

1. Introduction

Inclement weather conditions and bad road conditions can create hazardous travel conditions. The safety of the public and the need to ensure public confidence in this shipping program require that reasonable measures be taken to prevent traffic accidents. Avoiding adverse weather and road conditions where possible is one such precaution which should be taken.

TRANSCOM is used to track shipments to the Waste Isolation Pilot Plant (WIPP). Vehicles are equipped with communications systems which allow communication between the driver and the dispatch center at all times. States along the route are able to use TRANSCOM to track the location of shipments as they pass through each State. These capabilities provide a unique opportunity for the States and the Department of Energy (DOE) to work together to reduce the risk that these shipments may be involved in a transportation incident involving adverse weather or road conditions.

2. Road Construction Activity

During the first quarter of each year, the Western states will provide DOE with information regarding planned major highway construction activity for the next 12 months. This information should include WIPP corridor highways where construction activity is scheduled, location of construction activity, a brief description of the activity, and a discussion of any critical construction activities (*e.g.* temporary road closures, detours through congested areas, etc.) to be avoided if possible. DOE should consult with a state about planned shipments if road construction activities would cause delays of an hour or more.

3. Criteria for Postponing Shipments

Prior to dispatch, the WIPP Facility Shift Manager or Transportation Engineer, the shipper, and both vehicle drivers must agree that travel conditions are acceptable for a WIPP shipment. If not, the vehicle may not be dispatched until conditions improve. State representatives may participate in these discussions. The decision that acceptable conditions exist should be documented in writing or through entry into a computer data base.

4. Evaluation Criteria

Current weather conditions, the weather forecast, and road conditions must be acceptable prior to dispatch. Both local weather conditions (snow, rain, fog, etc) at the point of origination and conditions along the entire route should be considered, especially for the first 200 miles along the route. Indication of weather conditions can be obtained from any of the following sources:

- Monitoring The Weather Channel in the Central Monitoring Room
- National Weather Service web pages (for example, Western Region Forecast Map for Watches, Warnings, Statements and Advisories – <http://www.wrh.noaa.gov/index.php>)
- State road department web pages and web cameras
- Output from the weather information software (KAVOURAS)
- Contact with other drivers
- Shipper
- State Contacts
- Waste Isolation Pilot Plant (Maintenance and Operations Contractor)

A shipment should not be dispatched if severe weather conditions which would affect the shipment are forecast to occur along the route when a shipment is anticipated to be in the area. The predicted weather for the first 200 miles of the route should not be expected to deteriorate significantly for at least the next four to five hours. Roads within the first 200 miles should be substantially clear of snow and ice. Predicted weather along the remainder of the route should be expected to be acceptable for the time period when the shipment is anticipated to be in an area.

Severe weather conditions include the following storm warnings issued by the National Weather Service:

- Winter Storm Warning
- Blizzard Warning
- Blowing and Drifting Snow Advisory
- Ground Blizzard Warning
- Freezing Rain/Drizzle Advisory
- Ice Storm Warning
- Dense Fog Advisory
- Freezing Fog Advisory
- Tornado Warning
- Severe Thunderstorm Warning
- Flash Flood Warning
- River Flood Warning
- Hurricane Warning

- Hurricane Wind Warning
- High Wind Warning

A description of these terms is included in Appendix A. (NOTE: In cases where actual conditions in the area do not match the warning criteria, DOE shall have the ability to contact State personnel to seek concurrence for shipments to proceed.

Road conditions along the shipping route should be acceptable (i.e. rain has not produced local flooding along the route, snow and ice have been plowed and/or sanded, etc.). Shipments should not proceed if travel advisories suggest that unnecessary travel be avoided when the shipment is anticipated to be in the specified area.

Visibility should not be significantly impaired by fog, smoke, dust, blowing snow or other atmospheric conditions. Visibility shall be considered to be significantly impaired when visibility is one-quarter mile or less.

As a minimum standard, the current weather conditions, the weather forecast, and current road conditions must be acceptable for travel conditions to be considered acceptable for safe vehicle operation. If these conditions are not acceptable, the shipment must be delayed until travel conditions are acceptable. The drivers should concur with the decision to dispatch the shipment.

Shipments will not proceed through an area in which chains are required. If a truck is already in such an area, chains can be used to get the truck to a safe parking area.

Information regarding road and travel conditions in each state can be obtained from the numbers and web sites listed below in Table I. If additional information is desired, State Highway Patrol or State Police should be contacted for further information. Contacts for each State are listed in Table III.

Table I -- State Road and Travel Information Service

State	Phone
Washington	(509) 249-6752 (Washington State Patrol, Yakima District Headquarters) http://wsdot.wa.gov/traffic http://www.wrh.noaa.gov/pendleton/index.shtml
Oregon	503-588-2941 (In state – 800-977-6368) http://www.tripcheck.com/

Idaho	Statewide: 800-432-7623 Boise area: 208-336-6600 Eastern Dispatch Center: 208-236-6066 (alternate) Southern Dispatch Center: 208-846-7500 http://www2.state.id.us/itd/
Utah	1-866-511-8824 outside of Utah *511 within Utah www.commuterlink.utah.gov
Wyoming	(307) 772-0824 (out-of-state) (888) 996-7623 (in-state) http://wydotweb.state.wy.us/
Colorado	(303) 512-5830 www.cotrip.org
New Mexico	(505) 827-9300 – State Police District 1 Communications Center (800) 432-4269 – Weather & road construction information http://www.nmroads.com/
California	California Highway Patrol Emergency Notification & Tactical Alert (ENTAC) (916) 843-4199 (this number is not for public disclosure) 1-800-427-7623 within CA and a few western NV area codes 916-445-7623 – nationwide http://www.dot.ca.gov/hq/roadinfo/
Nevada	Nevada Road Conditions: 1-877-687-6237 http://www.nevadadot.com/traveler/ Trucker Information: http://www.nevadadot.com/business/trucker/ (permits, overweight, etc.): 1-800-552-2127
Arizona	888-411-7623 http://www.az511.com/adot/files/

Nebraska	1-800-906-9069 or 402-471-4533 or “511” (in state) http://www.dor.state.ne.us/
Texas	Texas Department of Transportation (TxDOT) 24-hour for highway conditions and weather – 1-800-452-9292 http://www.dot.state.tx.us/hcr/main.htm

States should monitor the status of WIPP shipments using the TRANSCOM system when adverse weather and road conditions exist. If a WIPP shipment is listed on TRANSCOM with a departure time which would cause the shipment to encounter adverse conditions, the State should notify the DOE WIPP Central Monitoring Room at the number listed in Table II of the need to consider delaying departure of the shipment due to adverse conditions.

Table II -- DOE Central Monitoring Room (CMR)

DOE Contact	Phone
WIPP Central Monitoring Room	575-234-8125
TRANSCOM	575-234-7105

5. Adverse Conditions En Route

Standard procedures should be followed to hold shipments at safe parking locations when adverse conditions are encountered en route. These are described below. In addition, States may wish to adopt supplemental procedures to assist DOE in avoiding adverse road and travel conditions.

Standard Procedures

WIPP shipments will not travel when severe weather conditions along routes or adverse road conditions make travel hazardous. Severe weather conditions include the storm warnings issued by the National Weather Service and listed on page 2.

Adverse road conditions are defined as conditions which prompt travel advisories which suggest that unnecessary travel be avoided. Upon encountering severe weather or adverse road

conditions, the driver should immediately contact the CMR.

Upon indication of severe weather or adverse road conditions from any of the sources listed, the CMR Operator shall notify the driver and obtain his/her input (if original notification was not received from driver). The CMR Operator should also notify Transportation Integration of severe weather conditions as soon as possible. The CMR Operator will obtain information from the shipper, carrier's dispatch or state police, as necessary, and coordinate diversion to a safe parking location. The CMR Operator will notify the driver of the decision and obtain concurrence.

The safe parking area should be selected based upon *Criteria for Safe Parking Areas for WIPP Shipments*. The contact listed in Table III for the affected State should be notified of the parking location selected. The layover should continue until the weather breaks and the route is passable.

Details of the conversations and decisions will be entered into the CMR Operator's Log. This cooperative effort between DOE and the States provides additional safeguards which allow WIPP shipments to avoid adverse road and weather conditions without causing undue delay to the shipments. The extra safety provisions provided through the TRANSCOM system and the two-way communications system allows the States to assist the DOE in avoiding potential hazardous travel conditions. These capabilities provide a unique opportunity for the States and DOE to work together to reduce the risk that shipments may be involved in a transportation incident caused by adverse weather or road conditions.

Road Closure – In the event of a road closure, drivers should be directed to locate an acceptable parking area following *Criteria for Safe Parking Areas for WIPP Shipments* developed by the Western Governors' Association WIPP Transportation Advisory Group. Drivers should be specifically instructed to make every reasonable effort to use parking locations selected according to these criteria rather than parking on the shoulder of the highway during road closures.

Road Re-opening – Depending upon the nature of the road closure, it may be prudent to hold the WIPP shipments at the secure parking area after the highway is reopened to general traffic. Shipments would be held if highway conditions after the road is reopened are marginal, or if it appears traffic will be extremely heavy after the road is reopened. The WIPP CMR TRANSCOM Operator should consult with the appropriate state contact to determine whether shipments should remain in safe parking for any length of time immediately following the re-opening of a road after a closure. Regardless, drivers should remain at the secure parking area until notified by the WIPP CMR TRANSCOM Operator or on-scene law enforcement to proceed. The designated point of contact for each state is identified in Table III.

Hazardous Conditions – In some instances, inclement weather conditions may not have forced a road closure, but create hazardous travel conditions or the possibility of an imminent road

closure. Traffic accidents or other conditions may also create hazardous travel conditions which should be avoided by WIPP shipments. In these cases, a state may notify the WIPP CMR that hazardous travel conditions exist and advise DOE that drivers should locate an acceptable parking area until notified to proceed. The state will notify the WIPP CMR when conditions have improved.

Each state will implement appropriate procedures to notify the WIPP CMR of adverse road conditions and to ensure that whenever a request has been submitted to the WIPP CMR to hold a shipment in an acceptable parking area, the WIPP CMR will be notified as soon as road conditions improve sufficiently to allow the WIPP shipments to proceed.

Table III -- State Contacts during a Shipment Delay

State	Contact	Phone
Washington	Washington State Patrol Yakima District Headquarters	(509) 249-6752
Oregon	Oregon Emergency Response System Duty Officer	(503) 378-6377
Idaho	Idaho State Police Regional Communications Center, Boise	(208) 846-7500
Utah	Box Elder Communications UHP Commercial Vehicle Enforcement Main number Lt. Bruce R. Pollei Commander	(435) 734-3800 801-596-9248
Wyoming	Wyoming Highway Patrol Dispatch Center	(307) 777-4321
Colorado	Colorado State Patrol, Regional Communications Center – Denver	(303) 239-4501
New Mexico	New Mexico State Police District 1 Communications Center	(505) 827-9300
California	California Highway Patrol Emergency Notification & Tactical Alert Center (ENTAC)	(916)843-4199 (not for use by the general public)

	California Warning Center (24-hour number)	1-800-852-7550
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Arizona	Department of Public Safety	(602) 223-2212
Nevada	Nevada Highway Patrol Las Vegas Area: Main number Lt. Lisa Lewis NHP Commercial Enforcement – Southern Command Nevada Highway Patrol Northern and Central Commands (I-80 Shipments): Reno – Main NHP Number Reno NHP Dispatch Elko – Main NHP Number Elko NHP Commercial Enforcement Governor’s Office, Agency for Nuclear Projects Joe Strolin	(702) 486-4100 (702) 432-5009 (702) 486-4100 Ext. 261 (775) 687-4100 (775) 687-0400 (775) 753-1111 (775) 753-1176 (775) 687-3744
Nebraska	Nebraska State Patrol HQ Troop Area Communications Center	(402) 479-4921 (402) 471-4545 (alternate)
Texas	Texas Department of Public Safety (24-hour call center)	(512) 424-2277 or (512) 424-2208

National Weather Service Terms Used in Advisories

(Conditions where travel should be avoided are marked with a ☒ symbol.)

Winter Conditions¹

☒ Winter Storm Warning

Severe winter weather conditions in the form of heavy snow (5 inches or more) or freezing rain or sleet (accumulations of more than ¼ inch) are imminent or occurring.



☒ Blizzard Warning

Considerable falling and/or blowing snow and sustained winds or gusts of at least 35 miles per hour are expected for at least three hours, frequently reducing visibility to less than ¼ mile.

☒ ☐ Blowing Snow Advisory

Wind-driven snow reduces visibility intermittently to or below ¼ mile. Blowing snow may be falling snow or snow that has already accumulated but is picked up and blown by strong winds.

☒ ☐ Ground Blizzard Warning

Blizzard conditions solely caused by blowing and drifting snow.

☒ Freezing Rain/Drizzle Advisory

Freezing rain or freezing drizzle is forecast or occurring but a significant accumulation is not expected. However, even small amounts of freezing rain or freezing drizzle may make road surfaces hazardous.

¹ Adapted from the National Weather Service glossary (<http://www.weather.gov/glossary/>)

☒ Ice Storm Warning

Freezing rain produces a significant and possibly damaging accumulation of ice. The criteria for this warning varies from state to state, but typically will be issued any time more than ¼ inch of ice is expected to accumulate in an area.

☒ Dense Fog Advisory

Dense fog will reduce visibility to ¼ mile or less over a widespread area for an extended period of time (more than 3 hours).

☒ Freezing Fog Advisory

Fog reduces visibility AND droplets of moisture within the fog freeze upon contact with exposed objects, creating a glaze of ice.

Tornado Warning

A tornado is indicated by radar or sighted by spotters. They are usually issued for a duration of around 30 minutes. If the thunderstorm which is causing the tornado is also producing torrential rains, this warning may also be combined with a Flash Flood Warning.

Severe Thunderstorm Warning

A severe thunderstorm is occurring or imminent in the warning area. Severe thunderstorms are defined as having winds of 58 miles an hour or higher or hail ¾ of an inch in diameter or larger. Severe thunderstorms can produce tornadoes with little or no advance warning. They are usually issued for a duration of one hour.

Flash Flood Warning

Flash flooding is in progress, imminent, or highly likely.

River Flood Warning

River flooding is occurring or imminent at one or more forecast points along a river. It is usually associated with widespread heavy rain and/or snow melt or ice jams.

High Wind Warning

High winds are occurring or imminent with sustained winds of 40 miles per hour or higher for one hour or more or wind gusts of 58 miles per hour or higher.

Hurricane Warning

Sustained winds of 74 miles per hour or higher associated with a hurricane are expected in a specified coastal area in 24 hours or less. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and

exceptionally high waves continue, even though winds may be less than hurricane force.

Hurricane Wind Warning

Sustained winds of 74 miles per hour or higher associated with a hurricane are expected to move inland beyond areas that are covered by a Hurricane Warning.

