinweb/)
Message Mapping

Message mapping is a technique used to identify anticipated issues during a debris-causing incident and creates key messages that officials can use when providing information to the public prior to, or during an event. Ideally, public information officers throughout the Seattle UASI region work together to develop common message maps for debris causing events.

To begin a message map, a group of staff identifies types of debris causing incidents, such as an earthquake and flood. Next the group brainstorms all the possible questions the public may ask during the identified incident. After that the questions are grouped into similar topics and related categories. Finally, three key messages are created, including at least two supporting facts for each category. These messages should be used when creating communications prior to and during an emergency to create continuity in debris management communications.

Identification of Public Information Processes and Protocols

Identification of common process and protocols is important in providing a coordinated public message. Public Information Officers (PIO) in the Seattle UASI Region should consider the following questions when planning within their jurisdiction and at a regional level with neighboring jurisdictions:

- Who will have the lead responsibility for public messaging?
- Who will have decision-making authority for public messaging?
- Which department within a jurisdiction will release messages to the public?
- What guidelines will be used when crafting public information messages?
- How will messages be coordinated between jurisdictions?
- How will consistency be maintained between jurisdictions?

Develop Materials to be used During an Event

Another element that supports success of this plan is to develop types of public information prior to an incident that helps to ensure communication with the public is systematic, consistent, and relevant. In this way, the public receives clear and consistent messages throughout the incident and recovery phases of the operation.

The first step for developing public information and messages is to define the communication objective. Consider the following questions:

- Who are your audiences, both primary and secondary?
- What behaviors of your audience do you want to influence?
- What knowledge of your audience do you want to influence?
- What attitudes of your audience do you want to influence?
- What will help manage the public health threat?
- What do you need to accomplish?

At times, the use of different communications procedures by different jurisdictions can frustrate and confuse the public. To prevent this, common language and coordinated messages should be used in communications. Messages, at a minimum, should be:
• Clear, direct, and simple so that all residents in the Seattle UASI Region understand their meaning

• Free of technical jargon and acronyms

• Consistent with expert understanding of the crisis

• Distributed in more than one language

• Appropriate in tone and appeal for the intended audience; and

• Responsive to audience concerns

The following elements should be avoided when developing public messages:

• Technical jargon or unnecessary filler. It only complicates your message and alienates the audience.

• Condescending or judgmental phrases.

• Attacks. Avoid attacks against individuals and organizations—stay focused on issues.

• Promises or guarantees. For example, rather than, "We are protecting the public," say, "We are working to protect the public."

• Speculation that could be mistaken for fact.

• Discussion of money. Don't give the appearance that financial considerations outweigh concerns and obligations to public health and safety.

• Humor. The public may believe you don't take the situation seriously or that you don't care about their safety and health. Or they may get the impression that the risk is not serious. Or they may be offended that you can joke about a serious concern.

**Developing Messages in Alternate Languages and Formats**

When developing message materials, a jurisdiction should include languages likely to be spoken in the community. Based on community demographics in the Seattle UASI Region, messages may need to be developed in the following languages:

• English
• Spanish
• Korean
• Ukrainian
• Chinese
• Vietnamese
• Russian
• Somali
• Tagalog

Messages should also be crafted in alternate formats to target members of the community with special needs.
Distribution Strategy

Another key step in effective messaging is identifying methods for disseminating information to the public. The following is a list of suggested ways to communicate pertinent information:

- Regional Media – Local television, radio, newspapers, or community newsletters
- State and City Internet Sites – Displays of clear links to debris information flyers for printing
- Online Web sites and notification systems such as the Regional Public Information Network (RPIN), or the Northwest Warning Alert and Response Network (NWWARN)
- Public Forums – Interactive meetings at town hall or shopping mall kiosks
- Direct Mail Products – Door hangers, direct mail, fact sheets, flyers within billings, and billboards
- Hand delivery of messages, fact sheets, flyers to homes, shelters, community centers, or other temporary housing locations
- A hotline available both in and/or outside the Region for the public to call for debris management information, including pickup locations and disposal sites open to the public for various types of debris
- Megaphones and public address systems
- Posting on Web sites or bulletin boards at libraries, fire stations, and other public areas

Developing and maintaining a current contact list for the media (television, radio, cable access, ham operators, newspapers, neighborhood newsletters), public information officers, jurisdictional leads, and key decision-makers will make message distributing during an incident much easier.

Depending on the nature of an incident, some modes of communication will be more appropriate than others. For example, people may not have access to television or the Internet if the power is out; public forums may not be appropriate if roads are not passable.

Key Issues to Consider

Jurisdictions should use a technique such as message mapping to identify all issues that may require messaging during an event. Listed below are some ideas for ideas for creating message maps:

- How will contaminated waste be collected?
- What kind of health threat does contaminated waste pose for citizens?
- How should citizens collect human waste if the sewer system is inoperable?
- How will waste such as putrescibles, household hazardous waste, and human waste be handled and disposed of?
• Where should citizens put debris and how will it be collected?

If curbside collection:
• Will only certain types of debris be collected (will specific debris such as putrescibles be collected in the days following a disaster)?
• How will the debris be collected?
• How should citizens sort or separate their debris, especially hazardous waste?
• What are the schedules and the routes for collection?
• What is the final collection date for streets, sectors, or subdivisions?

If collection centers:
• Where are the collection centers?
• Will residents be charged a fee to use the collection center?
• What are the daily collection center hours?
• Is debris to be segregated at the collection centers?
• What types of debris will be accepted at the centers?
• How long will the collection centers accept disaster-related debris?

For DMS sites:
• Where can a resident find a map of the DMS sites for public debris drop-off of household hazardous waste, construction and demolition debris, etc.? Are these areas segregated and well marked for vehicular traffic?
• Will residents be charged a fee to use the DMS sites?
• Will residents be restricted as to how much disaster-related debris can be dropped off at the DMS sites?
• Will the DMS sites have burning, chipping, or grinding operations? If so, during which hours will these activities take place? Address any environmental concerns the public may have as well.
• How long will residents be able to bring their disaster-related debris to the DMS sites?
• How long will the DMS sites be open to process (reduce/recycle) debris?
• Are there traffic changes that will impact the general public due to the location or operation of the DMS sites?

Addressing Concerns and Complaints
How well a jurisdiction identifies and responds to the public’s issues and concerns following an event is important for building long term trust within the community. Prior to an event, jurisdictions should identify strategies for addressing public concerns during an incident including:
• A toll-free number that can be activated during an event and staffed to provide information and route requests.

• An information center at an accessible location for walk-up questions and requests.

• Teams of jurisdiction staff who can travel through neighborhoods distributing information.

### 9.5 Public Information Strategy during an Incident

The jurisdiction’s public information staff will provide information to media outlets and the public during an incident. These activities may be provided solely by a single jurisdiction or through cooperation of multiple jurisdictions.

**Coordination with the Joint Information Center (JIC)**

Communications should be coordinated through the Joint Information Center (JIC) or Joint Information System (JIS); if a JIC or JIS has not been established, coordination should take place through each jurisdiction’s Public Information Officers (PIOs).

If a JIC is established during a debris-causing incident, a debris liaison or technical specialist should be available to the JIC to assist the PIOs. The debris operations liaison can provide current information on such topics as:

• Cleanup instructions
• Status of cleanup
• Locations of drop-off or collection sites
• How to source-separate waste
• Handling procedures
• Illegal dumping provisions
• Addressing complaints regarding debris piles or illegal dumping

### 9.6 Reviewing and Updating Public Information Strategy

The public information strategy should be evaluated after each disaster. Planning staff should assess whether the public information strategy addressed the needs of the community in a clear and timely manner.

Changes should be made in the public information strategy to reflect lessons learned from a disaster. The strategy should also be updated annually to reflect advances in communications technology and major policy changes in solid waste processing.

It is important to note that the public will likely assume the strategy used in one incident will be appropriate for use in the next one. If changes are made to the debris management program, these changes will need to be communicated to the public as part of a public information campaign.
Section 10: Training and Exercises

This section summarizes training and exercise components necessary to support disaster debris operations. The City of Mercer Island staff participating in disaster debris management operations has emergency management and position-specific training, depending on their expected role during a debris causing incident. For further information on the City of Mercer Island exercises and training, consult the City of Mercer Island Exercise and Training Plan.

10.1 General Emergency Management Training

General emergency management training requirements are developed as part of National Incident Management System (NIMS). The NIMS online courses are available at http://www.fema.gov/emergency/nims/. Additional FEMA courses and information are available at http://training.fema.gov/is/crslist.asp. The NIMS report maintains a record of staff training. The following are examples of recommended courses that staff complete:

- IS-700 NIMS: National Incident Management System (NIMS), An Introduction (http://training.fema.gov/EMIWEB/IS/is700.asp)
- IS-800 NRF: National Response Framework, An Introduction (http://training.fema.gov/emiweb/is/is800b.asp)
- IS-100.b: Introduction to Incident Command System, ICS-100 (http://training.fema.gov/emiweb/is/is100b.asp)
- IS-200.b: ICS for Single Resources and Initial Action Incidents (http://training.fema.gov/emiweb/is/is200b.asp)
- ICS-300: Intermediate NIMS ICS (classroom)
- ICS-400: Advanced NIMS ICS (classroom)

These requirements are listed as part of the Fiscal Year 2007 NIMS Training Requirements and the 2008 Five-Year NIMS Training Plan. Additional information on position-based NIMS training requirements is available from FEMA’s Emergency Management Institute and the Washington Military Department Emergency Management Division.

10.2 Position-Specific Training

Specific training is available for staff that will support debris management operations. This includes:

- IS-630: Introduction to the Public Assistance Program: This class provides an introduction to the FEMA Public Assistance Program and how it applies locally to the

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11 ICS-300 and ICS 400 are recommended for Command and General staff, strike team leaders, task force leaders, unit leaders, division/group supervisors, and branch directors, and is recommended for emergency operations center staff.
12 http://training.fema.gov/
13 http://emd.wa.gov/training/training.shtml
City of Mercer Island. It is well suited for debris managers, DMS site managers, finance and administration staff supporting debris operations, and any other staff who direct or have an active role in debris clearance, collection, and disposal operations. The class is available online through the FEMA Emergency Management Institute.

- **IS-631: Public Assistance Operations**: This class builds on IS-630 and provides additional information on the FEMA Public Assistance Program. It is well suited for debris managers, DMS site managers, and finance and administration staff supporting debris operations. The class is available online through the FEMA Emergency Management Institute.

- **IS-632: Introduction to Debris Operations in FEMA’s Public Assistance Program**: This class provides an introduction to local debris management operations and the FEMA public assistance program. It is well suited for any staff who will be participating in debris management operations, including Debris Managers, DMS Site Managers, debris monitors, and finance and administration staff supporting debris operations. The class is available online through the FEMA Emergency Management Institute.

- **E202 Debris Management**: This class provides in-depth training on a variety of debris management topics. The course is delivered in a classroom setting and is provided through a variety of sources, including the FEMA Emergency Management Institute and Washington Emergency Management Division.

### 10.3 Exercises

Procedures for disaster debris removal can be tested through discussion-based and operational-based exercises, as defined in the Homeland Security Exercise and Evaluation Program. The purpose of conducting exercises is to determine the overall efficiency and effectiveness of the City of Mercer Island Operational Disaster Debris Management Plan or a subset of the plan in a disaster scenario. These procedures can be exercised specifically using a debris management scenario, or as part of another exercise. At minimum, operational exercises involving the debris management plan will be conducted every four years.

The plan will be modified based on after action reports (AARs) and improvement plans (IPs) from exercises, as well as actual events.

The exercises will be developed and executed individually and through collaboration with other regional stakeholders. Regional stakeholders that will be considered include:

- **Federal Agencies**
  - U.S. Army Corps of Engineers
  - Federal Emergency Management Agency
  - Environmental Protection Agency

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10. TRAINING AND EXERCISES

- Washington State Agencies
  - Washington Military Department, Emergency Management Division
  - Department of Ecology

- Local and Regional
  - County Agencies
  - Local Health Department
  - Local Hazardous Waste Management Program in King County
  - Agencies/Jurisdictions Neighboring the City of Mercer Island
Section 11: Eligibility for Funding

This chapter outlines the current funding eligibility requirements for debris removal under the Public Assistance Program, as described in FEMA 325 Debris Management Guide (FEMA 2007). The information may in some cases be different from local requirements, and is meant to provide baseline guidance to jurisdictions within the Seattle UASI Region when drafting their own funding eligibility requirements. Note that FEMA’s funding policy changes over time, so it is important to consult FEMA’s debris management documentation during every incident or during annual plan review.

11.1 Debris Removal from Public Property

Debris removal work from public property is usually eligible for FEMA assistance under the Public Assistance Program. Eligible debris removal work must meet the following criteria:

- The debris was generated by a major disaster.
- The debris is located within a designated disaster area on an eligible applicant’s improved property or right-of-way.
- The debris removal is the legal responsibility of the city or the county.

Debris on public property that is not eligible for FEMA assistance under the Public Assistance Program includes the following:

- Unimproved property or undeveloped land
- Debris removal from a facility that is not eligible for funding under the Public Assistance Program
- Debris on federal lands or facilities that are the authority of another federal agency or department

11.2 Debris Removal from Private Property

Private property debris removal (PPDR) is generally not eligible for reimbursement under FEMA’s Public Assistance Program because debris on private property does not typically present an immediate health and safety threat to the public. Additionally, debris removal from private property is generally the responsibility of individual private property owners and other sources of funding such as insurance are commonly available to property owners to cover the cost of work. However, if private property owners move disaster-generated debris to the public right-of-way, the costs associated with removing that debris from the right-of-way may be eligible under the Public Assistance Program. Debris management planners need to consider when and how private property owners can dispose of their disaster debris and make appropriate plans prior to a debris-causing incident including collection and public communication strategies.

When large-scale debris-causing incidents cause mass destruction and generate large quantities of debris over vast areas, debris on private property may pose health and safety
threats to the public-at-large. If private property owners are not available because they have evacuated, state or local government may need to enter private property to remove debris considered to be an immediate threat to the life, health, and safety of its residents. In such situations, the FEMA Federal Coordinating Officer (FCO) is authorized to approve the provision of public assistance for removal of debris from private property when it is considered to be in the public interest.

Eligible debris removal work from private property may include removal of the following:

- Large piles of disaster-generated debris in the living, recreational, and working areas of properties
- Disaster-generated debris obstructing primary ingress and egress routes to improved property
- Debris created by removal of damaged interior and exterior materials from improved property
- Household hazardous wastes
- Disaster-generated debris on private roads and/or streets of a gated community, provided that the removal of the debris has become the legal responsibility of an eligible jurisdiction

Eligibility also includes disaster-damaged limbs and leaning trees in danger of falling on improved property, primary ingress or egress routes, or public rights-of-way. However, tree removal carries some qualifying conditions described below:

- Hazardous tree removal is eligible only if the tree is greater than 6 inches in diameter and:
  - The tree has more than 50 percent of the crown damaged or destroyed
  - The tree has split trunk or broken branches that expose heartwood
  - The tree itself is leaning at an angle greater than 30 degrees and shows evidence of ground disturbance
- Hazardous limb removal is eligible only if the limb (hanger) is greater than 2 inches in diameter measured at the point of break.

Ineligible debris removal on private property includes the removal of the following:

- Debris from vacant lots, forests, heavily wooded areas, unimproved property, and unused areas
- Agricultural debris used for crops or livestock
- Concrete slabs or foundations-on-grade
- Reconstruction debris consisting of materials used in the reconstruction of disaster-damaged improved property
11.3 Debris Removal from Private Commercial Property

Debris removal from commercial property and the demolition of commercial structures generally are not eligible for public assistance grant funding. Commercial enterprises are the exception because they have insurance that will cover the cost of debris removal and/or demolition. However, in some cases, as determined by the FCO, debris removal from private commercial property and/or the demolition of private commercial structures by a state or local government may be eligible for FEMA reimbursement only when the removal is in the public interest.

Industrial parks, private golf courses, commercial cemeteries, apartments, condominiums, and mobile homes in commercial trailer parks are generally considered commercial property.

11.4 Processing and Disposal

Landfill tipping fees usually include fixed and variable costs along with some special taxes or fees assessed by the jurisdiction. Examples of variable costs include costs for labor, supplies, maintenance, utilities, and gas or recovery systems. Fixed costs generally include equipment, construction, permits, landfill closure, post closure, and amortized costs for ancillary landfill building structures.

Eligible landfill costs are limited to the variable and fixed costs that are directly related to landfill operations. Jurisdictions may incorporate special taxes or fees into the landfill tipping fee to fund government services or public infrastructure. When tipping fees include such costs, those costs are not eligible for public assistance grant funding.
Section 12: References


- King County. 2006. *Disaster Debris Management Operating Plan*. King County, Seattle, WA.


- Snohomish County. 2004. *Comprehensive Solid Waste Management Plan*. Snohomish County, Everett, WA.


- Snohomish County. 2007. *Debris Management Plan*. Snohomish County, Everett, WA.


## APPENDIX A: DEBRIS RESOURCES

### APPENDIX A-1

**Debris Resources – Staff**

<table>
<thead>
<tr>
<th>City of Mercer Island Personnel Position</th>
<th>Potential Debris Management Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Director</td>
<td>- Debris Removal Manager</td>
</tr>
<tr>
<td></td>
<td>- Debris Management Subject Matter Expert (SME)</td>
</tr>
<tr>
<td>Streets Maintenance Manager</td>
<td>Debris Collection Supervisor</td>
</tr>
<tr>
<td>Streets Generalist</td>
<td>Debris Site Supervisor</td>
</tr>
<tr>
<td>Accounting Manager</td>
<td>Finance, Administration, and Logistical Staff</td>
</tr>
<tr>
<td>Building Official</td>
<td>Structural Engineer</td>
</tr>
<tr>
<td>Assistant City Attorney</td>
<td>Legal Staff</td>
</tr>
<tr>
<td>Deputy City Manager</td>
<td>Public Information Officer</td>
</tr>
<tr>
<td>- Information Services Manager</td>
<td>Technology Resources</td>
</tr>
<tr>
<td>- GIS Analyst</td>
<td></td>
</tr>
<tr>
<td>Utility Manager</td>
<td>Right-of-Way Manager</td>
</tr>
</tbody>
</table>
Local Hazardous Waste Management Program in King County (LHWMP)

Factoria Household Hazardous Waste Drop-Off Site
13800 S.E. 32nd St.
Bellevue, WA 98005
206-296-4692

South Seattle Household Hazardous Waste Collection Facility
8105 5th Ave. South
Seattle, WA 98108
206-296-4692

<table>
<thead>
<tr>
<th>Both of these locations accept the following:</th>
<th>Both of these locations DO NOT accept the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol cans (not empty)</td>
<td>Containers of household hazardous waste over 5 gallons</td>
</tr>
<tr>
<td>Automobile batteries</td>
<td>Aerosol cans (empty)</td>
</tr>
<tr>
<td>Automobile products</td>
<td>Biological waste</td>
</tr>
<tr>
<td>Batteries</td>
<td>Bullets, munitions, gunpowder, fireworks, etc..</td>
</tr>
<tr>
<td>Fluorescent light bulbs and tubes</td>
<td>Computers</td>
</tr>
<tr>
<td>Gasoline</td>
<td>Empty containers</td>
</tr>
<tr>
<td>Glues and adhesives</td>
<td>Explosives (ethyl ether, picric acid, dioxane, tetrahydrofuran)</td>
</tr>
<tr>
<td>Household cleaners</td>
<td>Explosives (dynamite)</td>
</tr>
<tr>
<td>Hobby chemicals</td>
<td>Garbage</td>
</tr>
<tr>
<td>Oil-based paints</td>
<td>Latex Paint</td>
</tr>
<tr>
<td>Pesticides and garden chemicals</td>
<td>Medical wastes (including sharps)</td>
</tr>
<tr>
<td>Products that contain mercury</td>
<td>Medications</td>
</tr>
<tr>
<td>Pool and spa supplies</td>
<td>Oil-contaminated soil</td>
</tr>
<tr>
<td>Propane tanks</td>
<td>Paint brushes and empty paint cans</td>
</tr>
<tr>
<td>Road flares</td>
<td>smoke detectors, radioactive wastes</td>
</tr>
<tr>
<td>Thinners and solvents</td>
<td>Televisions</td>
</tr>
<tr>
<td></td>
<td>Tires</td>
</tr>
</tbody>
</table>

Safety Tips:
- Keep products in original containers
- Label products not in original containers
- Secure products so they won’t tip over or leak
- Secure the entire load in your vehicle or trailer
- Store products away from passenger compartment of vehicle and keep them separate from items you wish to retain
- Don’t exceed maximum quantity limits

All information on this page is from the Local Hazardous Waste Management Program in King County (LHWMP) and additional specifics and details are available on their website.

Reference: http://www.lhwmp.org/home/HHW/whattobring.asp
## APPENDIX A-3
Debris Resources – External Agencies

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<th>Agency</th>
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<td>Local Hazardous Waste Management Program in King County: Office of the Program Administrator</td>
<td>150 Nickerson St., Suite 100 Seattle, WA 98109-1658</td>
<td>206-296-4692 206-263-8899</td>
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<tr>
<td>Local Hazardous Waste Management Program in King County</td>
<td>Hazardous Waste Program King County Water and Land Resources Division 130 Nickerson St., Suite 100 Seattle, WA 98109-1658</td>
<td>206-296-4692 206-263-8899</td>
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<tr>
<td>Environmental: Public Health – Seattle &amp; King County</td>
<td>Hazardous Waste Program Environmental Health Services Division Public Health – Seattle &amp; King County 401 Fifth Ave., Suite 1100 Seattle, WA 98104</td>
<td>206-205-4394</td>
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<td>Public Health – Seattle &amp; King County</td>
<td>2124 - 4th Ave Seattle, WA 98121</td>
<td>206-296-4755</td>
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<tr>
<td>King County Solid Waste Division</td>
<td>201 S. Jackson St., Suite 701 Seattle, WA 98104</td>
<td>206-296-4466</td>
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<tr>
<td>Puget Sound Clean Air Agency</td>
<td>1904 Third Avenue Suite 105 Seattle, WA 98101</td>
<td>206-343-8800 800-552-3565 Air Quality Hotline: 800-595-4341</td>
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<td>Environmental Protection Agency: Region 10 (AK, ID, OR, WA)</td>
<td>Environmental Protection Agency Region 10 1200 Sixth Avenue, Suite 900 Seattle, WA 98101</td>
<td>206-553-1200 (800) 424-4372</td>
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### APPENDIX B

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**FORCE ACCOUNT LABOR SUMMARY RECORD**

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<tr>
<th>LOCATION/SITE</th>
<th>CATEGORY</th>
<th>PERIOD COVERING</th>
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**DESCRIPTION OF WORK PERFORMED**

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<th>BENEFIT RATE/HR</th>
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<th>TOTAL COSTS</th>
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**TOTAL COST FOR FORCE ACCOUNT LABOR REGULAR TIME**

**TOTAL COST FOR FORCE ACCOUNT LABOR OVERTIME**

**CERTIFY THAT THE ABOVE INFORMATION WAS OBTAINED FROM PAYROLL RECORDS, INVOICES, OR OTHER DOCUMENTS THAT ARE AVAILABLE FOR AUDIT.**

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**PAPERWORK BURDEN DISCLOSURE NOTICE**

Public reporting burden for this form is estimated to 30 minutes per response. The burden includes the time for reviewing instruction, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (3067-0151). Submission of the form is required to obtain or retain benefits under the Public Assistance Program. **Please do not send your completed form to the above address.**
APPENDIX C

DMS Site Inventory

Site Name: 
Site Address: 
Estimated Property Size: acres 
Site Coordinates: N W 
Site Owner: 
Ownership Type: [ ] Jurisdiction Property [ ] County Property [ ] Private Property [ ] Other (describe) 
Owner Address: 
Owner Phone: 
Owner Email: 

Site and Neighboring Properties Characterization

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<td>Proximity to Major Roadway</td>
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<td>Fencing and Other Security Features</td>
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Site Preparation Level of Effort [ ] High [ ] Medium [ ] Low 
Suitability to Wet Weather [ ] High [ ] Medium [ ] Low 
Ability to Serve Spatial Area [ ] High [ ] Medium [ ] Low 

List Jurisdictions that could utilize this site:

Closest Landfill Available to This Site:
Recommended Uses for This Site:

- C&D
- Vegetative
- White Goods
- Hazardous Waste
- Other (describe)

Reduction Methods Acceptable for This Site:

- Open Burning
- Incineration
- Grinding

Site Map:

Date of Site Survey:

Picture Numbers Taken During Site Survey:

Potential Site Rating

- Primary
- Secondary
- Tertiary
Appendix D: Lifelines and other Debris Clearance Priorities

Rods/areas will be cleared based on priority:
- Lifelines
- Major freeways or arterial routes
- Clear areas necessary for movement of goods and services/economic restoration
  - Town Center Business District
  - South Shopping Center
- Minor arterial routes
- Local routes

Lifelines:
- SE 36th St (from Gallagher Hill Rd. to EOC and I-90 Interchange)
- Island Crest Way (from I-90 Interchange to SE 68th)
- East Mercer (from I-90 Interchange to SE 70th Pl.)
- West Mercer (from I-90 Interchange to SE 70th St.)

Clear areas necessary for movement of goods and services / economic restoration
- Town Center Business District:
  - SE 27th to I-90
- South Shopping Center:
  - SE 68th

Minor Arterial Routes:
- SE 40th (from East to West Mercer)
- 86th Ave SE (from SE 40th to Island Crest)
Appendix E:
Important City of Mercer Island Facilities/Infrastructure

- Emergency Operations Center (EOC) - SE 36th
- Emergency Well Site – 88th Ave. SE
- Mercer View Community Center – SE 26th
- Fire Department – 78th Ave. SE
Appendix F:

8 Pre-Designated Locations to Serve as Debris Management Sites (DMS) and Neighborhood Collections Sites (NCS)

- Luther Burbank Park (2430 84th Ave SE)
- Mercedale Park (3205 77th Ave SE)
- Homestead Park (8100 SE 40th St)
- Boat Launch (3600 E Mercer Way)
- Island Crest Park (5701 Island Crest Way)
- South Mercer Playfields (8220 SE 78th St)
- Wildwood Park (7400 86th Ave SE)
- Clarke Beach Park (7700 E Mercer Way)
Appendix G:

City of Mercer Island Equipment Resources

(Location: City Maintenance Yard)

- JD Loader
- CAT 318 Backhoe
- John Deere Backhoe
- (2) 7yd Dump Trucks
- (2) 5yd Flat Bed Dump Trucks
- Elgin Sweeper
## APPENDIX H: Forms

### DAILY OPERATIONAL REPORT

**CONTRACT NO. __________________________**

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**TRUCK PLACARD**

- **Company Name**
- **Truck Number**
- **Truck Weight**
- **Weighed by and Date**
Health and Safety Plan Supplement

Purpose
The purpose of this Health and Safety Supplement is to support the existing City of Mercer Island safety plan and procedures in regards to debris removal activities. These are recommended baseline safety provisions. Ultimately, health and safety is the responsibility of the contracted parties involved in debris removal activities. This document will outline some of the general steps necessary to provide a safe work environment for debris removal and monitoring employees. In addition, this document will identify some representative work hazards and the appropriate measures to reduce risk of injury.

Dissemination of Information
The debris hauling contractor and monitoring firm project managers will be provided with this document and will be expected to disseminate the information and guidelines to their respective personnel. A copy of the document should be available for consultation. In addition, elements of the document will be reviewed periodically during the project to increase worker awareness.

Compliance
The debris hauling contractor and monitoring firm project managers are responsible for health and safety compliance of their respective personnel and subcontractors. Any crews or individuals that are not compliant shall be suspended from debris removal activities until the situation is remedied. Offenders of safety policies and procedures will be dismissed from the project entirely.

Job Hazard Assessment
Though debris removal activities are fairly similar among events, assessing the particular hazards of each disaster is an important part of maintaining health and safety for the debris removal workers. At a minimum, the following areas of focus should be considered as part of job hazard assessment:

- **Disaster Debris** – Disasters that result in property damage typically generate large quantities of debris which must be collected and transported for disposal. The type of debris varies depending on the characteristics of the region (e.g. terrain, climate, dwelling and building types, population, etc.), age and use of structure and the debris-generating event (e.g. type, event strength, duration, etc.). In addition, the disaster debris produces a host of uneven surfaces, which must be negotiated.

- **Debris Removal** – Often the removal of disaster debris involves working with splintered, sharp edges of vegetative or construction material debris. Many disasters
involve heavy rains or flooding. Consequently, disaster debris is damp and heavier than usual. As weights increase, so does the risk of injury.

- **Removal Equipment** – In most disasters, debris must be removed from the public Right-of-Way (ROW) to provide access for emergency vehicles and subsequent recovery efforts. Debris collection and removal requires the use of heavy equipment and power tools to trim, separate and clear disaster debris.

- **Traffic Safety** – The ROW is located primarily on publicly-maintained roads. As a result, much of the debris removal process takes place in traffic of varying levels of congestion. In addition, disasters often damage road signs, challenging safety on the road.

- **Wildlife Awareness** – Disasters are traumatic events for people as well as wildlife. Displaced animals (rodents), reptiles and insects pose a hazard to debris removal workers.

- **Debris Disposal** – After disaster debris is collected it is often transported to a Debris Management Site (DMS). Upon entry to a DMS, the monitoring firm will assess the volume of disaster debris being transported. The collection vehicle will then dispose of the disaster debris and the debris will be reduced either through a grinding operation or incineration or sent offsite for recycling. The DMS is a common area for injury. Response and recovery workers in this environment are more likely to be exposed to falling debris, heavy construction traffic, high noise levels, dust and airborne particles from the reduction process. Load spotters will be trained to watch for hazardous waste and other items that do not belong at the DMS.

- **Climate** – Debris-generating disasters often occur in areas or seasons with extreme weather conditions. The effects of temperature and humidity on physical labor must be monitored, and proper work-rest intervals must be assessed.

### Administrative and Engineering Controls

The use of administrative and engineering controls can greatly reduce the threats to public health and safety in debris removal activities. Some common administrative and engineering controls used in the debris removal process are:

#### Collection Operations

- Conduct debris removal operations during daylight hours only (unless site is fully lit for nighttime operations).
- Limit clean-up operations to one side of the road at a time.
- Limit collection work under overhead lines Work with PUD to clear fallen lines prior to working in that area.
- Inspect piles before using heavy equipment to remove them to ensure that there are no hazardous obstructions.
- Make sure that all collection vehicles have properly functioning lights, horns and back-up alarms.
- Load collection vehicles properly (not overloaded or unbalanced).
- Cover and secure loads, if necessary.
- When monitoring the collection process, stay alert in traffic and use safe driving techniques.
- Watch for hazardous waste, white goods, propane tanks and other hazardous materials.

**Power Tools**

- Inspect all power tools before use.
- Do not use damaged or defective equipment.
- Use power tools for their intended purpose.
- Avoid using power tools in wet areas.

**Debris Reducing Machinery (Grinders/Wood Chippers)**

- Do not wear loose-fitting clothing.
- Follow the manufacturer’s guidelines and safety instructions.
- Guard the feed and discharge ports.
- Do not open access doors while equipment is running.
- Always chock the trailer wheels to restrict rolling.
- Maintain safe distances.
- Never reach into operating equipment.
- Use lock out/tag out protocol when maintaining equipment.

**TDSRS/Disposal Operations**

- Use jersey barriers and cones to properly mark traffic patterns.
- Use proper flagging techniques for directing traffic.
- Monitor towers must not exit into traffic and should have hand and guard rails to reduce trips and falls.
- Monitor towers must have properly constructed access stairways with proper treads and risers and proper ascent angle (4:1 height/width ratio).
- Monitor towers must be surrounded by jersey barriers which protect the tower and monitors from being struck by inbound or outbound collection vehicles.
- Monitor towers should be located upwind from dust- and particulate generating activities.
- A water truck should spray the site as necessary to control airborne dust and debris.

**Personal Protective Equipment**

Personal Protective Equipment (PPE) is the last resort to providing a safe working environment for workers. PPE does not eliminate or even reduce hazards as administrative and engineering controls do. PPE works to reduce the risk of injury by creating a protective barrier between the individuals and work place hazards.
Proper use of PPE includes using PPE for its intended purpose. For example, using the wrong type of respirator might expose the worker to carcinogenic particulates. Properly fitting the equipment to the user may require examination by a medical professional. PPE that does not fit well will not provide maximum protection and will decrease the likelihood of the individual continuing to use the equipment. In addition, improper use may result in serious injury or death. The proper use of the equipment is outlined in detail in the manufacturer’s instructions.

The following PPE may be applicable in standard ROW, Right-of-Entry (ROE), and vegetative and construction & demolition debris removal activities:

- **Head Protection** – Equipment designed to provide protection for an individual’s head against hazards such as falling objects or the possibility of striking one’s head against low hanging objects. PPE used to protect the head must comply with ANSI Z89.1-1986, “American National Standard for Personnel Protection - Protective Headwear for Industrial Workers – Requirements.”

- **Foot Protection** – Equipment designed to provide protection for an individual’s feet and toes against hazards such as falling or rolling objects, objects that may pierce the sole or upper section of the foot, etc. PPE used to protect the feet and toes must comply with ANSI Z-41-1991, “American National Standard for Personal Protection - Protective Footwear.”

- **Hand Protection** – Equipment designed to provide protection for an individual’s hands against hazards such as sharp or abrasive surfaces. The proper hand protection necessary is dependent upon the situation and characteristics of the gloves. For instance, specific gloves would be used for protection against electrical hazards while the same gloves may not be appropriate in dealing with sharp or abrasive surfaces.

- **Vision/Face Protection** – Equipment designed to provide protection for an individual’s eyes or face against hazards such as flying objects. PPE used to protect eyes and face must comply with ANSI Z87.1-1989, “American National Standard Practice for Occupational and Educational Eye and Face Protection.” Again, the proper eye/face protection necessary is dependent upon the situation and characteristics of the equipment. For instance, eye and face protection used by individuals who are welding may not be appropriate for individuals operating a wood chipper.

- **Hearing Protection** – Equipment designed to provide protection for an individual’s hearing against prolonged exposure to high noise levels. According to OSHA, the permissible level of sound is an average of 90 decibels over the course of an eight (8) hour work day. Above the sound exposure level, hearing protection is required. PPE used to protect hearing must comply with ANSI S3.19-1974, “American National Standard Practice for Personal Protection-Hearing Protection.”
- **Respiratory Protection** – Equipment designed to provide protection for an individual’s respiratory system against breathing air contaminated with hazardous gases, vapors, airborne particles, etc. PPE used to the respiratory system must comply with ANSI Z88.2-1992. In addition, the use of respiratory protection requires a qualitative fit test and in some cases a pulmonary fit test by a licensed medical professional.

**PPE Debris Removal Activity**

PPE requirements are made based upon the results of the job hazards assessment. The following list of PPE is organized by debris removal activity and is meant to be a representative list. Specific PPE requirements vary from location to location. In general, individuals involved in the debris removal process should personally monitor water consumption to avoid dehydration and use appropriate skin protection (breathable clothes, light colors, sunscreen, etc.). Ultimately, the selection of PPE is the responsibility of the debris hauling contractor and monitoring firm project managers.

**Debris Collection Monitoring**

The hazards of disaster debris collection monitoring include, but are not limited to: struck by vehicles, falls or trips on uneven surfaces, cuts, abrasions or punctures from vegetative or C&D sharps. PPE requirements include:

- Reflective vest;
- Foot protection (rugged shoes or boots, steel toe and shank if required); and
- Long pants.

**Debris Disposal Monitoring**

The hazards of disaster debris disposal monitoring include, but are not limited to: struck by or caught in/between vehicles, falls or trips on stairs or uneven surfaces, cuts, abrasions or punctures from vegetative or C&D sharps and struck by falling disaster debris. Monitor towers must be equipped with a first aid kit. PPE requirements include:

- Reflective vest;
- Foot protection (rugged shoes or boots, steel toe if required);
- Long pants; and
- Hard Hat.

**Debris Removal**

The hazards of disaster debris removal include, but are not limited to: struck by vehicles, falls or trips on uneven surfaces, cuts, abrasions or punctures from vegetative or C&D sharps and airborne debris. In addition, PPE requirements include:

- Reflective vest;
- Vision and hearing protection;
- Foot protection (rugged shoes or boots, steel toe and shank if required); and
- Long pants.
Debris Disposal, Reduction, and Recycling

The hazards of disaster debris disposal, recycling, and reduction include, but are not limited to: struck by or caught in/between vehicles, falls or trips on uneven surfaces, cuts, abrasions or punctures from vegetative or C&D, hazardous waste, sharps, struck by falling disaster debris and airborne particles. PPE requirements include:

- Reflective Vest;
- Foot protection (rugged shoes or boots, steel toe if required);
- Vision and hearing protection;
- Long pants;
- Gloves; and
- Hard Hat.

Debris Cutting and Trim Work

The hazards of disaster debris cutting and trimming work include, but are not limited to: struck by or caught in/between vehicles, falls or trips on uneven surfaces, cuts, abrasions or punctures from power tools, vegetative or C&D sharps, struck by falling disaster debris and airborne particles. PPE requirements include:

- Reflective Vest;
- Hand and Foot protection (rugged shoes or boots, steel toe if required);
- Vision and hearing protection
- Long pants; and
- Hard Hat

For additional information regarding health and safety requirements, please contact Occupational Safety and Health Administration (OSHA).
Appendix J:
EXAMPLE OF LUMP SUM CONTRACT
FOR DEBRIS REMOVAL

A lump sum contract establishes a total price using a one item bid from a CONTRACTOR. It should be used only when a scope of work is clearly defined, with areas of work and quantities of material clearly identified. Lump sum contracts can be defined in one of two ways:

- **Area Method**, where the scope of work is based on a one time clearance of a specified area, or
- **Pass Method**, where the scope of work is based on a certain number of passes through a specified area, such as a given distance along a right of way.

### ARTICLE 1.
**AGREEMENT BETWEEN PARTIES**

This contract is made and entered into on this the _____ day of__________, 20__, by and between the city/county of ________________________________________________, hereinafter called the ENTITY, and _________________________________, hereinafter called the CONTRACTOR.

### ARTICLE 2.
**SCOPE OF WORK**

This contract is issued pursuant to the Solicitation and Procurement on ____________________ for the removal of debris caused by the sudden natural or human-made disaster of _________________________________. It is the intent of this contract to provide equipment and resources to remove all hazards to life and property in the affected communities. Cleanup, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

The Work shall consist of cleanup or demolition and removal as outlined in the specifications on drawings and on block sector maps attached to the invitation for bid number _______.

### ARTICLE 3.
**SCHEDULE OF WORK**

Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The Work under this contract will commence on _________________, 20__. Maximum allowable time for completion will be _____ calendar days, unless the ENTITY initiates additions or deletions by written change order. If the CONTRACTOR does not complete the work within the allotted time, liquidated damages will be assessed in the amount of _____________ per day.

### ARTICLE 4.
**CONTRACT PRICE**

The lump sum price for performing the Work stipulated in the contract documents is _____________.

### ARTICLE 5.
**PAYMENT**

The CONTRACTOR shall submit certified pay requests for completed work. The ENTITY shall have ten (10) calendar days to approve or disapprove the pay request. The ENTITY shall pay the
CONTRACTOR for his performance under the contract within twenty (20) days of approval of the pay estimate. On contracts over 30 days in duration, the ENTITY shall pay the CONTRACTOR a pro-rata percentage of the contract amount on a monthly basis, based on the amount of work completed and approved in that month. The ENTITY will remunerate the CONTRACTOR within thirty (30) days of the approved application for payment, after which interest will be added at a rate of _____ per annum. Payments shall be subject to a retainer of_______ on each payment. Retainer shall be released upon substantial completion of the work.

Funding for this contract is authorized pursuant to Public Law of the State of Washington and ___________________________ (local statute or ordinance).

ARTICLE 6.

CHANGE ORDERS

If the scope of work is changed by the ENTITY, the change in price and contract time will be promptly negotiated by the parties, prior to commencement of work.

ARTICLE 7.

CONTRACTOR’S OBLIGATIONS

The CONTRACTOR shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the CONTRACTOR’s personnel and equipment is the responsibility of the CONTRACTOR. Additionally, the CONTRACTOR shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the ENTITY. The CONTRACTOR shall be responsible for the protection of existing utilities, sidewalks, roads, buildings, and other permanent fixtures. Any unnecessary damage will be repaired at the CONTRACTOR’s expense.

ARTICLE 8.

ENTITY’S OBLIGATIONS

The ENTITY's representative(s) shall furnish all information, documents, and utility locations necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the ENTITY. A representative will be designated by the ENTITY for inspecting the work and answering on-site questions.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

ENTITY (City, County, Town, Etc.)

_________________________________________________________ Seal CONTRACTOR

(Include Address, City, State)

by___________________________________________________
the Principal of the Firm
Appendix K:

ROE No. ___________  GPS Location:
Longitude ___________
Latitude ___________

RIGHT-OF-ENTRY ON PRIVATE PROPERTY FOR DEBRIS REMOVAL

Property Address/Description __________________________
Name (Owner or Tenant) ___________________________
City ___________________________

Right of Entry
I certify that I am the owner, or an owner’s authorized agent, of the property described above. I grant, freely and without coercion, the right of access and entry to said property to the United States Government, including but not limited to the US Army Corps of Engineers and the Federal Emergency Management Agency (FEMA), the State of Washington, City of Mercer Island, and each of their agencies, agents, contractors, and subcontractors, for the purpose of removing and/or clearing any or all storm-generated debris from the above-described property.

Hold Harmless
I understand that this permit is not an obligation upon the government to perform debris removal. I agree to indemnify and hold harmless the United States Government, the US Army Corps of Engineers, FEMA, the State of Washington, City of Mercer Island, and any of their agencies, agents, contractors, and subcontractors, for damages of any type whatsoever, either to the above-described property or to persons situated thereon. I release, discharge, and waive any action, either legal or equitable, that might arise by reason of any action of the above entities. I will mark any sewer lines, septic tanks, water lines, and utilities located on the described property.

Duplication of Benefits
Most homeowner’s insurance policies have coverage to pay for removal of storm-generated debris. I understand that Federal law (42 United States Code 5155 et seq.) requires me to reimburse the Federal government, through the City of Mercer Island, the cost of removing the storm-generated debris to the extent covered in my insurance policy. I also understand that I must provide a copy of the proof/statement of loss from my insurance company to the City of Mercer Island. If I have received payment, or when I receive payment, for debris removal from my insurance company, or any other source, I agree to notify and send payment and proof/statement of loss to City of Mercer Island for final recovery by FEMA. I understand that all disaster related funding, including that for debris removal from private property, is subject to audit. (I/We) acknowledge(s) that information submitted will be shared...
with other government agencies, federal and nonfederal, and contractors, their subcontractors and employees for purposes of disaster relief management and for the objectives of this right of entry.

**By signing this document, (I/we) certify that (I/we) (am/are) the owner of this property and /or that (I/we) (am/are) authorized to sign this right of entry.**

For the consideration and purposes set forth herein, I hereby acknowledge by my dated signature below.

Signed this _____ day of ________________________, 2010.

(All owners must sign)

Print Name:_______________________ Print Name:_______________________

Signature:_______________________ Signature_______________________

Print Name:_______________________ Signature:_______________________

Mailing Address (if different from municipal address listed above):

Current Telephone Number(s)

Name of Insurance Company:____________________________

Policy Number:________________

Please do not remove the following items:

_____________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
TIME AND MATERIALS CONTRACT
FOR DEBRIS REMOVAL

ARTICLE 1.
AGREEMENT BETWEEN PARTIES
This contract is made and entered into on this the ___ day of ________________, 20___, by and between the jurisdictions of_____________________, hereinafter called the ENTITY, and ____________________________, hereinafter called the CONTRACTOR.

ARTICLE 2.
SCOPE OF WORK
This contract is issued pursuant to the Solicitation and Procurement on ___________________ for the removal of debris caused by the sudden natural or human-made disaster of ___________________ to ___________________. It is the intent of this contract to provide equipment and staff to remove all hazards to life and property in the affected communities. Cleanup, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

The Work shall consist of the provision of equipment and labor to cleanup and remove debris as directed by the ENTITY.

ARTICLE 3.
SCHEDULE OF WORK
Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The Work under this contract will commence on ____________. The equipment shall be used for one hundred (100) hours, unless the ENTITY initiates additions or deletions by written change order. Based upon unit prices of equipment and labor, no minimum or maximum number of hours is guaranteed.

ARTICLE 4.
CONTRACT PRICE
The hourly rates for performing the work stipulated in the contract documents, which have been transposed from the low bidder’s bid schedule, are as follows:

<table>
<thead>
<tr>
<th>Equipment/Machine/Operator</th>
<th>Mobilization Cost</th>
<th>Hourly Rate</th>
<th>Demob. Cost</th>
<th>Manufacturer, Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total unit rate shall be given which includes maintenance, fuel, overhead, profit, and any other costs associated with the equipment.

Estimated Cost per unit of material. Only actual invoice amounts will be paid.
Labor Man-hours includes protective clothing, fringe benefits, hand tools, supervision, transportation, and any other costs.

ARTICLE 5.
PAYMENT

The ENTITY shall pay the CONTRACTOR for mobilization and demobilization if the Notice to Proceed is issued and will pay for only the Time that the equipment and manpower is actually being used in accomplishing the work. The CONTRACTOR shall be paid within thirty (30) days of the receipt of a pay estimate and verification of Work by the inspector.

ARTICLE 6.
CLAIMS

Not Applicable.

ARTICLE 7.
CONTRACTOR’S OBLIGATIONS

The CONTRACTOR shall supervise accomplishment of the Work effort directed by labor and proper equipment for all tasks. Safety of the CONTRACTOR’s personnel and equipment is the responsibility of the CONTRACTOR. Additionally, the CONTRACTOR shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of the contract.

Caution and care must be exercised by the CONTRACTOR not to cause any additional damage to sidewalks, roads, buildings, and other permanent fixtures.

ARTICLE 8.
ENTITY’S OBLIGATIONS

The ENTITY’s representative(s) shall furnish all information necessary for commencement of the Work and direct the Work effort. Costs of construction permits, disposal sites, and authority approvals will be borne by the ENTITY. A representative will be designated by the ENTITY for inspecting the work and answering onsite questions. This representative shall furnish the CONTRACTOR with daily inspection reports, including Work accomplished and certification of hours worked.

The ENTITY shall designate the public and private property areas where the Work is to be performed. Copies of complete “Right of Entry” forms, where they are required by State or local law for private property, shall be furnished to the CONTRACTOR by the ENTITY. The ENTITY shall hold harmless and indemnify the CONTRACTOR and his employees against any liability for any and all claims, suits, judgments, and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are the result of negligence on the part of the CONTRACTOR.

The ENTITY will terminate the contract for failure to perform or default by the CONTRACTOR.

ARTICLE 9.
INSURANCE AND BONDS

The CONTRACTOR shall furnish proof of Worker’s Compensation Coverage, Automobile Liability Coverage, and Comprehensive General Liability Insurance (Premises-Operations. Personal Injury, etc.) as deemed necessary by the ENTITY.

Surety: The CONTRACTOR shall deliver to the ENTITY fully executed Performance and Payment Bonds in the amount of 100% of the contract amount, if required by the specifications, general or special conditions of the contract. The ENTITY will reimburse the CONTRACTOR for the costs of the bonds, the costs of which will be included in the base bid.
ARTICLE 10.
CONTRACTOR QUALIFICATIONS
The CONTRACTOR must be duly licensed in the State per statutory requirements.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:
City of Mercer Island

__________________________________________________________ Seal CONTRACTOR
(Include Address, City, State)

by_________________________________________________
the Principal of the Firm
Appendix M:

UNIT PRICE CONTRACT
FOR DEBRIS REMOVAL

ARTICLE 1.
AGREEMENT BETWEEN PARTIES
This contract is made and entered into on this the ___ day of _____________, 20___, by and between the jurisdiction of ____________________________, hereinafter called the ENTITY, and ____________________________, hereinafter called the CONTRACTOR.

ARTICLE 2.
SCOPE OF WORK
This contract is issued pursuant to the Solicitation and Procurement on ____________________, for the removal of debris caused by the sudden natural or human-made disaster of ________________ to ________________. It is the intent of this contract to provide equipment and personnel to remove all hazards to life and property in the affected communities. Cleanup, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety, and 2) that which is considered essential to the economic recovery of the affected area.

The Work shall consist of cleanup or demolition and removal as outlined in the specifications, on drawings, and on block sector maps attached to the invitation for bid number __________.

ARTICLE 3.
SCHEDULE OF WORK
Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The Work under this contract will commence on ________________, 20__. Maximum allowable time for completion will be ______ calendar days, unless the ENTITY initiates additions or deletions by written change order. Subsequent changes in cost and completion time will be equitably negotiated by both parties pursuant to applicable State law. Liquidated damages shall be assessed at $_______/calendar day for any days over the approved contract amount.

ARTICLE 4.
CONTRACT PRICE
The unit prices for performing the Work stipulated in the contract documents, which have been transposed from the low bidder’s bid schedule, are as follows:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Unit of Measure</th>
<th>Description</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Cost of Bonds</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>
Debris shall be classified as one of the following units: cubic yards, each, square foot, Lineal foot, gallon, or an approved unit measure applicable to the specific material to be removed.

ARTICLE 5.
PAYMENT

The CONTRACTOR shall submit certified pay requests for completed Work. The ENTITY shall have ten (10) calendar days to approve or disapprove the pay request. The ENTITY shall pay the CONTRACTOR for his performance under the contract within twenty (20) days of approval of the pay estimate. On contracts over thirty (30) days in duration, the ENTITY shall pay the CONTRACTOR a pro-rata percentage of the contract amount on a monthly basis, based on the amount of work completed and approved in that month. The ENTITY will remunerate the CONTRACTOR within thirty (30) days of the approved application for payment, after which interest will be added at a rate of ______ per annum. Payments shall be subject to a retainage of ______ on each payment. Retainage shall be released upon substantial completion of the Work.

Funding for this contract is authorized pursuant to Public Law of the State of _______(local statute or ordinance).

ARTICLE 6.
CLAIMS

If the CONTRACTOR wishes to make a claim for additional compensation for work or materials not clearly covered in the contract, or not ordered by the ENTITY as a modification to the contract, CONTRACTOR shall notify the ENTITY in writing. The CONTRACTOR and the ENTITY will negotiate the amount of adjustment promptly; however, if no agreement is reached, a binding settlement will be determined by a third party acceptable to both ENTITY and CONTRACTOR under the auspices of applicable State law.

ARTICLE 7.
CONTRACTOR’S OBLIGATIONS

The CONTRACTOR shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the CONTRACTOR’s personnel and equipment is the responsibility of the CONTRACTOR. Additionally, the CONTRACTOR shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the ENTITY. The CONTRACTOR shall be responsible for the protection of existing utilities, sidewalks, roads, buildings, and other permanent fixtures. Any unnecessary damage will be repaired at the CONTRACTORS expense.

ARTICLE 8.
ENTITY’S OBLIGATIONS

The ENTITY’s representative(s) shall furnish all information, documents, and utility locations necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the ENTITY. A representative will be designated by the ENTITY for inspecting the work and answering onsite questions.

The ENTITY shall designate the public and private property areas where the disaster mitigation Work is to be performed. Copies of complete “Right of Entry” forms, where they are required by State or local law for private property, shall be furnished to the CONTRACTOR by the ENTITY. The ENTITY shall hold harmless and indemnify the CONTRACTOR judgments and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are caused by the gross negligence of the CONTRACTOR, his subcontractors, or his employees.

The ENTITY will terminate the contract for failure to perform as specified. or for default by the CONTRACTOR.
ARTICLE 9.

INSURANCE AND BONDS

The CONTRACTOR shall furnish proof of Worker’s Compensation Coverage, Automobile Liability Coverage, and Comprehensive General Liability Insurance (Premises-Operations, Personal Injury, etc., as deemed necessary by the ENTITY).

Surety: The CONTRACTOR shall deliver to the ENTITY fully executed Performance and Payment Bonds in the amount of one hundred percent (100%) of the contract amount, if required by the specifications. or general or special conditions of the contract. The ENTITY will reimburse the CONTRACTOR for the costs of the bonds, the costs of which will be included in the base bid.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

The City of Mercer Island

_______________________________________________ Seal CONTRACTOR
(Include Address, City, State)

by_________________________________________________
the Principal of the Firm
APPENDIX N:

Washington Public Assistance Damage Assessment

This information is provided by the Washington Emergency Management Division (EMD) at http://www.emd.wa.gov/disaster/WashingtonMilitaryDepartmentEmergencyManagementDivision-DisasterAssistance-PublicAssi.shtml

Purpose
At the onset of an emergency or disaster, before any federal funding is provided, the Washington Emergency Management Division (EMD) must determine the extent of the damages sustained by state and local public facilities. Through the Preliminary Damage Assessment (PDA) process EMD obtains the information necessary to determine if the criteria has been met to forward a request through the governor to FEMA for a Presidential Disaster Declaration for Public Assistance.

The intent of the PDA process is to depict the magnitude, impact, dollar damage, and the actions that are needed to deal with and recover from the event.

The PDA process is necessary to request federal assistance for the state and each affected county. If damage assessment information is not received when needed, we are unable to include a county’s information in the initial assessment of needs for public facilities.

Assessment of Damages
In order to determine the extent of an event, state agencies and county emergency management offices complete an initial assessment of the damages affected jurisdictions sustained in an impacted county. Each county emergency management office coordinates the data collection for all potential applicants within their county - their jurisdictions.

Who are the Applicants / Jurisdictions?
Applicants (jurisdictions) are defined as: state agencies, all local public agencies – counties, cities, towns, utilities (water, sewer, electrical) and other special-purpose districts to include school districts and fire districts, Indian tribes, and certain private non-profit organizations that provide essential governmental-type services.

How Does the Assessment Process Start?
Each local agency/jurisdiction completes the Preliminary Damage Assessment Estimates – Site/Category (PA-2) form for each category of work (type of damage) they incurred as a result of the disaster. The cost estimates from each category of work are included in the total cost estimates that are listed on the Preliminary Damage Assessment Summary (PA-1) form. The forms are then forwarded to the County Emergency Management Office.

Please remember - the County is the coordination point for all local jurisdictions. The information the counties submit to EMD should include completed forms for each jurisdiction that sustained damages within their county.

Each impacted county emergency management office is responsible for notifying all jurisdictions in their county to complete a PDA. Counties are requested to complete a PDA of
the county-owned damages sustained in their county and to coordinate the PDA data collection from all jurisdictions in their county. The PDAs submitted from all jurisdictions within the county are submitted to EMD, Public Assistance Program. The counties are not responsible for completing the forms for their jurisdictions.

We ask that each county emergency manager:

1. Advise us of their primary point of contact. This is very important when we coordinate the follow-on joint PDA with FEMA.

2. Notify us if their county did NOT experience extensive damages to public roads, sewers, water systems, schools, utility districts, etc., or

3. Notify us if their county did sustain extensive damages by completing and submitting the PDA forms (PA-1 and PA-2) to EMD Public Assistance.

Each local jurisdiction and Indian Tribe is asked to forward the completed PDA forms to their county emergency management office for coordination and submission to the state.

The counties need to send the forms to:
Email: publicassist@emd.wa.gov, or
Fax: (360) 570-6350

**Preliminary Damage Assessment (PDA) Forms**

To prepare the initial assessment, each public agency should complete a PA-2 worksheet for each category of damage incurred by the disaster and a PA-1 summary sheet.

The PDA forms are in one Excel workbook. You should save a copy of the workbook to your computer and then fill in the forms on this saved copy. The forms cannot be completed online. We also recommend that you keep a paper copy of the forms in case you do not have power or access to a computer when you need the forms.

The **PDA Form** includes:

- **Data Sheet.** This is the 1st page in the Excel workbook. Completion of this page automatically fills the demographic information on each PA-1 and PA-2 form.

- **PA-1,** Preliminary Damage Assessment Summary. This is required and provides the totals of each damage category and an overview of the event’s effects.

- **PA-2,** Preliminary Damage Assessment Estimates - Site/Category. The PA-2 forms are required and should be completed before the PA-1 summary form. There is a PA-2 form for each Category of Work.

- **PA-3,** PDA Totals – County’s Use. This is a project tracking tool for county emergency managers and is not a required form.

The **Instructions** for the PDA forms are listed below. These are in a separate Word document.
Timeline
If it is determined that a formal PDA will be pursued, federal/state PDA teams will arrive in each county. These teams will coordinate directly with the county’s emergency management office. A representative knowledgeable about the damages should be available to help the teams verify the damages.

In general, the following timeline exists:

- One week for each jurisdiction to complete their forms, submit to their county emergency manager, and
- The county submits to EMD. State agencies submit directly to EMD.
- One week for EMD to send out joint FEMA/State teams to verify all damage.
- One week for EMD to collate all data, prepare request for disaster declaration, submit to the governor for approval, and forward approved request package to FEMA.
- Thirty days total to complete PDA and submit through governor to FEMA.

Contact
For more information, please contact the Program Manager at (253) 512-7078.
Appendix O:

### PDA DATA SHEET

<table>
<thead>
<tr>
<th>Date:</th>
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<table>
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**Who Must Complete PDA?**

**Instructions for PDA forms**

**Printing**

Complete this sheet first. The information will automatically enter on each page in the workbook. NOTE: These data cells are not protected on the worksheets. If you need to change this demographic data for a specific category of work, you can do this on the applicable page. Complete each Category of Work page that you need for your damages, the information that is needed on each page is shaded light yellow.

**ALL applicants** with damages must complete a set of PDA forms for each county in which they sustained damages. Each local applicant must submit these forms to the county's emergency manager. Each county emergency manager is responsible for submitting all PDAs within their county to the WA Emergency Management Division (EMD). All state agencies must complete a set of PDA forms for each county where they sustained damages and submit the forms directly to EMD. EMD will total each county's damages to determine if thresholds are met.

**When Printing:** Text boxes are formatted to word wrap. However, if you enter more information than the cell will show, you will need to adjust the cell's size in order to print all entered information. Print margins are formatted to print all pages as they are currently formatted. If you only have four sites out of a possible 15 sites, the informational blocks for 15 sites will still print.

**Instructions** for the PA-1 and PA-2 PDA forms are available in a separate Word document. The instructions are available at our web site: http://emd.wa.gov. If you need assistance, please contact the Public Assistance Program at 360-570-6305. Submit the forms via e-mail to: publicassist@emd.wa.gov, or fax 360-570-6350.

Submit the PA-1 and PA-2 PDA forms via e-mail to: publicassist@emd.wa.gov, or fax to 360-570-6350. If you need assistance, please contact the Public Assistance Program at 360-570-6305.
Debris Removal – Mercer Island, WA

City wide debris removal will begin full scale on [date].

According to [who?], "This will be a long, extensive process with over XXX million cubic yards of debris to be removed that could take up to XXX months. We are asking the public to follow the guidelines for debris separation and ask for their patience and cooperation during this huge undertaking."

Property owners are responsible for all clean-up on private property. Debris should be piled on the public right of way.

Separate debris in the following three categories:

- Vegetative (limbs, tree trunks, etc)
- Construction & Demolition (lumber, plywood, insulation carpet, etc.)
- White Goods (refrigerators, stoves, etc.)

**DO NOT** mix any household garbage with debris.

**DO NOT** place anything on or near water meters or fire hydrants.

Be cautious of placement and height of debris piles relative to power lines.
Appendix P:

UASI Disaster Debris Management Plan Phase Two

Debris Management and Neighborhood Collection Site Requirements

The following is a summary of the draft debris management site requirements and review/activation process identified by the project team with guidance from the Snohomish Health District, Seattle-King County Health Department, and Tacoma-Pierce County Health Department.

Neighborhood Collection Site Requirements

A neighborhood collection site is a temporary solid waste handling site used to consolidate debris within a local jurisdiction or area for transfer to a debris management site (DMS) or a permanent solid waste handling facility. Neighborhood collection sites should be developed and operated using the Washington State Department of Ecology’s Intermediate Solid Waste Handling Facility Standards under WAC 173-350-310 as guidance. Design standards for neighborhood collection sites include:

- Control public access and prevent unauthorized vehicular traffic and illegal dumping of waste.
- All containers used to store debris shall be constructed of durable, watertight, and easily cleanable materials with a lid or screen on top that prevents the loss of materials during transport and access by rats and other vermin.
- Provide effective means to control rodents, insects, birds and other vectors.
- Provide effective means to control litter.
- Provide pollution control measures to protect surface and ground waters, including runoff collection and discharge designed to handle a twenty-five-year storm as defined in WAC 173-350-100, and equipment cleaning and washdown water.
- Provide pollution control measures to protect air quality.
- Provide all-weather surfaces for vehicular traffic.

It is recognized that some of these standards may not apply to neighborhood collection sites, or may not be applicable to a sites depending a variety of operating conditions.

As part of the Solid Waste Handling Facility Standards, Jurisdictions will develop an operating plan for each neighborhood collection site. An operating plan template for neighborhood collection sites is included as attachment B to this summary.

Debris Management Site Requirements

A debris management site is a temporary solid waste handling site used to collect, sort, and reduce debris, including special waste, prior to final recycling or disposal. DMSs should be developed and operated using the Washington State Department of Ecology’s “Pile” Standards

Design standards for DMS include:

- Identify the maximum waste capacity, elevation and boundaries of the site prior to operation.
- Control public access and prevent unauthorized vehicular traffic and illegal dumping of waste.
- Provide effective means to control rodents, insects, birds and other vectors.
- Provide effective means to control litter.
- Provide pollution control measures to protect air quality.
- Provide all-weather surfaces for vehicular traffic.
- Meet the performance standards of WAC 173-350-040.

All piles shall be designed to:

- Control public access.
- Comply with the uniform fire code as implemented through the local fire control agency.
- Minimize vector harborage to the extent practicable.
- Provide all-weather approach roads and exits.

Piles of putrescible waste, contaminated soils or dredged material, or waste determined by the jurisdictional health department/district to be likely to produce leachate posing a threat to human health or the environment shall also:

- Place waste on a sealed surface, such as concrete or asphaltic concrete, to prevent soil and ground water contamination. The surface shall be durable enough to withstand material handling practices.
- Control run-on and runoff from a twenty-five-year storm, as defined in WAC 173-350-100.

It is recognized that some of these standards may not apply to debris management sites, or may not be applicable to sites depending on a variety of operating conditions. In general putrescibles and municipal solid waste will not be stored or handled at a DMS.

**DMS and Neighborhood Collection Site Review and Activation Process**

Meeting participants identified the following process for site review and identification:

- Jurisdictions complete a Site Inventory/Investigation of Site Suitability Form (attachment A) for each potential neighborhood collection site or debris management site.
- Site inventories are provided to Health Department/District for cursory review.
- During event jurisdiction submits “notice of intent to operate” prior to site activation (attachment D).
- Jurisdiction verifies baseline site evaluation prior to activation.

**Health Agency Contacts for Review**

The following contact information is provided for submitting debris management and/or neighborhood collection sites for review and for submitting "notice of intent to operate" form (attachment D) prior to activating a site.

**Snohomish County Health District**

Aran Enger  aenger@shd.snohomish.wa.gov  425-339-5250
General Contact Number  425-339-5250

Seattle-King County Public Health
Bill Lasby  bill.lasby@kingcounty.gov  206-263-8495
Teri Barclay  teri.barclay@kingcounty.gov  206-263-8428
General Contact Number  206-296-4600

Tacoma Pierce County Health Department
Andy Comstock  acomstock@tpchd.org  253-798-6538
General Contact Number  253-798-6500
Attachment A

Debris Management Site Inventory
Investigation of Site Suitability

<table>
<thead>
<tr>
<th>Site Name:</th>
<th>Parcel Number</th>
<th>Site Address:</th>
<th>Estimated Property Size:</th>
<th>Parcel Number</th>
<th>Site Coordinates:</th>
<th>N</th>
<th>W</th>
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<tr>
<td>Site Owner:</td>
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<td></td>
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</tr>
<tr>
<td>Ownership Type:</td>
<td>[ ] Jurisdiction Property</td>
<td>[ ] County Property</td>
<td>[ ] Private Property</td>
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<td>Other (describe):</td>
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<table>
<thead>
<tr>
<th>Site and Neighboring Properties Characterization</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Current Use</td>
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<tr>
<td>Proposed Future Land Use</td>
<td></td>
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<tr>
<td>Current Land use/Zoning</td>
<td></td>
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<tr>
<td>Restoration Time Requirements</td>
<td></td>
</tr>
<tr>
<td>Proximity to School, Church, or Community Center</td>
<td></td>
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<tr>
<td>Property Topography</td>
<td></td>
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<tr>
<td>Environmental Considerations</td>
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</tr>
<tr>
<td>Open Water or Wetlands</td>
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<tr>
<td>Proximity to Ground Water Wells (wellhead protection area)</td>
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<tr>
<td>Within 100-year floodplain</td>
<td></td>
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<tr>
<td>Soil/Slope Integrity</td>
<td></td>
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<tr>
<td>Surface Water Drainage</td>
<td></td>
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<tr>
<td>Suitable for use in wet weather</td>
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<tr>
<td>Prevailing Wind Direction</td>
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<tr>
<td>Brownfield Site</td>
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<td>Superfund Site</td>
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<tr>
<td>Archeological or Historic Properties or Artifacts</td>
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<tr>
<td>Underground Utilities (water, wastewater, natural gas, electricity)</td>
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<tr>
<td>Noise Control Buffer</td>
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<tr>
<td>Adjacent to Airport/Airfield</td>
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<tr>
<td>Access to Electrical Service</td>
<td></td>
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<tr>
<td>Access to Water Service</td>
<td></td>
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<tr>
<td>Access to Sewer Service</td>
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<tr>
<td>Existing Lighting</td>
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<tr>
<td>Traffic Ingress/Egress Capacity</td>
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<tr>
<td>Transportation accessibility (topography, traffic congestion)</td>
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<tr>
<td>Capable of Accepting Heavy Trucks (site and neighboring roads)</td>
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<tr>
<td>Proximity to Major Roadway</td>
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<tr>
<td>Fencing and Other Security Features</td>
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<tr>
<td>Site Preparation Level of Effort</td>
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<td>Suitability to Wet Weather</td>
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<tr>
<td>Ability to Serve Spatial Area</td>
<td>[ ] High</td>
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</table>

Recommended Uses for This Site:

[ ] C&D
[ ] Vegetative
[ ] White Goods
☐ Hazardous Waste  ☐ Other (describe)

Reduction Methods Acceptable for This Site:
☐ Open Burning  ☐ Incineration
☐ Grinding  ☐ Other (describe)

Site Map: Please indicate intended use areas, traffic management patterns, utilities, and any other elements that will involve or impact operation of the site.

List Jurisdictions that could utilize this site:
Closest Recycling Facility Available to This Site:

Closest Yard Waste/Composting Facility Available to This Site:

Closest CDL Facility Available to This Site:

Closest Transfer Station Available to This Site:

Closest Landfill Available to This Site:

Date of Site Survey:
List pictures or other observations taken during site visit:

Potential Site Rating  □ Primary  □ Secondary  □ Tertiary
Attachment B

Neighborhood Collection Site Operating Plan

1.1 Summary
The City of Mercer Island has 8 pre-designated locations that will serve as Neighborhood Collection Site (NCS) and Debris Management Sites (DMS). The facility provides service to the local residential population. This Plan of Operation provides a description of the procedures that the City of Mercer Island will use to operate the site.

1.1.1 Operation Summary
The NCS consists of an asphalt unloading area. Customers back up to a curb at the edge of the unloading area and deposit their solid waste. Debris is picked up and transported to and dumped at a permitted disposal site in King County.

1.1.2 Regulatory Compliance
The NCS should meet the applicable regulatory requirements of WAC Chapter 173-350-310 “Intermediate Solid Waste Handling Facilities.” The following sections briefly outline the WAC requirements and how they have been addressed.

1.1.2.1 WAC 173-350-310 Intermediate Solid Waste Handling Facilities
This document will serve as the operating plan identified in WAC 173-350-310. As defined in the WAC “The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:”

a. A description of the types of solid wastes to be handled at the facility; see section 2.4
b. A description of how solid wastes are to be handled on-site; see section 2.6
c. A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility; see section 2.11
d. Safety and emergency plans; see section 2.8 and 2.10
e. A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs; see section 3.1
f. For putrescibles wastes, an odor management plan describing the actions to be taken to control nuisance odors; not applicable as waste will be removed from the NCS daily.
g. The forms used to record volumes or weights; see section 3.2
h. Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

1.1.2.2 WAC 173-350-310 (5) (a) (ii) Operating Standards for Drop Box Facilities
Operations at this facility will meet the requirements of WAC 173-350-310 (5) (a) (ii) Operating Standards for Drop Box facilities:

a. Be serviced as often as necessary to ensure adequate dumping capacity at all times.
Storage of waste outside the drop boxes is prohibited;
b. Be protective of human health and the environment;
c. Control rodents, insects, and other vectors;
d. Control litter;
e. Prohibit scavenging;
f. Control dust;
g. For putrescible waste, control nuisance odors; and
h. Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance;

2 OPERATIONS

2.1 Hours
The NCS will be open during daylight hours. The site hours may be and could be revised to meet operational needs.

2.2 Staffing
The NCS will be staffed by one or more staff responsible for observing and measuring refuse loads, keeping the site free of litter and debris, contacting the hauler when drop box containers are full and contacting the appropriate authorities in case of emergency.

2.3 Vehicle Traffic
All vehicles using the Neighborhood Collection Site (NCS) will enter and exit the site following the designated signage.

2.4 Allowable Materials
These sites will only handle the following types of debris:

- Construction, Demolition, and Land-clearing debris
- Vegetative debris
- Municipal Solid Waste
- Putrescibles
- Solid, Mud, and Sand

2.5 Site Operations
Debris will be transported to the site by citizens and unloaded by citizens. Debris will be emptied at a permitted facility when full.

2.5.1 Debris Movement
Vehicles will back up to a curb in the unloading area and dump debris into the drop box containers. Scavenging will not be permitted at the site. Customers are instructed to keep small children and animals in their vehicles when at the facility.

2.5.2 Cleaning
Site staff will be responsible for picking up debris and litter at the site, sweeping the concrete area and sweeping and raking spilled debris. Debris and spilled refuse will be placed in the drop box containers.

2.6 Site Controls
Any nuisance conditions at the sites will be referred to the Mercer Island Police Department.
2.6.1 Site Access
Fences will be used to prevent unauthorized access to the site.

2.6.2 Vector Control
Waste will be removed from the NCS on a daily basis. NCS site grounds will be kept clean by operating personnel. No formal vector or pest controls beyond removing the waste on a daily basis and maintaining the NCS site in a clean & sanitary condition are anticipated.

2.6.3 Bird Hazards
No bird hazards are anticipated for this NCS site. Waste will be removed from the NCS on a daily basis. NCS site grounds will be kept clean by operating personnel. No bird controls beyond removing the waste on a daily basis and maintaining the NCS site in a clean & sanitary condition are anticipated.

2.6.4 Nuisance Odors
Waste will be removed from the NCS on a daily basis. NCS site grounds will be kept clean by operating personnel. No nuisance odors are anticipated as all waste will be removed by the end of each day and the site will be maintained in a clean & sanitary condition.

2.6.5 Storm water runoff
Storm water impacts from this temporary NCS site are not anticipated as the drop boxes & waste unloading activities will be located on an impervious surface area and wastes will be immediately loaded into the drop boxes. Spilled waste at this temporary NCS site will be swept up or otherwise picked up on an ongoing basis during site operations and all wastes will be removed by the end of each day.

2.7 Safety
The City of Mercer Island is in compliance with all OSHA and WISHA regulations.

2.8 Emergency Plans and Procedures
The general types of emergency conditions that may occur include fire and explosions. A list of emergency phone numbers and contacts will be kept at the facility and updated annually. The general response to an emergency is:

- Assess the conditions and the impact on public health and operation of the facility.
- Determine the immediate response required with regard to public health and safety considerations.
- Notify the appropriate personnel, utilities and regulatory agencies as soon as possible.
- Take corrective action to restore the facility to normal operation.

Emergency telephone numbers include:

- Fire Department 911
- Police Department 911
- Police Dispatch Non-Emergency 425-577-5656
- Mercer Island Police general information 206-275-7610
- King County Health Department 206-296-4600
- Department of Ecology (360) 407-6300
The nearest hospital is Overlake Hospital, which is located in Bellevue, Washington.

Overlake Hospital Medical Center
1035 116th Ave. NE
Bellevue, WA 98004
425-688-5000

2.8.1 Fire
Immediate fire protection for the site will be provided by portable fire extinguishers. Staff will be familiar with the location of the fire extinguishers and trained in their use. All fire extinguishers will be inspected annually. Any smoldering debris found at the facility will be extinguished by portable fire extinguisher. The waste will then be turned over and allowed to cool. All debris must be completely extinguished. In case of a major fire, the public will be evacuated, all personnel will leave the area and the local fire department will be notified. The site will be closed to all emergency vehicles.

2.8.2 Explosions
The most likely source of explosion is reactive or explosive waste inadvertently disposed of by the public. This could include small amounts of hazardous wastes, containers of gasoline or other explosive liquid, fireworks or ammunition. To minimize the potential for these occurrences, waste coming into the site will be observed by site staff. If suspicious containers or materials are noted, the local fire department will be contacted regarding proper removal and disposal.

If an explosion occurs at the drop box facility, eliminating any possible ignition sources, such as vehicles and open flames, and evacuating the area will prevent the potential for further explosions and injury. Anyone injured by an explosion will be given first aid and the fire department or paramedics will be contacted immediately. The gates to the facility will be closed to all but emergency vehicles.

2.9 Hazardous Waste
No hazardous waste, whether HHW or regulated business waste should be handled through the NCS site. Residents or businesses that bring hazardous waste to the NCS will be directed to take the material to one of the fixed moderate risk waste (MRW) collection facilities or other suitable debris management sites. If hazardous waste is found in the drop box containers, access to the area will be restricted. Any flames or other potential sources of ignition will be removed from the area. The local health department and appropriate regulatory agencies will be notified. A hazardous waste materials response team will be called to investigate the waste and determine how to remove it.

Debris from private vehicles may contain some small amounts of household hazardous waste. Visual inspection of the materials cannot be expected to remove all quantities. However, large and substantial amounts of hazardous waste will be strictly prohibited from the neighborhood collection facility unless the facility is configured to handle and process this type of waste.

2.10 Spill Control Plan
The NCS will not accept liquids or barrels that may contain liquids. Liquid spills must be prevented from getting into storm drains. If a liquid spill is noticed at the site the following actions will be taken:
Restrict access to the area by the public.
- Berm off the area with absorbent material, such as newspaper and cardboard that is available at the site, and prevent the liquid from reaching the storm water drains or runoff ditches.
- Call a hazardous materials response team to investigate the liquid and determine how to remove it.
- If the liquid spilled is determined to be oil or hazardous material, notify the Washington State Department of Ecology at 1-425-649-7000 and the King County Health Department 206-296-4600.
- If the liquid spilled is determined to be non-hazardous, dispose of wet absorbent material in the drop boxes.
- If necessary, clean the floor to remove any contaminants.

2.11 Closure

2.11.1 General
- The NCS will have a limited operational life based on the needs of the debris causing incident.
- The final disposition of the site facilities and closure of the site will depend on the pre-disaster use and the future use of the site. In general sites will be returned to their pre-use condition. The following section presents a general closure plan for the facility.

2.11.2 Closure Procedure
- Any structures or machinery used to operate the site will be removed.
- All waste will be removed from the site.
- New utilities installed as part of site development would be disconnected and the structures supporting them removed. This would include telephone and electricity.
- The Neighborhood Collection Site (NCS) would be graded to a smooth surface or pre-existing contours. For unpaved portions of the site that were disturbed, a topsoil mixture would be applied, and a natural vegetative mix would be seeded over the area. Alternatively the site could be paved and/or developed for its next use.
- Paved surfaces will be swept clean / returned to pre-existing conditions. Storm water catch basins shall be inspected and cleaned of accumulated debris if necessary.

3 FACILITY INSPECTIONS, RECORD KEEPING AND REPORTING

3.1 Inspections
- The City of Mercer Island will conduct site inspections daily / weekly during the life of this NCS to maintain the facility in good operating order and identify items needing maintenance. An inspection sheet will be filled out for each inspection and will be kept on site in a logbook.

3.2 Record Keeping
- Daily records will be kept of the amount and type of solid waste delivered to and removed from the site tracking the following factors:
  - Waste delivered by the public will be documented.
  - The number and type of vehicles coming to the site
  - Address where each load of debris originated from
- A Daily Site Activity Form should be included as an attachment to this document17.

17 A sample daily site activity log is included as attachment G to this document.
3.3 Reporting

A report will be prepared and submitted to the King County Health Department in accordance with WAC 173-350-310 following the closure of the site. If the site is operated longer than one year annual reports will be provided. The report will describe facility activities for the previous year and will contain the following minimum information:

- Facility name and address
- Calendar year reported
- Annual quantity and type of debris received
Attachment C
Debris Management Site Operating Plan

1.1 Summary
The City of Mercer Island has 8 pre-designated locations to serve as Debris Management Sites (DMS) and Neighborhood Collections Sites (NCS). The facility provides service to the regional area and may be a collection hub for neighborhood collection sites. This Plan of Operation provides a description of the procedures that the City of Mercer Island will use to operate the sites.

1.1.1 Operation Summary
The debris management site (DMS) consists of an unloading area where debris collection vehicles may unload their debris for sorting. Separate areas are defined for debris storage, moderate risk waste, incineration, and grinding. There is an area where the public can back up to a curb at the edge of the unloading area and deposit their debris for sorting. Debris is removed from the site by a hauler and transported to a permitted recycling or disposal site in King County.

1.1.2 Regulatory Compliance
The site is designed, whenever possible, to meet the applicable regulatory requirements of WAC Chapter 173-350-320 “Piles Used for Storage or Treatment” and 173-350-360 “Moderate Risk Waste Handling” (if moderate risk waste is handled). The following sections briefly outline the WAC requirements and how they have been addressed.

1.1.2.1 WAC 173-350-320 Piles Used for Storage or Treatment
This document will serve as the operating plan identified in WAC 173-350-320 “Piles Used for Storage or Treatment”. As defined in the WAC the jurisdiction will “Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to the site operating personnel that concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:”

a. A description of the types of solid waste to be handled at the facility;
b. A description of how solid wastes are to be handled on-site during the facility's life including:
   i. The maximum amount of waste to be stored or treated in pile(s) at the facility;
   ii. Methods of adding and removing waste from the pile and equipment used;
c. A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
d. Safety and emergency plans;
e. Forms to record weights or volumes; and
f. Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
1.1.2.1 WAC 173-350-360 Moderate Risk Waste Handling

Debris management sites accepting and handling moderate risk waste will use the guidance under WAC 173-350-360 “Moderate Risk Waste Handling” subsection (2) “Mobile Waste Systems and Collection Events”. WAC 173-350-360 subsection (2) specifies that: “In accordance with RCW 70.95.305, the operation of mobile systems and collection events are subject solely to the requirements of (a) through (n) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of mobile systems and collection events shall:

- a. Notify the department\(^{18}\) and the jurisdictional health department of the intent to operate a mobile system or collection event at least thirty days prior to commencing operations. The notification shall include a description of the types and quantities of moderate risk waste (MRW) to be handled;\(^{19}\)
- b. Manage mobile systems or collection events in compliance with the performance standards of WAC 173-350-040;
- c. Record the weights or gallons of each type of MRW collected, number of households and conditionally exempt small quantity generators served, and type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal). Records shall be maintained for a period of five years and will be made available to the department or jurisdictional health department on request;
- d. Ensure that the MRW at a mobile system or collection event is handled in a manner that:
  - i. Prevents a spill or release of hazardous substances to the environment;
  - ii. Prevents exposure of the public to hazardous substances; and
  - iii. Results in delivery to a facility that meets the performance standards of WAC 173-350-040;
- e. Ensure that incompatible wastes are not allowed to come into contact with each other;
- f. Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;
- g. Ensure that containers holding MRW have legible labels and markings that identify the waste type;
- h. Ensure that containers holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);
- i. Ensure that personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill;
- j. Control public access and prevent unauthorized entry;
- k. Prepare and submit a copy of an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department.

\(^{18}\) Activation of a debris management site will trigger local health department/district notification only and not the Washington Department of Ecology.

\(^{19}\) Due to the nature of disaster debris operations a thirty-day notification is not possible. Jurisdictions will notify their health department/district whenever a debris management site is activated.
The annual report shall detail the collection activities during the previous calendar year and shall include the following information:

i. Name of owner or operator, and locations of all collection sites;

ii. Calendar year covered by the report;

iii. Annual quantity and type of MRW, in pounds or gallons by waste type;

iv. Number of households and conditionally exempt small quantity generators (CESQGs) served;

v. Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

vi. Any additional information required by written notification of the department;

l. Allow inspections by the department or the jurisdictional health department at reasonable times;

m. Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours; and

n. Mobile collection systems using truck or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter 296-150C WAC, administered by the department of labor and industries.

2 GENERAL OPERATIONS

2.1 Hours
The debris management site (DMS) will be open during daylight hours.

2.2 Staffing
The debris management site will be staffed during daylight hours by one or more staff that will observe and measure refuse loads, keep the site free of litter and debris, and manage other specialized debris operations depending on what debris is collected and processed at the site.

2.3 Vehicle Traffic
Debris hauling vehicles using the debris management site (DMS) facility will enter and exit the site following the designated signage.

2.4 Allowable Materials
The DMS sites will handle the following types of debris:

- Construction, Demolition, and Land-clearing debris
- Vegetative debris
- E-waste
- Moderate Risk Waste
- Hazardous Waste
- Municipal Solid Waste
- Putrescibles
- Solid, Mud, and Sand
- Vehicles and Vessels
- White Goods
2.5 Site Operations

Debris will be transported to the site by debris hauling vehicles as well as citizens. Debris will be sorted on site, and segregated for disposal, reduction (grinding/shredding), or incineration. Segregated debris will be hauled to a permitted recycling/disposal facility. Figure X shows an operational site layout map for this site.

![Diagram of site operations]

The maximum amount of debris allowable on site will be dictated by the number of containers on-site.

2.5.1 Debris Movement

Vehicles will unload debris onto the tipping floor. Scavenging will not be permitted at the site. Customers are instructed to keep small children and animals in their vehicles when at the facility.

2.5.2 Cleaning

Site staff will be responsible for picking up debris and litter at the site, sweeping the concrete area and sweeping and raking spilled debris. Debris and spilled refuse will be cleaned up in order to maintain site cleanliness.
2.6 Debris Processing Activities

2.6.1 Recyclable Processing
Recyclable Debris will be accepted and loaded into drop boxes labeled for each different recyclable material. Site staff will contact the hauler when the drop boxes are full for transport to a regional debris management site.

2.6.2 Construction, Demolition, and Land-clearing Debris Processing
Construction, demolition, and land clearing (CDL) debris will be accepted in a specific area or drop box containers identified for CDL debris. Site staff will contact the hauler when the drop boxes are full for transport to a regional debris management site.

2.6.3 Vegetative Debris Processing
Vegetative debris will be accepted in a specific area or drop box containers. Site staff will contact the hauler when the drop boxes are full for transport to a regional debris management site.

2.6.4 Electronic Waste Processing
Electronic waste debris will be accepted in a specific area or drop box containers. Site staff will contact the hauler when the drop boxes are full for transport to a regional debris management site.

2.6.5 Moderate Risk Waste Processing
Moderate risk waste (MRW) will be accepted at a designated MRW handling area by specifically trained site staff. MRW will be processed and stored on-site until it can be transported to a regional MRW processor.

2.6.6 Putrescible Debris Processing
Putrescible debris will be accepted in specific drop box containers. Site staff will contact the hauler when the drop boxes are full for transport to a regional debris management site.

2.6.7 White Goods Processing
White goods will be accepted and stored in specific area of the site. Site staff will contact a white goods processor if they have white goods for pickup and processing.

2.6.8 Debris Reduction
Several methods can be used to reduce the mass or volume of debris prior to final recycling or disposal.

2.6.8.1 Incineration
Curtain pit incineration, portable incinerators, and controlled incineration may all be used to reduce debris volume. Because of air quality concerns in the Region, incinerating debris is not generally considered a viable reduction strategy. The decision to use incineration as a reduction strategy for some types of debris would be made by the Puget Sound Clean Air Agency.
2.6.8.2 Debris Grinding
Chipping and grinding reduces the volume of some debris types by as much as 75 percent. This method is commonly used to reduce the volume of disaster debris, including vegetative debris, construction demolition debris, plastics, rubber, and metals. Clean wood can also be reduced and used for mulch, and other debris such as plastic and metals can be chipped to reduce the overall volume of the material prior to transportation or disposal. The benefit of using a reduction method can be increased by identifying alternate uses for the residual material. The ability to use recycled wood chips as mulch for agricultural purposes, fuel for industrial heating, or in a cogeneration power plant helps to offset the cost of the chipping and grinding operations. Jurisdictions using chipping and grinding to reduce the volume of vegetative debris must be careful to ensure that contaminants such as plastics, soil and rocks, and special wastes are not present in the vegetative debris to be processed. Care must also be taken when reducing construction and demolition debris to ensure that it does not contain hazardous materials such as asbestos.

2.7 Site Controls
The following strategies will be used to mitigate nuisance conditions at the sites. Nuisance conditions at the sites will be referred to the Mercer Island Police Department.

2.7.1 Site Access
Fences will be used to prevent unauthorized access to the site.

2.7.2 Vector Control
Not Applicable

2.7.3 Bird Hazards
Not Applicable

2.7.4 Nuisance Odors
Not Applicable

2.7.5 Storm water runoff
Earthen berms will be used as necessary to contain storm water on the site.

2.8 Safety
The City of Mercer Island is in compliance with all OSHA and WISHA regulations.

2.9 Emergency Plans and Procedures
The general types of emergency conditions that may occur include fire and explosions. A list of emergency phone numbers and contacts will be kept at the facility and updated annually. The general response to an emergency is:
• Assess the conditions and the impact on public health and operation of the facility.
• Determine the immediate response required with regard to public health and safety considerations.
• Notify the appropriate personnel, utilities and regulatory agencies as soon as possible.
• Take corrective action to restore the facility to normal operation.
Emergency telephone numbers include:

- Fire Department 911
- Police Department 911
- Police Dispatch Non-Emergency 425-577-5656
- Mercer Island Police general information 206-275-7610
- King County Health Department 206-296-4600
- Department of Ecology (360) 407-6300

The nearest hospital is Overlake Hospital, which is located in Bellevue, Washington.

Overlake Hospital Medical Center
1035 116th Ave. NE
Bellevue, WA  98004
425-688-5000

2.9.1 Fire

Immediate fire protection for the site will be provided by portable fire extinguishers. Staff will be familiar with the location of the fire extinguishers and trained in their use. All fire extinguishers will be inspected annually. Any smoldering debris found at the facility will be extinguished by portable fire extinguisher. The waste will then be turned over and allowed to cool. All debris must be completely extinguished. In case of a major fire, the public will be evacuated, all personnel will leave the area and the local fire department will be notified. The site will be closed to all but emergency vehicles.

2.9.2 Explosions

The most likely source of explosion is reactive or explosive waste inadvertently disposed of by the public. This could include small amounts of hazardous wastes, containers of gasoline or other explosive liquid, fireworks or ammunition. To minimize the potential for these occurrences, waste coming into the site will be observed by site staff. If suspicious containers or materials are noted, the local fire department will be contacted regarding proper removal and disposal.

If an explosion occurs at the debris management site facility, eliminating any possible ignition sources, such as vehicles and open flames, and evacuating the area will prevent the potential for further explosions and injury. Anyone injured by an explosion will be given first aid and the fire department or paramedics will be contacted immediately. The gates to the facility will be closed to all but emergency vehicles.

2.10 Hazardous Waste

Site staff are responsible for observing debris delivered to the site. If any suspicious debris is observed, the staff member will question the customer delivering the debris, and may refuse to accept the load.

If hazardous waste is found in the debris management site containers, access to the area will be restricted. Any flames or other potential sources of ignition will be removed from the area. The local health department and appropriate regulatory agencies will be notified. A hazardous waste materials response team will be called to investigate the waste and determine how to remove it.

Debris from private vehicles may contain some small amounts of household hazardous waste. Visual inspection of the materials cannot be expected to remove all quantities. However, large
and substantial amounts of hazardous waste will be strictly prohibited from the debris management site unless the facility is configured to handle and process this type of waste.

2.11 Spill Control Plan

Liquid spills must be prevented from getting into storm drains. If a liquid spill is noticed at the site the following actions will be taken:

- Restrict access to the area by the public.
- Berm off the area with absorbent material, such as newspaper and cardboard that is available at the site, and prevent the liquid from reaching the storm water drains or runoff ditches.
- Call a hazardous materials response team to investigate the liquid and determine how to remove it.
- If the liquid spilled is determined to be oil or hazardous material, notify the Washington State Department of Ecology at 1-425-649-7000 and the King County Health Department 206-296-4600.
- If the liquid spilled is determined to be non-hazardous, dispose of wet absorbent material in the drop boxes.
- If necessary, clean the floor to remove any contaminants.

2.12 Closure

2.12.1 General

The debris management site will have a limited operational life based on the needs of the debris causing incident. The final disposition of the site facilities and closure of the site will depend on the pre-disaster use and the future use of the site. In general sites will be returned to their pre-use condition. The following section presents a general closure plan for the facility.

2.12.2 Closure Procedure

- Any structures or machinery used to operate the site will be removed.
- New utilities installed as part of site development would be disconnected and the structures supporting them removed. This would include telephone and electricity.
- The debris management site area would be graded to a smooth surface. A topsoil mixture would be applied, and a natural vegetative mix would be seeded over the area, or the site would be paved and developed for its next use.
- As-built plans and a report detailing the closure procedures, signed by a professional engineer registered in the State of Washington would be submitted to the local health department. The report would detail the work performed for the closure, and the plan

3 FACILITY INSPECTIONS, RECORD KEEPING AND REPORTING

3.1 Inspections

The City of Mercer Island will conduct site inspections annually or as needed to maintain the facility in good operating order and identify items needing maintenance. An inspection sheet will be filled out for each inspection and will be kept on site in a logbook.

3.2 Record keeping

Daily records will be kept of the amount and type of solid waste delivered to and removed from the site tracking the following factors:

- Waste delivered by the public will be documented.
• The number and type of vehicles coming to the site
• Address where each load of debris originated from

A Daily Site Activity Form should be included as an attachment to this document\textsuperscript{20}.

3.3 Reporting

A report will be prepared and submitted to the King County Health Department in accordance with WAC 173-350-320 following the closure of the site. If the site is operated longer than one year annual reports will be provided. The report will describe facility activities for the previous year and will contain the following minimum information:

• Facility name and address
• Calendar year reported
• Annual quantity and type of debris received

\textsuperscript{20} A sample daily site activity log is included as attachment G to this document.
Attachment D

Notice of Intent to Operate
Debris Management Site and Neighborhood Collection Site

Site Information

<table>
<thead>
<tr>
<th>Site Type:</th>
<th>Neighborhood Collection Site</th>
<th>Debris Management Site</th>
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<tr>
<td>Site Name:</td>
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<td>Parcel Number</td>
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<td>Site Address:</td>
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<td>Site Coordinates:</td>
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<td>Site Owner:</td>
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<td>Private Property</td>
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Agency Operating Site

<table>
<thead>
<tr>
<th>Agency Name:</th>
<th>Agency Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Address:</td>
<td>Contact Title:</td>
</tr>
<tr>
<td>Contact Phone:</td>
<td>Contact Email:</td>
</tr>
</tbody>
</table>

General Description of Activity to be Performed at Site

Submit this form along with the completed Debris Management Site Inventory form and Debris Management or Neighborhood Collection Site Operating Plan to your local health agency.
Attachment E

Daily Site Activity Log

<table>
<thead>
<tr>
<th>Time</th>
<th>Vehicle Type: Public or Private</th>
<th>Vehicle # (public/Contract) or License # (private)</th>
<th>Debris weight or volume</th>
<th>Empty Vehicle Weight (if volume recorded by weight)</th>
<th>Location debris originated from</th>
<th>Eligible (Y/N)</th>
<th>Comments</th>
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</thead>
<tbody>
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