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Please be aware that this revision is only available electronically.

Who to Contact:
Please contact Helen Simmonds at (360) 705-7866 with comments, questions, or suggestions for improvement to the Maintenance Manual.

Available On-Line:
To obtain the Maintenance Manual in its entirety, it is available on the Internet at:
http://www.wsdot.wa.gov/publications/manuals/fulltext/M51-01/Maintenance.pdf

Instructions:
Page numbers and corresponding sheet-counts are given in the table below to indicate portions of the Maintenance Manual that are to be removed and inserted to accomplish this revision.

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Cover	1-2	1	1-2	1
Table of Contents	1-8	4	1-8	4
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Appendices				
Emergency Procedures Manual, M 3014 This manual is available on line at: http://www.wsdot.wa.gov/publications/manuals/fulltext/M3014/EmergencyProcedures.pdf	Entire appendix			
Work Zone Traffic Control Guidelines, M 54-44 This manual is available on line at: http://www.wsdot.wa.gov/publications/manuals/fulltext/M54-44/Workzone.pdf	Entire appendix			
Highway Engineering Field Formulas, M 22-24 This manual is available on line at: http://www.wsdot.wa.gov/publications/manuals/fulltext/M22-24/FieldFormulas.pdf	Entire appendix			

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Maintenance and Operations

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Chapter 1 Emergency Procedures

General Responsibilities

This chapter provides guidance to reduce the vulnerability of the state transportation system from any emergency or disaster by:

1. Establishing capabilities for protecting the transportation system and employees from the effects of emergencies or disasters,
2. Responding efficiently to emergencies and disasters,
3. Assist in recovering in the aftermath of any emergency or disaster.

This chapter also incorporates some of the day-to-day operational procedures that are used in responding to incidents such as small spills, snow/ice removal, traffic accidents, emergencies, disaster events, and recovery efforts. The Washington State Department of Transportation (WSDOT) Disaster Plan and the *Emergency Relief Manual* (M 30-14) define the details of how the Department responds to these types of events and is included as an Appendix for reference purposes.

An emergency is defined as a situation involving natural phenomena, disasters, casualties, national defense or security measures, etc. and includes response activities that must be taken to prevent the imminent loss of human life or property.

WSDOT will perform the following functions in emergency situations:

- Determine usable portions of the state highway network. Coordinate and control emergency highway traffic regulations in conjunction with the Washington State Patrol.
- Notify your local Washington Department of Fish and Wildlife (WDFW) local habitat biologist that an emergency action needs to be taken and obtain the Hydraulic Project Approval (HPA) as soon as possible after taking the emergency action.
- Notify the "National Marine Fisheries Service and U.S. Fish and Wildlife Service" that maintenance is taking an emergency action that could result in an "after the fact" consultation under the endangered species act, if the emergency action involves threatened or endangered species' water bodies.
- Follow the memorandum of understanding on "Emergency Actions in Water Courses" with the Washington Department of Fish and Wildlife.
- Meet the conditions of the Washington Department of Fish and Wildlife (HPA) permit if applicable and possible.
- Reconstruct, repair and maintain state highways, bridges, and alternate routes. Coordinate the mobilization of personnel and equipment required for emergency engineering services.

- Maintain liaison with the Washington State Chapter of the Associated General Contractors of Washington and America, construction, and equipment rental companies.
- Provide initial damage assessment estimates on state and local facilities (both for federal aid eligible roads and non-federal aid eligible roads) and public/private airports as a member of the Preliminary Damage Assessment (PDA) Team.
- Participate on Damage Survey/Inspection Report Teams, conducting inspections of federal aid and non-federal aid system highway facilities damaged by a disaster.
- Coordinate all transportation related missions including, emergency air, marine and rail transportation of personnel and essential supplies.
- Conduct aerial reconnaissance and photographic missions.
- Provide public information support to the Office of the Governor and the Washington Emergency Operations Center during emergency response and recovery operations.

Regional Emergency Response Plans

Each Region shall develop and maintain an Emergency Response Plan that will establish day-to-day operational procedures to cope with routine spills, accidents, etc. Regions will also develop procedures to address their response capabilities for those events that are beyond the normal day-to-day operational mode. Each of these procedures shall clearly define employee roles and responsibilities.

WSDOT Disaster Plan

Concepts of Operations

Governments have the responsibility to make every effort to protect life and property during emergencies. When the emergency exceeds the capability of government to respond, assistance will be requested from the next higher level of government.

For example:

Local government may request state assistance and state government may request federal assistance. However, this plan heavily emphasizes the responsibility and capability of local governments to respond to and accomplish short-term recovery during emergencies/disasters.

The WSDOT Disaster Plan recognizes that emergency functions for groups and individuals should parallel normal day-to-day functions. When this is not possible, managers should attempt to maintain organizational continuity and assign familiar tasks to employees.

Organization and Assignment of Responsibilities

Service Centers and Regional Offices have emergency functions in addition to normal duties. Each Service Center and Regional Office establishes procedures for:

- Operations during emergencies.
- Emergency Personnel Roster.
- Compliance with WSDOT Responsibilities and Authorities.

Administration and Logistics

WSDOT acknowledges that in a time of crisis, some administrative procedures should be suspended, relaxed or made optional. However, it is desirable to foresee and plan for necessary changes in administrative procedures.

Documentation is critical for successful reimbursement of funds or to support liability issues. All actions taken, especially changes to established procedures, shall be documented. This is the responsibility of Maintenance Lead Technicians, Maintenance Supervisors and Superintendents. It is proper in these situations to use all tools that are available in order to provide a clear documentation trail.

Maintenance office staff are to be provided the documentation and then are tasked with filling out the proper records and forms to be forwarded to the Regional Maintenance administration.

Plan Development and Maintenance

The WSDOT Disaster Plan is the principal source of documented department emergency management activities. Most Service Centers and Regional Offices are responsible for developing or accomplishing tasks in some part of the plan. This may require simultaneous coordination with local, state and federal agencies. Overall, the Headquarters WSDOT Disaster Plan development, maintenance and coordination is the WSDOT Emergency Management Program Manager's responsibility in cooperation with Service Centers and Regional Offices.

Training and Exercises

WSDOT will periodically provide training and conduct exercises to test the WSDOT Disaster Plan and Procedures to assure maintenance of a readiness mode and reflection of current department operational practices.

Emergency Operating Procedures

General

There are many situations when transportation crews may be exposed to situations requiring emergency action. The most common emergency situations maintenance crews may encounter are vehicle accidents and hazardous material spills.

Hazardous materials are those substances which, when spilled, may make driving on the roadway unsafe, endanger the lives of people in the vicinity, or contaminate the environment. These materials may make the roadway surface slippery, impair visibility, or cause lane and road closures. Materials that may be dangerous in themselves include: explosives, flammables, corrosives, poisons, and radioactive materials. Other materials may not be hazardous but cause hazardous conditions such as fine powder-like materials which create visibility problems or bulky materials which cause lane closure.

WSDOT employees at the scene of an accident or spill will take emergency actions only as required to protect human life and property until the Washington State Patrol has control of the situation. The State Patrol has the responsibility for safety measures at an accident site and for coordination with Department of Ecology for the clean-up of spilled substances. The Washington State Patrol may request assistance from WSDOT for traffic control and to clean up an accident site. WSDOT employees must not attempt to clean up any hazardous material spills. In most cases WSDOT Maintenance employee's have not been trained and/or do not have the proper resources to clean up hazardous spills. Clean up is the responsibility of the owner or shipper of the cargo, if they can be identified. If the owner/generator is unknown, the Department of Ecology is responsible for the clean up. In general terms Ecology personnel only respond onsite to spills greater than 50 gallons of hazardous material.

Maintenance Field Personnel

Maintenance employees will take the following actions when encountering a hazardous condition:

- Advise the Area Maintenance Supervisor or Superintendent of the problem, and request aid from the Washington State Patrol.
- Take precautionary actions to protect themselves, maintenance crews, and the traveling public from any exposure.
- Provide traffic control, including closure of the highway if appropriate, to ensure that no one comes in contact with the hazardous material.
- Survey the situation and report the exact location, cause of the temporary closure, and extent of the closure to the Area or Regional Maintenance Office (or your Maintenance Supervisor or Lead Technician). Notification should also go to the TMC, Traffic Management Center, in each Region if they have one in Place.
- If the spilled substance is identified and is spreading toward water courses, additional traffic lanes, or likely to cause ground water damage, take appropriate action to absorb or confine the spill.

  Always use careful judgment and only take actions you know and understand are safe for you to do. Examples of commonly spilled materials include gas, oil and diesel.

- Never take action on an unknown substance or on a known substance that is extremely dangerous to life and property. Examples would include those products with greater harm than gas, oil and diesel. If employee's are not sure what the product is they are to stay clear of the area.
- Some accident scenes include human tissue and blood residues. Contact with these materials is to be avoided. Fire response should wash this residue from the highway or highway feature surfaces. The Washington State Patrol is the incident commander and should assure that the accident scene is ultimately safe.
- Stay on site to safeguard traffic until proper traffic control devices are installed and/or until relieved by your Maintenance Supervisor, Lead Technician, or a Washington State Patrol Trooper.
- Patrol for stranded motorists in isolated areas when traffic has been controlled and when applicable.

Maintenance Superintendent or Supervisor

- Coordinate personnel and equipment to close a highway or restrain traffic from entering a hazardous area.
- Make a complete report of the closure to the Regional Maintenance Engineer/ Manager and Traffic Control Center (TMC).
- Ensure the hazardous section of highway is being monitored, then patrol the area to make sure there are not stranded motorists.
- Provide detours around partial closures when safe to do so. Whenever possible, establish detours on existing state routes. Other local roads should only be used after surfaces, bridges, and overhead clearance restrictions have been reviewed and approved by the appropriate local jurisdiction. Detours will be signed and other traffic control devices (e.g., barricades and flashing lights) will be installed. Station flaggers at barricaded points when necessary.
- Arrange to advise the Regional Public Information Office so that announcements of the closure can be made on the WSDOT public service and communications networks.
- If a closure is requested by the Washington State Patrol, and the local Maintenance Superintendent is not available, contact the Regional Maintenance Manager or the Regional Administrator to advise of the request and provide recommendations concerning the need for the proposed temporary closure.
- Reopen the roadway when the physical blockage is eliminated or the hazardous conditions that caused the closure have abated.
- Advise the Area Maintenance Superintendent, Regional Maintenance Manager, or Regional Administrator of the reopening by the fastest means available.
- Arrange to relay notice of the reopening to the Regional Public Information Office to ensure that information on the public service and communications network is current.

Abandoned Cargo

- All cargo spilled on WSDOT property will be removed at the owner's expense if the owner can be identified. A determination that the cargo is hazardous material will necessitate the procedures outlined earlier. State law (RCW 4.24.512) dictates that the responsible party has the responsibility for clean up of hazardous materials.
- If the spilled material is hazardous, stay safely back from the hazard, establish traffic control, and call the Washington State Patrol who in turn will call the Department of Ecology Spill Response Team. The Department of Ecology is responsible for coordinating clean-up of hazardous materials. If dropped material is identified as hazardous but the container is not leaking or severely damaged, it can be removed to the edge of the shoulder to allow traffic flow if this action must be taken prior to Ecology's arrival at the scene. It should not be taken back to the maintenance facility.
- If dropped material is identified as non-hazardous and is reusable it should be returned to the maintenance facility. After a determination of ownership is made and if the commodity is not reclaimed within (30) days it becomes the property of the department and may be used for it's intended purpose, if appropriate.

Clearing the Highway

Open Road Policy

- The February 2002 WSP/WSDOT "Joint Operating Policy Statement" was developed to stress the importance of the Agencies' responsibility to do whatever is reasonable to reduce the delays associated with incidents and collisions. The open roads philosophy of this policy statement is that WSP and WSDOT shall open the roadway as soon as possible on an urgent basis.
- It is a goal of WSDOT to minimize traffic delays caused by vehicle accidents and incidents. WSDOT Maintenance personnel assisting at vehicle accidents will make every reasonable effort to clear the traveled way as quickly as possible.
- First priority -safety: It is the departments' obligation and responsibility to provide a safe environment for its employees and the public.
- Second priority- Minimizing traffic delay: Maintenance personnel responding to vehicle accidents which involve lane closures will consider every reasonable measure in coordination with WSP, to clear the lane as quickly as possible. At accident scenes which involve spilled or damaged cargo, the overriding strategy will be to minimize traffic delay. Salvage of the cargo will be secondary and at the convenience and

benefit of transportation movement. Criteria to be used in making "Open Road" decisions include:

- crime scene investigation
- traffic volume
- time of day

- Lowest priority- The potential salvage of the cargo should be the last consideration in decisions related to minimizing traffic delay.
- Bridges and other transportation structures closed due to structural damage require approval from the Bridge Preservation Engineer before opening.