



PROCEDURE

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Client **Fluor Canada**
 Project IORVL Module Transport
 Subject Incident Specific Emergency Response Plan - Montana



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1.0 Background

1.1 Purpose

The purpose of this document is to provide a detailed look to Fluor and Imperial Oil Resources Ventures Ltd. (IORVL) at the emergency response plans (ERP) for four specific incident scenarios that may be encountered during the transport of modules for the Kearl Oil Sands Project (KOSP) through the State of Montana:

- Jack knifing situation with the transporter
- Load sliding partially off the trailer situation
- Rollover situation into water
- Private vehicle in an emergency situation

This document will provide the necessary guidelines for the heavy haul carrier to follow in the event that an emergency situation of the above mentioned nature may arise during the transport of a module through the States of Montana.

The first priority in any emergency situation is the safety of the general public and the employees, while minimizing any damage and potential hazards to property and the environment.

The overall ERP will be reviewed with the all members of transportation crew (including flaggers, pilot truck escorts, utility escorts, and police, etc.) at the daily tailgate meeting and will also be attached to the job execution analysis (JEA). It should be noted that the following procedure shall serve as guidelines to the transport crew in case of emergencies as there may be different incident circumstances. The carrier must rely on the expertise of the transportation supervisor and crews, and follow the basic steps and outlined in their respective health, safety and environmental (HSE) manuals for emergency situations.

1.2 Historical Context

The oil and gas industry recognizes the need to reduce the effects of accidents and malfunctions on human life and the environment and has developed best practices and standards for addressing these situations through project engineering, construction and operations activities, including the identification of potential situations and the development of effective mitigation strategies.

Industry experience has shown that accident and malfunction assessments are an effective means of modifying industry best practices to suit specific planned project activities and environmental and socio-economic considerations.



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1.3 Hazard Assessments

Hazard assessment is the tool commonly used by industry to guide functional and effective decisions in evaluating accidents and malfunctions.

- The proponents' hazard assessment process follows industry proven practice and regulatory expectations and standards.

The proponents' hazard assessment process includes identifying:

- Credible accident or malfunction scenarios.
- Worker and public health and safety.
- Potential environmental effects.
- Emergency response activities.
- Post-response recovery activities.



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1.4 Emergency Response Process

The emergency response process involves communication among response team members to enable timely and effective actions, including:

- Initiating the initial response by:
 - Addressing risks to safety
 - Securing the emergency area
 - Controlling and containing the incident
 - Notifying all external agencies and appropriate companies
- Taking subsequent actions to mitigate the effects of the incident, including:
 - Cleaning up
 - Reporting
 - Continuing with project activities
- Conducting recovery activities to address residual impacts, including:
 - Assessing damage to project assets and local environmental and social components
 - Establishing decision criteria related to recovery activities, e.g., environmental remediation
 - Incident investigation to identify the root cause to assist in preventing a reoccurrence.
- Roles and responsibilities for mitigation actions will be developed, agreed upon, documented and implemented.

The emergency response process outlined in this document will be reviewed and revised, as necessary, throughout the project's life.



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2.0 Scope of Scenarios

2.1 Scenarios Selected

Four types of incident scenarios will be discussed in this document in order to provide the necessary guidelines that the transport team may reference in the event one of these situations takes place during the transport of a module along the designated route through the State of Montana.

- Scenario 1: Jack-knifing the transporter
- Scenario 2: Load sliding partially off the trailer
- Scenario 3: Overturning the load and transporter into water
- Scenario 4: Private vehicle in an emergency situation

2.2 Scenario Content

Each scenario is based on current project engineering planning information and available environmental and social information, and includes:

- A description of the scenario
- The environmental setting
- The potential effects on environmental and social components
- Mitigations and preventative measures
- Emergency response and recovery



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3.0 Jack-Knifing of the Transporter

3.1 Scope

This portion of the document will describe a scenario in which the transporter carrying a module jack knifes on the highway.

3.2 Background

Jack-knifing is the term used when a vehicle that is towing a trailer folds at the pivoting joint, causing the transporter to resemble a pocket knife or a "jack knife". Several factors may cause a jack knife incident such as slippery or icy road conditions, malfunctioning breaks or equipment, and sudden braking at high speeds. However, due to the design of hydraulic platform trailers, it is nearly unachievable to have a jack knife incident occur. If such incident was to occur, it cannot happen in a typical tractor-trailer scenario where the trailer swings out of the lane into the ditch. This is due to the fact that there are up to 14 axle lines steering and controlling the direction of the trailer, (see Appendix 3 – Equipment Information) whereas a normal tractor-trailer has two or three non steering axles that are located 20 to 30 feet behind the pivot point. Therefore, for a platform trailer jack-knife situation, the likelihood would be for the lead tractor to be forced into the ditch and the trailer remain on the road surface.

Zero amounts of dangerous goods or hazardous materials will be shipped in or with the module. However, small amounts of hydrocarbons are required for the operation of the tractors and hydraulic platform trailers. Each tractor transporting the load can carry up to 350 gallons of diesel fuel and the hydraulic platform trailers use approximately 60 gallons of hydraulic oil. All vehicles in the transport convoy will have a copy of the carriers WHMIS file explaining the hazardous materials on board. In addition, all vehicles will be equipped with spill kits, which will assist to control and recover minor hazardous material spills.

Weather will be continuously monitored. Modules will not travel in adverse weather conditions, as per the permit requirements and based on the expertise of the transport supervisor and the transport team. The transport supervisor will check the forecast and posted road conditions, as well as scout the route prior to moving each day. The transport shall not leave the parking location if there is thought to be a risk to the public and the crew due to the weather. Should adverse weather conditions arise during transport, the transport team will determined the safest course of action and remain parked until it is deemed safe for the for the load to proceed.



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3.3 Scenario

While descending a steep grade, the tractor towing the hydraulic platform trailer loaded with a module, loses control under braking due to icy road conditions and jack knifes the transporter, forcing the pull tractor towards the ditch and the trailer to remain on the road. There is no damage to the tractors, the trailer or the load.



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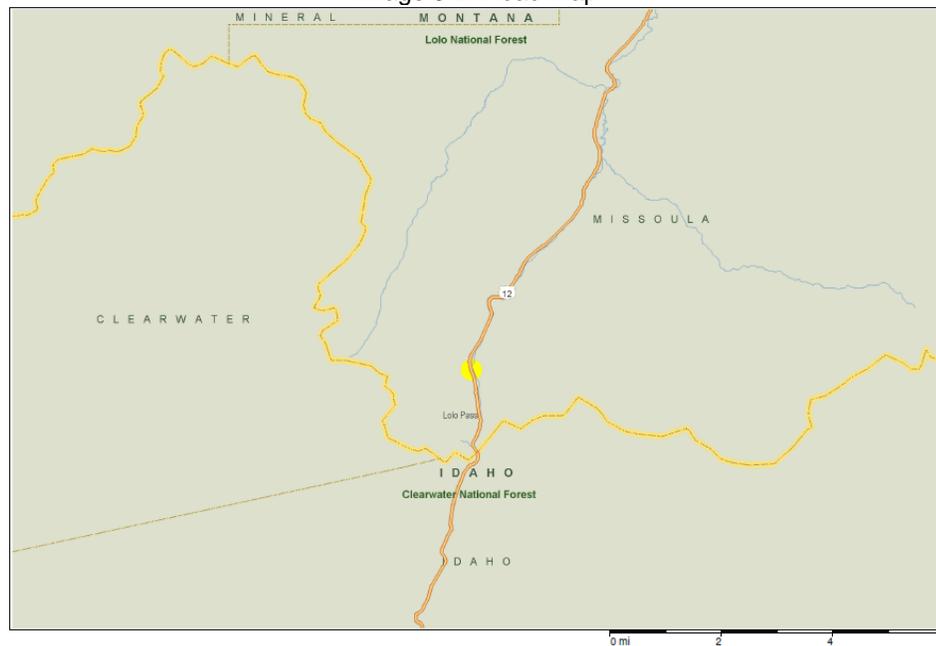
3.4 Environmental Setting

- Location: US Highway 12, eastbound descending Lolo Pass towards Lolo, MT.
- Road: Two lane paved highway with narrow shoulders. Mountain side with trees to the left and a steep ditch lined with trees to the right.

Image 3-1: Highway View



Image 3-2: Road Map





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3.5 Potential Effects

Table 3-1: Potential Effects of a Transporter Jack-Knifing Incident

Environmental Components	Environmental Concern	Potential Effect
Air Quality and Noise	Air quality	No effect expected
	Noise	No effect expected
Water and aquatic environment	Water Quality	No effect expected
	Fish and fish habitat	No effect expected
	Aquatic mammals and habitat	No effect expected
	Water flow	No effect expected
Soils and landforms	Soil quality	No effect expected
	Ground stability	No effect expected
Vegetation	Plant and plant communities	No effect expected
Wildlife	Birds	No effect expected
	Terrestrial mammals	No effect expected
Community resources	Health care services	Local medical and emergency services may be required
	Transportation infrastructure	Road may be blocked up to 4 hours
	Other community resources	Towing/recovery services may be required
Community wellness	Community health	No effect expected
	Community safety	No effect expected
Land and resource use	Traditional harvesting and land use	No effect expected
	Heritage resources	No effect expected
	Protected areas	No long term effects expected



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3.6 Mitigation and Preventative Measures

- Drive at appropriate speeds for transporting the modules based on the experience and expertise of the driver, the transport supervisor and the transport crew.
- Comply with HSE guidelines, rules, regulations, codes of practice and industry best practice standards.
- Ensure that the transport equipment is properly outfitted for the current weather conditions.
- Make sure the pre-trip inspections are completed ensuring everything is in good working order.
- Perform preventative maintenance to ensure all the equipment is in excellent condition.
- Verify that the road is in acceptable driving condition prior to departing the parking location.
- Communicate between the transport crews.

3.7 Emergency Response

- i. The scene will be stopped, stabilized and evaluated. The first priority is to ensure the safety of the public and the employees, and the protection of the environment and property.
- ii. Injuries shall be treated accordingly.
- iii. Immediate contact shall be established within the transport convoy.
- iv. The transport supervisor will contact the Montana Highway Patrol, emergency service agencies, IORVL and Fluor representative, the transport company senior management and any other pre-determined authorities as listed in the JEA, providing a full description of the incident, location, damage (if applicable) and contact information.



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3.8 Recovery

- i. The transport supervisor, in conjunction with the transport crew, will assess the situation, decide on the safest course of action and mitigate any possible public disruptions. A JEA will be developed on scene detailing the plan and executed on location, describing the steps to be taken, identifying the possible hazards, and how potential hazards will be controlled.
- ii. In the event of a jack-knife incident, the jack knifed prime mover (Tractor #1) will be disconnected from the trailer either at the prime mover hitch, or at the drawbar / header connection. The front and rear pilot vehicles and flaggers will direct or control traffic accordingly.
- iii. Hydraulic and steering adjustments will be made to the trailer to allow it to be pulled in the opposite direction.
- iv. The push tractor (Tractor #2) will be positioned to pull the trailer and load back to the nearest traffic clearing location keeping traffic disruption to a minimum.
- v. Once at the parking area, Tractor #2 will disconnect from the trailer and return to assist with the recovery of Tractor #1. All prime movers are equipped with appropriately sized tow ropes. Should additional recovery services be required, contact would be made for an immediate dispatch. Nearby prime movers working on other module transports within the State or third prime movers utilized for assisting transporters to ascend steep grades may be called to assist with the recovery. (Third party towing & recovery contact numbers are to be documented at the daily toolbox talk)
- vi. Once the transporter and the load have been inspected and deemed safe, the load will be transported to the next traffic clearing location.
- vii. MDT (Montana Department of Transportation) will be advised of the incident and the recovery actions taken.

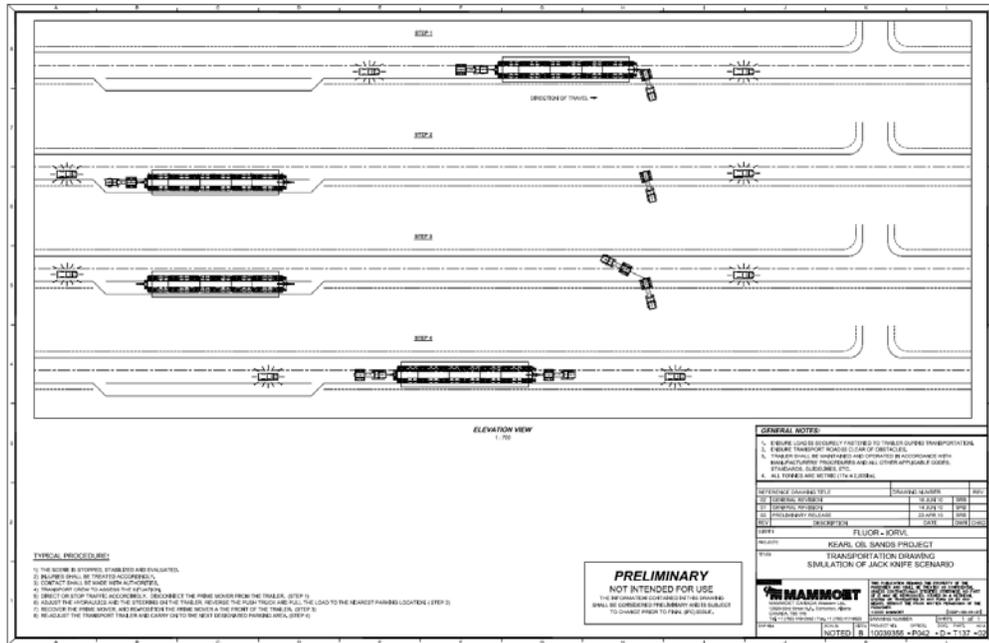


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Image 3-3: Transportation Drawing (See Appendix 1)





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4.0 Load Sliding Partially Off the Trailer

4.1 Scope

This portion of the document will describe a scenario in which the transporter's load slides off the deck of the trailer.

4.2 Background

A load sliding off the trailer could have consequences for the public, the environment, the client and the heavy haul carrier. All necessary steps will be taken to help prevent such an incident from happening as everyone involved in the project will be committed to achieving a high level of safety by complying with HSE guidelines, rules, regulations, codes of practice and industry best practice standards. Transport team members from the heavy haul carrier shall be familiar with the basic understanding of heavy transport, trailer stability and lashing.

Zero amounts of dangerous goods or hazardous materials will be shipped in or with the module. However, small amounts of hydrocarbons are required for the operation of the tractors and hydraulic platform trailers. Each tractor transporting the load can carry up to 350 gallons of diesel fuel and the hydraulic platform trailers use approximately 60 gallons of hydraulic oil. All vehicles in the transport convoy will have a copy of the carriers WHMIS file explaining the hazardous materials on board. In addition, all vehicles will be equipped with spill kits, which will assist to control and recover minor hazardous material spills.

Weather will be continuously monitored. Modules will not travel in adverse weather conditions, as per the permit requirements and based on the expertise of the transport supervisor and the transport team. The transport supervisor will check the forecast and posted road conditions, as well as scout the route prior to moving each day. The transport shall not leave the parking location if there is thought to be a risk to the public and the crew due to the weather. Should adverse weather conditions arise during transport, the transport team will determine the safest course of action and remain parked until it is deemed safe for the load to proceed.



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4.3 Scenario

While manoeuvring the curves along the highway, the tractor and its load drifted outside of the curve to avoid the drop off on the inside of the curve. The outside tires of the hydraulic platform trailer exited the road surface moving the load centre of gravity outside of the stability angle and caused the load to partially slide off the trailer with one side of the module is resting on the trailer and the other is resting on the ground in the ditch. The tractors, the trailer and the load remained upright. In this situation, only 12 feet of the trailer remains on the road surface with no overhang of the module on the road side. This leaves approximately 10 feet of road surface available for controlled traffic flow around the tractors, trailer and module. There are no hazardous material spills as a result of the incident.



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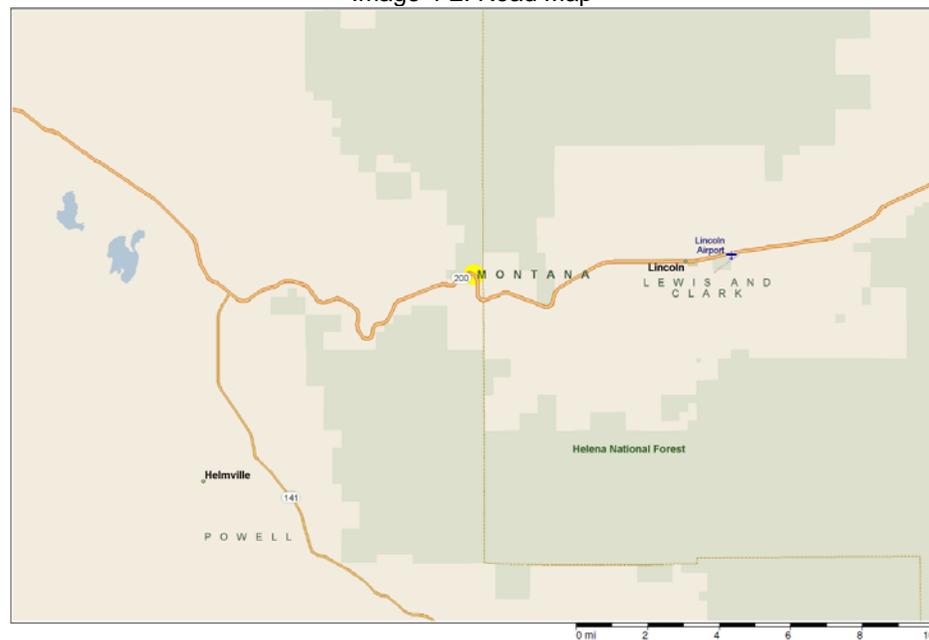
4.4 Environmental Setting

- Location: US Highway 200, eastbound approaching Lincoln, MT.
- Road: Two lane paved highway with narrow shoulders, shallow and wide drainage ditches on either side lined with trees.

Image 4-1: Highway View



Image 4-2: Road Map





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4.5 Potential Effects

Table 4-1: Potential Effects of a Module Partially Sliding Off the Trailer Incident

Environmental Components	Environmental Concern	Potential Effect
Air Quality and Noise	Air quality	No effect expected
	Noise	No effect expected
Water and aquatic environment	Water Quality	No effect expected
	Fish and fish habitat	No effect expected
	Aquatic mammals and habitat	No effect expected
	Water flow	No effect expected
Soils and landforms	Soil quality	No long term effects expected
	Ground stability	No effect expected
Vegetation	Plant and plant communities	Plants in incident area may get affected
Wildlife	Birds	No effect expected
	Terrestrial mammals	No effect expected
Community resources	Health care services	Local medical and emergency services may be required
	Transportation infrastructure	Road may be partially blocked for an extended period of time. Traffic may be restricted to one lane for approximately 2 to 3 days.
	Other community resources	Towing/recovery services may be required
Community wellness	Community health	Emergency vehicles may have to detour the incident
	Community safety	Emergency vehicles may have to detour the incident
Land and resource use	Traditional harvesting and land use	No effect expected
	Heritage resources	No effect expected
	Protected areas	No long term effects expected



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4.6 Mitigation and Preventative Measures

- Drive at appropriate speeds for transporting the modules based on the experience and expertise of the driver, the transport supervisor and the transport crew.
- Make certain that the pilot vehicles and spotters carefully observe the load as it is travelling along the highway.
- Ensure that all communication devices (2-way radios) are properly functioning for the spotter to inform the driver of the trailer position on the highway.
- Comply with HSE guidelines, rules, regulations, codes of practice and industry best practice standards.
- Ensure the load is properly lashed and secured to the transporter.
- Verify that the lashing and securing equipment is in excellent working condition.
- Ensure pre-trip inspections are completed ensuring everything is in good working order.
- Verify that the road is in acceptable driving condition prior to departing the parking location.

4.7 Emergency Response

- i. The scene will be stopped, stabilized and evaluated. The first priority is to ensure the safety of the public and the employees, and the protection of the environment and property.
- ii. Injuries shall be treated accordingly.
- iii. Immediate contact shall be established within the transport convoy.
- iv. The transport supervisor will contact the Montana Highway Patrol, emergency service agencies, IORVL and Fluor representatives, the transport company senior management and any other pre-determined authorities as listed in the JEA, providing a full description of the incident, location, damage and contact information.



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4.8 Recovery

- i. The transport supervisor, in conjunction with the transport crew, will assess the situation, decide on the safest course of action and mitigate any possible public and environmental disruptions. Prior to any new activities, a JEA will be developed on scene detailing the plan and executed on location, describing the steps to be taken, identifying the possible hazards, and how potential hazards will be controlled.
- ii. Traffic coordination around the incident will be controlled by the flaggers and pilot trucks as to disrupt traffic as little as possible. Flagging crews shall detour traffic around the incident on the open lane until all lanes of the highway can be re-opened.
- iii. MDT will be advised of the incident and presented with a recovery plan for their input and approval. The recovery plan will include the type of cranes, other equipment and personnel that will be used in the recovery and whether the cranes will be assembled at the incident site or at the next closest turnout before being moved to the incident site. During the recovery operation, traffic should not be stopped for more than 4 hours unless prior approval has been given by MDT.
- iv. Depending on the specific location of the incident and the position of the load and the trailer, one of the two following options may be used.
 1. Straight Lift Recovery
 - a. The cranes can be situated in such a position that there are acceptable lifting radii with sufficient capacity.
 - b. The cranes must hoist the module in order to remove the transporter and re-position it in a safe location for loading. Once in position, the cranes can hoist the module and re-load the transporter.
 2. Pick and Drag Recovery – This is where the cranes can be set up but the working radii does not allow sufficient capacity to fully lift the load back into a safe position. In this instance, each crane would take a percentage of the load and boom up while winch trucks situated at each end of the load would drag in into a radius where a full lift is achievable with both cranes.
- v. Contact information for local specialty towing, recovery and crane companies will be listed in transport JEA. Preliminary analysis shows that mobile cranes with up to approximately 500 ton capacities may be required to assist with the recovery should an incident occur. Appendix 4 lists numerous crane companies, within Montana, the north-west United States and Alberta that have suitable cranes within their fleets. Crane companies shall be contacted immediately so they may dispatch the appropriate equipment. Equipment required for the recovery efforts will need to be reviewed on a case by case basis and will be specified depending on various factors such as exact incident details, size, weight,



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- viii. access area, module lift lug locations, etc. Pre-transport contact will be made to the crane companies to verify that suitable cranes are available for emergency call-out if required. Once the incident has been dealt with, it will be reviewed and analyzed. The transport equipment will be checked and verified to ensure it is safe to proceed prior to continuing transport.



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5.0 Overturning of the Load and Transporter in Water

5.1 Scope

This portion of the document will describe a scenario in which the transporter carrying a module overturns in water.

5.2 Background

Overturning a highway transporter and the load could have consequences for the public, the environment, the client and the heavy haul carrier. All necessary steps will be taken to help prevent such an incident from happening as everyone involved in the project will be committed to achieving a high level of safety by complying with HSE guidelines, rules, regulations, codes of practice and industry best practice standards. Transport team members from the heavy haul carrier shall be familiar with the basic understanding of heavy transport, trailer stability and lashing.

Zero amounts of dangerous goods or hazardous materials will be shipped in or with the module. However, small amounts of hydrocarbons are required for the operation of the tractors and hydraulic platform trailers. Each tractor transporting the load can carry up to 350 gallons of diesel fuel and the hydraulic platform trailers use approximately 60 gallons of hydraulic oil. All vehicles in the transport convoy will have a copy of the carriers WHMIS file explaining the hazardous materials on board. In addition, all vehicles will be equipped with spill kits, which will assist to control and recover minor hazardous material spills.

Weather will be continuously monitored. Modules will not travel in adverse weather conditions, as per the permit requirements and based on the expertise of the transport supervisor and the transport team. The transport supervisor will check the forecast and posted road conditions, as well as scout the route prior to moving each day. The transport shall not leave the parking location if there is thought to be a risk to the public and the crew due to the weather. Should adverse weather conditions arise during transport, the transport team will determine the safest course of action and remain parked until it is deemed safe for the load to proceed.

5.3 Scenario

While manoeuvring a curve along the highway, the hydraulic platform trailer made contact with the barrier. As a result, the trailer and the prime mover exited the road surface and overturned into the river. Small amounts of hydrocarbons leaked from the prime mover and the hydraulic platform trailer as a result of the incident.



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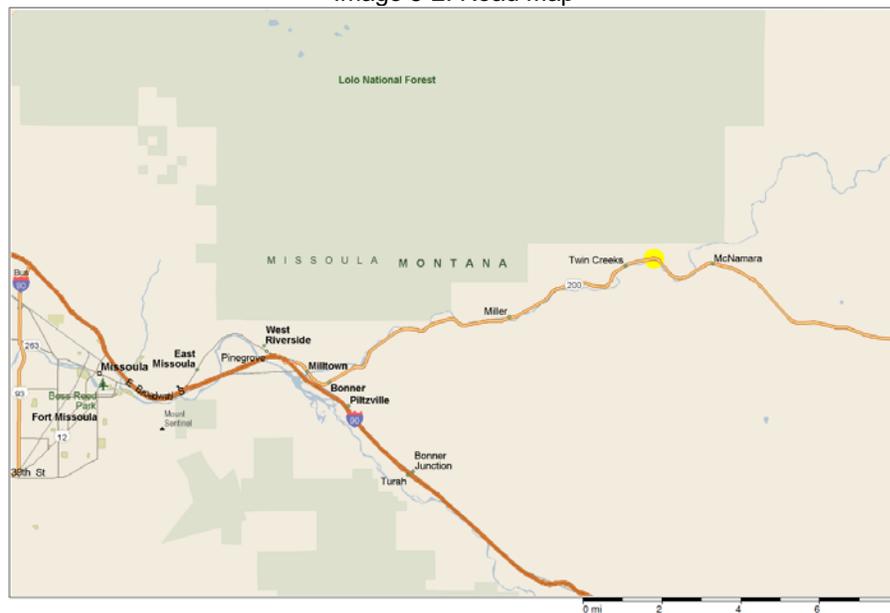
5.4 Environmental Setting

- Location: US Highway 200, eastbound past Missoula, MT.
- Road: Two lane paved highway with narrow shoulders, a drainage ditch to the left and a river to the right.
- Water: The Blackfoot River runs along US Highway 200 in this area.

Image 5-1: Highway View



Image 5-2: Road Map





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5.5 Potential Effects

Table 5-1: Potential Effects of a Module Overturning Incident

Environmental Components	Environmental Concern	Potential Effect
Air Quality and Noise	Air quality	No effect expected
	Noise	No effect expected
Water and aquatic environment	Water Quality	Short term effects expected
	Fish and fish habitat	Possible mortality
	Aquatic mammals and habitat	Mammals may be affected
	Water flow	Minimal disruption of water flow expected
Soils and landforms	Soil quality	Soil contamination expected
	Ground stability	No effect expected
Vegetation	Plant and plant communities	Plants in incident area may get affected
Wildlife	Birds	Birds may be affected
	Terrestrial mammals	Mammals may be affected
Community resources	Health care services	Local medical and emergency services may be required
	Transportation infrastructure	During the recovery, the road may be blocked for intervals up to 4 hours in length
	Other community resources	Towing/recovery services will be required
Community wellness	Community health	Emergency vehicles may have to detour the incident
	Community safety	Emergency vehicles may have to detour the incident
Land and resource use	Traditional harvesting and land use	Fishing or rafting activities may be affected
	Heritage resources	No effect expected
	Protected areas	No long term effects expected



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5.6 Mitigation and Preventative Measures

- Drive at appropriate speeds for transporting the modules based on the experience and expertise of the driver, the transport supervisor and the transport crew.
- Make certain that the pilot vehicles and spotters carefully observe the load as it is travelling along the highway.
- Ensure that all communication devices (2-way radios) are properly functioning as to inform the driver of the trailer position along the highway.
- Comply with HSE guidelines, rules, regulations, codes of practice and industry best practice standards.
- Ensure the load is properly lashed and secured to the transporter.
- Verify that the lashing and securing equipment is in excellent working condition.
- Ensure pre-trip inspections are completed ensuring everything is in good working order.
- Verify that the road is in acceptable driving condition prior to departing the parking location.

5.7 Emergency Response

- i. The scene will be stopped, stabilized and evaluated. The first priority is to ensure the safety of the public and the employees, and the protection of the environment and property.
- ii. Injuries shall be treated accordingly.
- iii. Immediate contact shall be established within the transport convoy.
- iv. The transport supervisor will contact the Montana Highway Patrol, emergency service agencies, IORVL and Fluor representatives, the transport company senior management and any other pre-determined authorities as listed in the JEA, providing a full description of the incident, location, damage and contact information.



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5.8 Recovery

- i. The transport supervisor, in conjunction with the transport crew, will assess the situation, decide on the safest course of action and mitigate any possible public and environmental disruptions. Prior to any new activities, a JEA will be developed on scene detailing the plan and executed on location, describing the steps to be taken, identifying the possible hazards, and how potential hazards will be controlled.
- ii. Traffic coordination around the incident will be controlled by the flaggers and pilot trucks as to disrupt traffic as little as possible. Flagging crews shall control traffic around the incident.
- iii. The hazardous material spill area will be analyzed and a plan will be developed to secure or remove any remaining diesel / hydraulic fluid. The area will be flagged and the proper authorities contacted immediately as to keep the disturbances to the environment as minimal as possible. Local hazard material authority contact information may be found in the transport JEA. From a safe location, the transport supervisor, or other, shall supply the following minimum information to the hazardous materials authorities:
 1. Name and contact information
 2. A brief description of the incident including substances and approximate quantity leaked
 3. The immediate effects on people, animals and the environment
 4. Current weather conditions
- iv. MDT will be advised of the incident and presented with a recovery plan for their input and approval. The recovery plan will include the type of cranes, other equipment and personnel that will be used in the recovery and whether the cranes will be assembled at the incident site or at the next closest turnout before being moved to the incident site. During the recovery operation, traffic should not be stopped for more than 4 hours unless prior approval has been provided by MDT.
- v. Depending on the specific location of the incident and the position of the load and the trailer, one of the three following options may be used:
 1. Straight Lift Recovery – This is where the cranes can be situated in such a position that there are acceptable lifting radii with sufficient capacity.
 2. Pick and Drag Recovery – This is where the cranes can be set up but the working radii does not allow sufficient capacity to fully lift the load back into a safe position. In this instance, each crane would take a percentage of the load and boom up while winch trucks situated at each end of the load would drag it into a radius where a full lift is achievable with both cranes.
 3. Salvage – This option would be required if the location did not allow cranes to be set up at a safe working radius or would not allow to be set up at all due to swing interferences from the mountain side. This



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option would require a salvage team to cut the module into sections which could be removed with a much smaller crane.

- vi. Contact information for local specialty towing, recovery and crane companies will be listed in transport JEA. Preliminary analysis shows that mobile cranes with up to approximately 500 ton capacities may be required to assist with the recovery should an incident occur. Appendix 4 lists numerous cranes companies, within Montana, the north-west United States and Alberta that have suitable cranes within their fleets. Crane companies shall be contacted immediately so they may dispatch the appropriate equipment. Equipment required for recovery efforts will need to be reviewed on a case by case basis and will be specified depending on various factors such as exact incident details, size, weight, access area, lift lug locations, etc. Pre-transport contact will be made to the crane companies to verify that suitable cranes are available for emergency call-out if required.
- vii. Once the incident has been dealt with, it will be investigated and analyzed. The transport equipment will be checked and repaired (if possible) as to ensure it is safe to return to the fleet. Results of the investigation will be communicated to IORVL, Fluor, the heavy haul carrier and all members of the transport crews.



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6.0 Private Vehicle in an Emergency Situation

6.1 Scope

This portion of the document will describe a scenario in which the transporter carrying a module encounters a private vehicle in an emergency situation, or an unannounced emergency vehicle along the route.

6.2 Background

The ERP contained within the Montana Transportation Plan describes briefly the procedure when marked and announced emergency vehicles are approaching the transport convoy. Albeit the emergency vehicle scenario has been dealt with, there exists the possibility that a private vehicle in an emergency situation or an unannounced emergency vehicle must pass the load immediately and continue on to receive medical assistance.

6.3 Scenario

While transporting a module along the designated route, the transport convoy encounters a private vehicle in an emergency situation.



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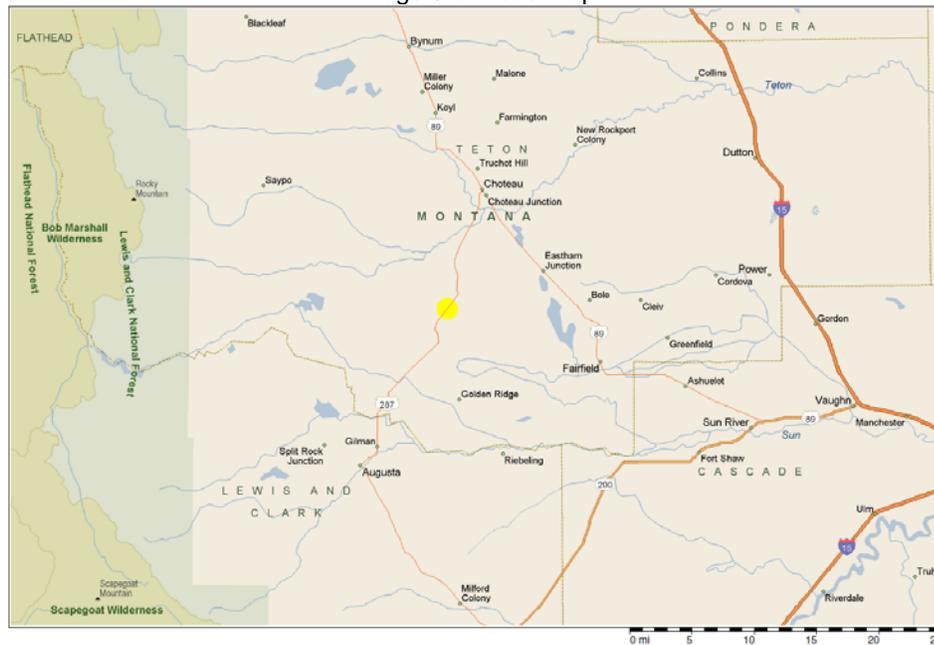
6.4 Environmental Setting

- Location: US Highway 287, northbound approaching Choteau, MT.
- Road: Two lane paved highway with narrow shoulders and steep drainage ditches on either side.

Image 6-1: Highway View



Image 6-2: Road Map





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6.5 Potential Effects

Table 6-1: Potential Effects of Encountering Private Vehicle in an Emergency Situation

Environmental Components	Environmental Concern	Potential Effect
Air Quality and Noise	Air quality	No effect expected
	Noise	No effect expected
Water and aquatic environment	Water Quality	No effect expected
	Fish and fish habitat	No effect expected
	Aquatic mammals and habitat	No effect expected
	Water flow	No effect expected
Soils and landforms	Soil quality	No effect expected
	Ground stability	No effect expected
Vegetation	Plant and plant communities	No effect expected
Wildlife	Birds	No effect expected
	Terrestrial mammals	No effect expected
Community resources	Health care services	Private vehicle in an emergency situation may be impacted
	Transportation infrastructure	Minor traffic delays may happen
	Other community resources	No effect expected
Community wellness	Community health	Private vehicle in an emergency situation may be impacted
	Community safety	No effect expected
Land and resource use	Traditional harvesting and land use	No effect expected
	Heritage resources	No effect expected
	Protected areas	No effect expected



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6.6 Mitigation and Preventative Measure

- Rely on the experience and the expertise of the transport supervisor, the transport crew and the local police officers for dealing with this type of situation.
- Make certain that all members of the transport crew and all vehicles are highly visible to oncoming and following traffic.
- Ensure that there is sufficient warning (signs, lights, message boards, etc) for oncoming or following unannounced emergency vehicles advising them of the over-dimensional transport ahead.
- Ensure that all communication devices (2-way radios) are properly functioning as to inform the entire transport crew including police escorts of the load position along the highway.
- Comply with HSE guidelines, rules, regulations, codes of practice and industry best practice standards.
- The transport supervisor, along with the drivers, will review the upcoming segment prior to departing the turnout to identify the opportunities for clearing oncoming private vehicles in need of immediate medical aid, such as driveways, approaches and intersections.



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6.7 Emergency Response

- i. The private vehicle with an emergency situation required to immediately pass the transport convoy will inform the nearest pilot vehicle operator, police officer or flagger of the emergency.
- ii. The pilot truck operator, police officer or flagger will radio the transport supervisor of the situation.



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6.8 Recovery

Emergency vehicle travelling in the opposite direction of the module:

- i. The transport supervisor will radio the crew advising them of the situation and order the nearest pilot truck to escort the unannounced emergency vehicle towards the module.
- ii. a) If it is determined that there is a location prior to the next turnout that is wide enough to have the emergency vehicle pass the transporter, the transport supervisor will direct the transport crew to pull over and stop. The pilot truck will escort the vehicle around the load.
b) If there are no wide spots that may allow the emergency vehicle to safely pass the transporter, the transporter will stop just in advance of the next available turnout, approach, driveway or pullout of any kind while the remaining pilot trucks and flaggers stop both oncoming and following traffic. After the vehicle is clear of the roadway, the pilot truck escorting the vehicle will radio the transport supervisor, who will in turn direct the transporter to safely pass the vehicle parked off to the side.
- iii. Once the transporter and the private vehicle have passed each other, the pilot truck will escort the unannounced emergency vehicle through the remainder of the transport activity zone.
- iv. The transport supervisor will call 9-1-1 (or equivalent – emergency numbers to be located in the JEA) so the emergency can be dealt with appropriately.
- v. Once the private vehicle situation has passed the transporter, the transport of the module will resume. Should the transport convoy have lost a member of the Montana Highway Patrol due to the fact they are escorting the private vehicle, the transport convoy will remain parked at the next turnout until they return or can be replaced.

Emergency vehicle travelling in the same direction as the module:

- i. The transport supervisor will radio the crew advising of the situation and order the nearest pilot truck operator to escort the unannounced emergency vehicle directly behind the module, while the remaining pilot trucks and flaggers stop oncoming and following traffic.
- ii. a) If it is determined that there is a location prior to the next turnout that is wide enough to have the emergency vehicle pass the transporter, the transport supervisor will direct the transport crew to pull over and stop. The pilot truck will then escort the vehicle around the load.
b) If there are no wide spots that may allow the emergency vehicle to safely pass the transporter, the transporter will proceed without delay to the nearest turnout and immediately pull over to allow the pilot truck to escort the emergency vehicle around the load.
- iii. The transport supervisor will also call 9-1-1 (or equivalent – emergency numbers to be located in the JEA) so the emergency can be dealt with appropriately.



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- iv. Once the unannounced emergency vehicle situation has passed the transporter, the transport will resume. Should the transport convoy have lost a member of the Montana Highway Patrol due to the fact they are escorting the private vehicle, the transport convoy will remain parked at the next turnout until they return or can be replaced.

***Unannounced emergency vehicle emergency recovery plan based in part by information provided by Western Traffic Control.



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Appendices

- Appendix 1 – Transportation Drawing
- Appendix 2 – Job Execution Analysis (JEA) Sample
- Appendix 3 – Equipment Information
- Appendix 4 – Mobile Crane locations and Capacities