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<th>DOCUMENT REF</th>
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1 PURPOSE AND CONTEXT

1.1 The Wiluna Uranium Project

Toro Energy Limited (Toro) proposes to develop the Wiluna Uranium Project (the Project) located near Wiluna, Western Australia. The Project would involve mining and processing of up to 2 Mt of mineralised ore per year over an anticipated mine life of up to 20 years, producing the equivalent of about 1200 tpa of uranium oxide concentrate (UOC).

The Project comprises four deposits, Lake Way (15 km south-east of Wiluna), Centipede and Millipede (30 km south of Wiluna) and Lake Maitland (105 km south-east of Wiluna). Ore from all four deposits would be processed at a plant adjacent to the Centipede-Millipede deposits and transported by road to Port Adelaide and Darwin for shipment to customers.

Wiluna (population just over 1000) is approximately 960 km north-east of Perth and 520 km north of Kalgoorlie. The sealed Goldfields Highway links Wiluna to Kalgoorlie.

1.2 Purpose

The purpose of the Transport Management Plan (TMP) is to document the framework that Toro would adopt for the safe transport of UOC in 20 ft general purpose (GP) containers from the Project for export shipment.

The TMP applies consistent systems and procedures for final product transportation. In doing so, it establishes the framework to meet operational requirements, taking into account transport safety standards set by both Toro and regulatory authorities and legislative and regulatory requirements.

1.3 Objective

The TMP sets out arrangements to ensure the protection of the:

- Community;
- The environment; and
- Infrastructure and property during the transport process.

This objective is achieved by:

- Correctly packed drums, secured in 20 ft GP containers;
- Use of routes approved by the Australian Safeguards and Non-Proliferation Office (ASNO) between the Project and nominated Australian export ports of Port Adelaide, South Australia and Darwin Port, Northern Territory; and
- Toro management systems and controls for the transport activities.

1.4 Product Volumes

The planned production for the Project is about 1200 tpa of UOC. A 20 ft GP container can carry approximately 19 t of product. Accordingly, the product transport requirements of the Project equate on average to the movement of five 20 ft GP containers per month in a road train comprising two double trailers and one single trailer. Subject to customer requirements, production and grade mix, the actual volumes of UOC being transported may vary from month-to-month.
2 SCOPE

2.1 Scope of the TMP

The TMP applies to uranium peroxide concentrate in the form of UO₂₂H₂O (hereafter UOC) packed in 205 L drums loaded in 20 ft GP containers at the Project site in ASNO-approved storage areas for transport to the nominated port(s) for export from Australia.

The scope of this TMP covers the transport of UOC consignments originating at the Project for:

- Road transport to Port Adelaide in South Australia (SA);
- Rail transport from Adelaide, SA to the East Arm facilities at Darwin Port, Northern Territory (NT); and
- Sea freight from either Port Adelaide or Darwin Port to international customer(s).

UOC is classified as a dangerous good and would be transported as UN2912, Class 7 – Radioactive Substances, LSA-1. The requirements for the transport of UOC consignments are established by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in the Code of Practice for the Safe Transport of Radioactive Material, latest edition 2008 (the Code).

2.2 Abbreviations and Definitions

The definitions and abbreviations listed in Table 2.1 are used throughout this document.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 ft GP</td>
<td>20ft General Purpose container with minimum external dimensions 6.1 m (l) x 2.4 m (w) x 2.4 m (h)</td>
</tr>
<tr>
<td>ADGC</td>
<td>Australian Dangerous Goods Code</td>
</tr>
<tr>
<td>ALARA</td>
<td>The As Low As Reasonably Achievable (ALARA) principle is defined as²: the source related process to keep the likelihood of incurring exposures (where these are not certain to be received), the number of people exposed, and the magnitude of individual doses as low as reasonably achievable, taking economic and societal factors into account</td>
</tr>
<tr>
<td>AMSA</td>
<td>Australian Maritime Safety Authority</td>
</tr>
<tr>
<td>ASNO</td>
<td>Australian Safeguards and Non-Proliferation Office</td>
</tr>
<tr>
<td>ARPANSA</td>
<td>Australian Radiation Protection and Nuclear Safety Agency</td>
</tr>
<tr>
<td>ARTC</td>
<td>Australian Rail Track Corporation</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed circuit television</td>
</tr>
<tr>
<td>CEMP</td>
<td>Crisis and Emergency Management Plan</td>
</tr>
<tr>
<td>CMT</td>
<td>Crisis Management Team</td>
</tr>
</tbody>
</table>

¹ The sea freight component is not included in this draft TMP; it will be completed prior to seeking formal approvals from the Australian Government to transport UOC.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Competent Authority</td>
<td>Regulatory authority which administers the various statutory regulations covering transport of radioactive materials and controls emergency action in the event of an incident</td>
</tr>
<tr>
<td>CTC</td>
<td>Central Train Control</td>
</tr>
<tr>
<td>C-TPAT</td>
<td>Customs-Trade Partnership Against Terrorism</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Management Team</td>
</tr>
<tr>
<td>EPIRB</td>
<td>Emergency position indicating radio beacons</td>
</tr>
<tr>
<td>ERP</td>
<td>Emergency Response Plan</td>
</tr>
<tr>
<td>GP</td>
<td>General purpose</td>
</tr>
<tr>
<td>GPS</td>
<td>Global positioning system</td>
</tr>
<tr>
<td>IAEA</td>
<td>International Atomic Energy Agency</td>
</tr>
<tr>
<td>IMT</td>
<td>Incident Management Team</td>
</tr>
<tr>
<td>IP</td>
<td>Industrial Packaging</td>
</tr>
<tr>
<td>LEMC</td>
<td>Local Emergency Management Committee</td>
</tr>
<tr>
<td>LSA</td>
<td>Low Specific Activity. (Radioactive material of Low Specific Activity has a limited specific activity, or is material to which limits of estimated average specific activity apply. External shielding materials surrounding the LSA material must not be considered in determining the estimated average specific activity)</td>
</tr>
<tr>
<td>NOS</td>
<td>Not Otherwise Specified, refers to labelling of dangerous goods</td>
</tr>
<tr>
<td>NT</td>
<td>Northern Territory</td>
</tr>
<tr>
<td>PPE</td>
<td>Personal protective equipment</td>
</tr>
<tr>
<td>PN</td>
<td>Permit to Possess Nuclear Material</td>
</tr>
<tr>
<td>Radioactive Material</td>
<td>In this document, any material such as UOC, product and exploration samples with greater than 1 Becquerel/gram (Bq/g) (approx 80 ppm uranium) is considered radioactive.</td>
</tr>
<tr>
<td>SA</td>
<td>South Australia</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet (previously referred to as Material Safety Data Sheet)</td>
</tr>
<tr>
<td>The Code</td>
<td>Code of Practice for the Safe Transport of Radioactive Material, 2008, Radiation Protection Series No. 21, ARPANSA, Canberra</td>
</tr>
<tr>
<td>The Project</td>
<td>Wiluna Uranium Project</td>
</tr>
<tr>
<td>TMP</td>
<td>Transport Management Plan</td>
</tr>
<tr>
<td>TN</td>
<td>Permit to Transport Nuclear Material</td>
</tr>
<tr>
<td>Toro</td>
<td>Toro Energy Limited</td>
</tr>
<tr>
<td>Transport Index</td>
<td>The maximum radiation level at 1 m from any external surface of the package (μSv/h divided by 10) and rounded up to the first decimal place to determine the transport index</td>
</tr>
<tr>
<td>TSP</td>
<td>Transport Service Provider</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>UOC</td>
<td>Uranium oxide concentrate</td>
</tr>
</tbody>
</table>
| Vehicle | As defined in paragraph 247 (page 15) of the Code of Practice for Safe Transport of Radioactive Materials:  
... shall mean a road vehicle (including an articulated vehicle, i.e. a tractor and semi-trailer combination) or railroad car or railway wagon. Each trailer shall be considered as a separate vehicle. |
| WA   | Western Australia |
3 LEGISLATION: TRANSPORT OF RADIOACTIVE MATERIAL

3.1 Introduction
As a signatory to the commitments contained in the Nuclear Non-Proliferation Treaty administered by the International Atomic Energy Agency (IAEA), the Australian Government has maintained a comprehensive uranium export policy for almost 40 years. Under this policy, the sale of Australian uranium is only approved for peaceful purposes.

This section provides an overview of how UOC exports are managed under Australian law and international regulatory regimes.

It finishes with a summary of the permits required by each of the entities involved in transporting UOC.

3.2 Regulatory Requirements
A range of federal, state and territory laws would be applicable to transport of product by Toro. International regulatory regimes, such as those maintained by the IAEA, would also apply. Toro would comply with all current international laws and regulations even if they may not have been adopted in Australian law by relevant jurisdictions at the time of product shipment.

The following laws, regulations and standards apply in Australia:

3.2.1 Commonwealth of Australia
- Australian Radiation Protection and Nuclear Safety Act 1998;
- Nuclear Non-Proliferation (Safeguards) Act 1987;
- Customs Act 1901;
- Customs (Prohibited Exports) Regulations 1958;
- Code of Practice for the Safe Transport of Radioactive Materials 2008;
- Australian Dangerous Goods Code, 7th Edition;
- ARPANSA, Code of Practice for the Safe Transport of Radioactive Material 2008;
- ARPANSA, Code of Practice, Security of Radioactive Sources, Radiation Protection Series 11;
- ARPANSA, Safe Transport of Radioactive Material, Safety Guide, Radiation Protection Series No. 2.1, 2008; and
- Australian Standard AS 3846-1998 The handling and transport of dangerous cargoes in port areas.

3.2.2 Western Australia
The following regulatory instruments cover road transport from the Project site to the WA/SA border:
- Radiation Safety Act 1975;
- Radiation Safety (Transport of Radioactive Substances) Regulations 2002;
- Dangerous Goods Safety Act 2004;
- Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007;
- Dangerous Goods Safety (General) Regulations 2007;
- Emergency Management Act 2005; and

---

3 Referred to as the ‘Transport Code’ under the South Australian Radiation Protection and Control Act Regulations
3.2.3 South Australia

The following regulatory instruments cover road transport from the WA/SA border to Port Adelaide, and/or rail movement from Adelaide to the NT/SA border:

- Environment Protection Act 1993;
- Dangerous Substances Act 1979;
- Dangerous Substances (Dangerous Goods Transport) Regulations 2008;
- Radiation Protection and Control Act 1982;
- Radiation Protection and Control (Transport of Radioactive Substances) Regulations 2008;
- Rail Safety Act 1961;
- Rail Safety (General) Regulations; and

3.2.4 Northern Territory

The following regulatory instruments are relevant to the rail transport route from the SA/NT border to the Darwin Port, East Arm wharf:

- Dangerous Goods Act;
- Dangerous Goods Regulations;
- Fire and Emergency Act;
- Radioactive Ores and Concentrates (Packaging and Transport) Act;
- Radioactive Ores and Concentrates (Packaging and Transport) Regulations;
- Rail Safety (National Uniform Legislation) Act;
- Darwin Port Corporation Act; and
- Darwin Port (Handling and Transport of Dangerous Cargoes) By-laws.

3.2.5 Permits

In relation to this TMP, under the Nuclear Non-Proliferation (Safeguards) Act 1987, ASNO would issue permits to the various parties involved in the movement of UOC to either Possess Nuclear Material (PN) or Transport Nuclear Material (TN). As well as ASNO permits, Western Australia and the Northern Territory require additional licences to be held for the transport of UOC in their respective jurisdictions.

Table 3.1 provides a summary of the permits and licences required to transport UOC. All permits and approvals must be in place before any movement of UOC material from the Project can occur.

Toro would secure all relevant licences and permits covering land and sea transport to nominated customer(s) destinations as these become known.
## Table 3.1: Permits for the Transportation of UOC in Australia

<table>
<thead>
<tr>
<th>Permit/Licence</th>
<th>Description</th>
<th>Permit holder</th>
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<tbody>
<tr>
<td><strong>ASNO</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permit to Possess Nuclear Material (PN)</td>
<td>To mine, produce, store and handle nuclear material</td>
<td>Toro</td>
</tr>
<tr>
<td>Permit to Transport Nuclear Material (TN)</td>
<td>To transport nuclear material along approved routes including physical protection</td>
<td>Transport service provider such as: Toro, Road operator, Rail operator</td>
</tr>
<tr>
<td>Permit to Possess Nuclear Material (PN)</td>
<td>Transit storage and handling nuclear material</td>
<td>Transport service provider such as: Stevedores, Approved transit storage area operator(s)</td>
</tr>
<tr>
<td>ASO 112 – Application to create a new approved location</td>
<td>Storage location approvals on an ongoing basis</td>
<td>Toro</td>
</tr>
<tr>
<td>ASO 113 – Application to approve a new (or variation to a current) transport plan</td>
<td>Road and rail transport route approvals to permit holders to allow shipments to occur on an ongoing basis</td>
<td>Transport service provider such as: Toro, Road operator, Rail operator</td>
</tr>
<tr>
<td><strong>Western Australia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licence in respect of radioactive substances</td>
<td>Comply with licence requirements</td>
<td>Nominated individual(s) employed by the appointed transport service provider</td>
</tr>
<tr>
<td><strong>South Australia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport Management plan</td>
<td>SA Cabinet approved transport plan for UOC consignments</td>
<td>Toro</td>
</tr>
<tr>
<td><strong>Northern Territory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licence to transport radioactive material</td>
<td>Comply with the requirements as set out in the issued licence</td>
<td>Transport service provider such as: Road operator, Rail operator</td>
</tr>
</tbody>
</table>
4 RELATIONSHIP AND RESPONSIBILITIES OF PARTIES

4.1 Introduction
This section sets out the relationships, roles and responsibilities that would be either directly or indirectly involved in transportation of product from the Project to the ports of Adelaide and Darwin.

4.2 Roles and Responsibilities

4.2.1 The Wiluna Uranium Project
The Project would be responsible for:

- The implementation and maintenance of this TMP;
- All aspects associated with the approvals for and management of the TMP;
- Compliance with all aspects associated with the transport of UOC from the Project to the ASNO-approved facilities in either Adelaide or Darwin, along an approved transport route as set out in relevant permits;
- Having an appropriate Emergency Response Plan and emergency response procedures in place to respond to any incident during the transport process and testing of such procedures on a regular basis;
- Selecting, appointing and managing contractors, at its discretion, for part or all of the operations described in this TMP;
- Maintaining relationships with Australian, state and territory government agencies and authorities associated with the road or rail transport of UOC consignments; and
- Providing information and training to emergency services organisations prior to the transport of UOC.

4.2.2 Transport Freight Service Provider(s)
The transport freight service provider (TSP) contracted directly to Toro, would have the responsibility to:

- Provide all services associated with the transportation of UOC by road and/or rail, including maintaining all road equipment (prime movers and trailers) to manufacturers’ specifications agreed during the TSP selection process;
- Secure and maintain all necessary permits and approvals from Australian, state and territory regulators to carry UOC;
- Implement a training program for all staff and contractors that provides formal training on the properties and correct handling of UOC consignments and details the appropriate incident response procedures;
- Implement appropriate emergency response procedures in the event of an incident involving a UOC consignment whilst under its control;
- Comply with the procedures described in this TMP and any other Australian, state or territory government code(s) or regulation(s) including occupational health and safety, Fatigue Management and Chain of Responsibility laws;
- Comply with all Australian, state and territory road and rail regulations, procedures and codes of practice applicable to the task of transporting UOC; and
- Provide appropriate documentation and an emergency response folder in an identifiable location within the cabin of each road truck or locomotive.
4.2.3 Australian, State and Territory Governments

Australian, state and territory government regulators have the responsibility to:

- Administer appropriate legislation and regulations that contain provisions to prevent accidents and reduce risks in storing, handling and transporting UOC;
- Issue valid permits, approvals and conditions to transport and store radioactive materials that are consistent with their respective legislative and regulatory obligations;
- Maintain adequate emergency services incident management capabilities and resources to respond to and protect public health and safety in the event of an incident involving the transport of radioactive materials;
- Monitor and determine that clean-ups have been completed to adequate standards in the event of any incident; and
- Ensure community awareness of emergency response plans and capabilities in the event of an incident involving UOC.

4.3 Cross-reference of Roles and Responsibilities Within the TMP

A summary of the key roles and responsibilities as presented within this TMP is provided in Table 4.1.

**Table 4.1: Cross-reference of Roles and Responsibilities**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Task</th>
<th>Relevant Section of TMP</th>
<th>Responsible Party</th>
</tr>
</thead>
</table>
| Approved Routes                       | Nomination of transport routes from the Project site to nominated export port(s) | 6.4.1                    | • ASNO  
|                                       |                                                                      |                           | • Toro                                                                |
| Incident Management                   | Development of an emergency response plan                           | 7.1–7.5                  | • Australian state and territory governments  
|                                       |                                                                      |                           | • Toro  
|                                       |                                                                      |                           | • Transport service provider                                         |
| Incident Response Kit                 | Kit(s) to accompany each transport movement including the maintenance of items in the kit | 6.3.4                    | • Transport service provider                                         |
| Issuing of Permits and Licences for Transport of UOC | Secure and maintain appropriate permits and licences to possess, transport and handle UOC | 3.2, 4.2.3               | • Australian state and territory governments  
|                                       |                                                                      |                           | • Toro  
|                                       |                                                                      |                           | • Transport service provider                                         |
| Management Systems                    | Review, update and overall management of TMP                       | 8.2–8.4, 8.7–8.9         | • Toro                                                                |
| Monitoring Systems                    | Collection and reporting of monitoring programs associated with UOC transport | 8.6                      | • Toro                                                                |
| On Route Activities                   | Management, monitoring and reporting covering route communications, storage access and security | 6.4.2–6.4.3              | • Toro  
<p>|                                       |                                                                      |                           | • Transport service provider                                         |</p>
<table>
<thead>
<tr>
<th>Requirements</th>
<th>Task</th>
<th>Relevant Section of TMP</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging, Marking and Labelling</td>
<td>Application of appropriate packaging, labels and placarding for</td>
<td>6.2, 6.3.1</td>
<td>• Toro</td>
</tr>
<tr>
<td></td>
<td>transporting drums and 20 ft GP containers</td>
<td></td>
<td>• Transport service provider</td>
</tr>
<tr>
<td>Security</td>
<td>Development and implementation of security measures for transport of</td>
<td>6.4, 8.3</td>
<td>• Toro</td>
</tr>
<tr>
<td></td>
<td>UOC</td>
<td></td>
<td>• Transport service provider</td>
</tr>
<tr>
<td>Separation and Segregation</td>
<td>Maintain appropriate separation and segregation distances to other</td>
<td>5.6</td>
<td>• Transport service provider</td>
</tr>
<tr>
<td></td>
<td>dangerous and hazardous materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Contamination</td>
<td>Compliance with Code of Practice for drum and 20 ft GP container for</td>
<td>6.3.3</td>
<td>• Toro</td>
</tr>
<tr>
<td></td>
<td>non-fixed surface contamination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>Coordination of a training program and matrix</td>
<td>8.5</td>
<td>• Toro</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Emergency services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Transport service provider</td>
</tr>
</tbody>
</table>
5    BASIS OF THE TRANSPORT METHODOLOGY

5.1 Code of Practice for Safe Transport of Radioactive Material

The ARPANSA Code of Practice for Safe Transport of Radioactive Material Edition 2008 (the Code) provides the guidelines and various requirements for the transportation of all radioactive substances including UOC. These guidelines are incorporated in Australian, state and territory laws and regulations as set out in Section 3.

Toro would transport UOC from the Project on public roads and rail systems based on the methodology outlined in this section of the TMP.

5.2 Community Engagement

UOC is one of many hazardous materials regularly transported around Australia. It is a hazard if ingested or inhaled in large quantities over extended periods of time.

Toro has engaged with communities and stakeholders along the proposed transport routes to increase the understanding and awareness of the systems and procedures to be adopted under this TMP. These systems and procedures have been developed to protect the community, employees and contractors during both routine operations and in the event of an incident, to minimise the risk of radiation exposure and provide protection during the transport of UOC.

5.3 The ALARA Principle

The Code incorporates the ‘as low as reasonably achievable’ (ALARA) principle. ALARA focuses on protecting communities and the environment by reducing any exposure to radiation associated with the transport of UOC consignments from the Project site.

Across the transport solution, ALARA is achieved by maintaining public radiation exposure levels well below the annual public dose limits set by Australian legislation of 1 millisievert per year (mSv/a).

The four main means to minimise radiation exposure incorporated into the transport solution for the movement of UOC are:

- Shielding – use of 205 L drums and 20 ft GP containers to block or reduce radiation;
- Time – limiting the time UOC consignments are being transported between approved facilities;
- Distance – maintaining safe distances between workers or communities along the approved transport routes; and
- Amount – monthly transport movements coordinated with the quantity of UOC material being held in storage.

5.4 Uranium Oxide Concentrate

The UOC transported would be a yellow, solid material (Figure 5.1) classified as shown in Table 5.1.
Table 5.1: Classification of UOC

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations (UN) Number</td>
<td>2912</td>
</tr>
<tr>
<td>Class</td>
<td>7 (Radioactive Material)</td>
</tr>
<tr>
<td>Correct Shipping Name</td>
<td>Radioactive Material Low Specific Activity (LSA-1) non fissile or fissile-exceptioned</td>
</tr>
<tr>
<td>Packaging Group</td>
<td>Industrial Packaging (IP) – 1</td>
</tr>
</tbody>
</table>

Figure 5.1: Uranium Oxide Concentrate

5.5 Road Vehicle Combinations

In line with the objective of the TMP (see Section 1.3), for each movement of UOC from the Project, the following requirements would be met:

- A minimum of two trucks would travel together at all times along the approved transport route (see Section 6.4);
- Each truck would have two drivers sharing the driving responsibilities so as to avoid extended breaks during the journey; and
- Security and communication protocols would apply throughout the journey (see Sections 6.4.2 and 8.3).

5.6 Separation Distances

Consistent with the Australian Dangerous Goods Code (ADGC) requirements, separation distances between UOC containers and other dangerous goods or certain types of rolling stock must comply with the following requirements as outlined in Table 5.2 and Table 5.3.
Table 5.2: Minimum Transport Separation Distances

<table>
<thead>
<tr>
<th>Class</th>
<th>Dangerous Good</th>
<th>Minimum Distance (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explosives</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Gases</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Flammable liquids</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Flammable solids</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Oxidizing and organic substances</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>Toxic poisonous and infectious substances</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>Corrosive substances</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous dangerous substances</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 5.3: Minimum Rail Separation Distances

<table>
<thead>
<tr>
<th>Rolling Stock</th>
<th>Minimum Distance (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotive in power</td>
<td>24</td>
</tr>
<tr>
<td>Guards van</td>
<td>24</td>
</tr>
<tr>
<td>Wagon loaded with logs, rails, beams and without bulk head</td>
<td>24</td>
</tr>
<tr>
<td>Passenger carriage</td>
<td>24</td>
</tr>
<tr>
<td>Operating refrigerated container</td>
<td>12</td>
</tr>
</tbody>
</table>
6 THE TRANSPORT PROCESS

6.1 Introduction

The transport process from the Project site to Port Adelaide (road) and to the East Arm Wharf at Darwin Port (a combination of road and rail services) can be divided into three phases:

1. Project site based activities;
2. Pre-site departure activities; and
3. Transport activities.

This section provides a description of the tasks that are included in each of the phases across the transport process. As discussed in Section 1.4, it is anticipated that there would be a monthly consignment consisting of five 20 ft GP loaded with UOC as follows:

- Two double trailer road trains loaded with two 20 ft GPs each; a total of four 20 ft GP containers.
- One single trailer road train loaded with one 20 ft GP.

Any lifting between road, rail and storage facilities would be undertaken at approved locations where the TSP would have relevant ASNO approvals to manage UOC consignments on behalf of Toro.

6.2 Project Site Activities

6.2.1 Drum Marking

The outside of each drum (i.e. individual 205 L drums of UOC in each container) would be clearly marked with the gross mass and net mass. The marking would be legible and durable, as required by the ADGC.

Individual drums would be labelled as per the Code and the ADGC (namely: Class 7, UN2912, III–Yellow).

6.2.2 Packaging

As per the Code, under routine transport conditions there would be no loss of UOC material or loss of shielding resulting in radiation exposure.

Prior to packaging, each 20 ft GP container would be inspected by Project personnel to verify the container is fit for purpose, i.e. fit to carry UOC.

UOC consignments from the Project would have three levels of containment and encapsulation, with the product being:

- Packed in Industrial Packaging Type 1 (IP –1) 205 L steel drums with up to 64 drums per container;
- Secured and packed using an acceptable packing design with Corex strapping (Cordlash CC105) approved by the relevant Competent Authority, Australian Maritime Safety Authority (AMSA); and
- Loaded and locked in a 20 ft GP container conforming to ISO 1496 Series 1 freight containers - Specification and testing and lined with plastic sheeting.

An example of the proposed packing method is shown in Figure 6.1.
Figure 6.1: Packing Methods for UOC

6.3 Pre-site Departure Tasks

6.3.1 Labelling and Placarding Containers and Vehicles

Correct labels must be attached to all external walls and doors of the 20 ft GP container as required under both the Code and ADGC (Class 7, UN2912, III–Yellow) when loaded with export material from the Project site. In addition, UN3077, Environmentally Hazardous Substance, Solid, Not Otherwise Specified (NOS) is also required. Examples of the required labels are shown in Figure 6.2.

Figure 6.2: Placards Applied to Each UOC 20 ft GP Container

The Class 7 label showing UN2912 (normally a trefoil with half yellow, half white with black lettering) can be substituted with a rectangular label with black writing on an orange background as shown in Figure 6.3.

Figure 6.3: Alternate Label for Class 7

The Transport Index (TI) would be measured and used to determine radiation exposure during transport for each 20 ft GP container. The TI is an indicative measure of the potential gamma
radiation level at 1 m for each 20 ft GP container and recorded on the radioactive III trefoil. The index must not exceed 10 m.

The road vehicle (see Section 5.5) used to transport the 20 ft GP containers would be marked with a placard using the Class 7 UN2912 label as required under the Code and ADGC. All labels would be removed from the 20 ft GP containers when radioactive material is unloaded at the final destination.

6.3.2 Container Door Security
An overview of security requirements that would be captured in a security plan relevant to the transport of UOC is presented in Section 8.3 and should be read in conjunction with this section.

At the Project site, in a secure ASNO-approved area, the UOC drums would be packed and secured in 20 ft GP containers. The doors of the containers would then be sealed with consecutively numbered bolt type seals. The seal numbers would be recorded on all transport documents.

Bolt seals (Figure 6.4) would comply with Customs-Trade Partnership Against Terrorism (C-PTAT) and ISO 17712 Freight containers - Mechanical seals standards that meet current ASNO standards as part of the security plan for the movement of UOC from the Project site.

Figure 6.4: Bolt Security Seal

6.3.3 Controls for Surface Contamination
Under routine transport conditions as set out in the Code, the non-fixed surface contamination (i.e. radioactive substances, dust particles or similar that can be wiped or washed off) on the external surfaces of the 20 ft GP container shall not exceed the following:

- 4 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters; and
- 0.4 Bq/cm² for all other alpha emitters.

Before departing from the Project site, the external surfaces of the 20 ft GP containers and the truck would be checked by appropriately trained personnel to ensure surface contamination was below the limits specified above.

6.3.4 Incident Spill Kits
During all transport activities, an incident response kit would accompany the 20 ft GP containers when packed with drums containing UOC. The lead road vehicle would carry the incident response
kit while, in the case of rail transport, the kit would be loaded on to the train in a location determined to be appropriate.

The kit has been designed to assist in safe and efficient containment in the initial stages of a UOC spill during transport. The kit would include, but not be limited to, the following items:

- Personal protective equipment (PPE);
- Emergency position indicating radio beacons (EPIRB);
- Personal hygiene materials;
- Workplace first aid kit;
- Dolphin torch and batteries;
- Traffic management devices (i.e. advance warning and hazard signage, traffic cones);
- Containment equipment (i.e. heavy duty plastic sheeting, tarpaulins, pegs and mallet, bags to be filled for bunding, barrier mesh, gaffer/flagging tape, disposable bags for used clothing and other disposable equipment);
- Recovery equipment (e.g. shovels/scoops/brooms/vacuum equipment); and
- A copy of the Emergency Response Plan.

The spill kits would be held and maintained by the TSP. Appropriate procedures would be developed for regular checking of the contents of the kits to ensure they were maintained and ready for use at any time during the transport of UOC.

6.4 Transport Activities

6.4.1 Approved Routes

For road movements from the Project site to Adelaide, the interstate road transport solution would follow ASNO approved transport routes as described in Table 6.1 and shown in Figure 6.5.

Table 6.1: Overview of Approved Routes

<table>
<thead>
<tr>
<th>Mode</th>
<th>Origin</th>
<th>Destination</th>
<th>ASNO Approved Route</th>
</tr>
</thead>
</table>
| Road   | Wiluna Project site           | Port Adelaide or Adelaide rail terminal | • Private road to the Goldfields Highway  
                                            • Goldfields Highway to Norseman via Leonora, Menzies, Kambalda  
                                            • Eyre Highway from Norseman to Port Augusta  
                                            • Princes Highway (National Route 1) from Port Augusta to Adelaide |
| Rail   | Port Adelaide or Adelaide rail terminal | Darwin approved transit facility, such as NQX at Berrimah, Darwin | • Adelaide to Tarcoola on the Australian Rail Track Corporation (ARTC) network  
                                            • Tarcoola to the Darwin rail terminal via Alice Springs, Katherine on the Freightlink controlled rail track |
| Road   | Darwin approved transit facility, such as NQX at Berrimah | East Arm Wharf, Port of Darwin | • O’Sullivan Circuit  
                                            • Berrimah Road to the East Arm Wharf at the Port of Darwin |
Figure 6.5: Transport Route from the Project to Adelaide, SA and Darwin, NT
Prior to departure from the Project site the nominated Project Officer(s) would determine the availability of the transport route by assessments including:

- The Australian Bureau of Meteorology website for:
  - Weather maps and forecasts of weather conditions en route; and
  - Any weather warnings as issued or in place at the time.
- State or territory emergency services community warnings or advice in force at the time.
- Any other sources of relevant information.

If, in the opinion of the nominated officer(s), a factor or factors may prevent the movement of UOC along the approved transport route as planned, road transport would be delayed until a more appropriate time was identified.

Under instruction from the respective state/territory police, emergency services and/or approved regulatory officers, alternate routes could be requested or required from time to time to complete the delivery of the consignment to the approved destinations of Adelaide and Darwin.

If an alternative route were required to complete the planned journey of the UOC consignments from the Project site, the TSP and Toro would assess the impact of the required changes to the approved transport route to ensure that safety and compliance regulations were not compromised.

If an alternative route were required, Toro would advise the relevant Australian, state or territory authorities of the change in the approved route.

Where a consignment or recovered material from an incident was required to be returned to the Project site, such movements would retrace the approved route to return to the Project site.

6.4.2 Communications and Security During Transport

The TMP requires timely, accurate and up-to-date communications between all parties involved in transporting UOC.

An overview of the en route communications arrangements is summarised below.

**Road Transport**

All road vehicles (Section 1.4) used to transport UOC from the Project site to Adelaide would:

- At all times travel in combinations of at least two trucks which would remain in close proximity throughout the journey;
- Use two trained drivers per truck with all necessary licenses to complete the direct service, stopping only to refuel and for driver meal breaks at designated locations along the approved transport route;
- As a minimum, be outfitted with equipment to communicate quickly, efficiently and reliably with an operational base; this could include two-way radios and satellite phones; and
- Have a global positioning system (GPS) fitted to each prime mover.

A GPS fitted to each truck would provide three main security functions that are outlined below:

1. A duress pendant or similar device would be provided to each driver so that if he/she was involved in an en route incident, the pendant may be pressed within 50 m of the vehicle and a duress message would be triggered.
2. Out-of-zone requirements (also known as a geo-fence) around the approved road or rail transport routes would be defined, and if a vehicle moved outside these zones or travelled in an alternative direction, a back-to-base alarm would be generated.
3. During the journey, monitoring (with automatic updates, duress alarms etc. through to an authorised user website) would show the location of vehicles to both the Project main security gate and TSP operational centre.
Rail Transport

The rail track infrastructure owners operate Central Train Control (CTC) centres for their respective rail line sections of the train journey between Adelaide and Darwin. CTC manages the planning, movement and scheduling of TSP train services between Adelaide and Darwin.

Manned 24 hours per day, 365 days per year, the CTCs provide communications between train control and train crew for:

- Train operating orders ensuring safety by sequencing train movements;
- Knowledge of train locations throughout the rail journey; and
- Single point of contact with a single frequency for emergencies, train-to-train communication.

Throughout the rail journey between Adelaide and Darwin, the CTCs and train drivers have established procedures and protocols in place to maintain communications and provide up-to-date information on train movement.

6.4.3 Transit Storage During Transport

An overview of security requirements that would be captured in a security plan relevant to the transport of UOC is presented in Section 8.3 and should be read in conjunction with this section.

UOC would be stored in designated secure transit areas that have been approved and licensed by ASNO and/or the relevant state or territory regulators. Depending on operational requirements, additional secure transit areas may be needed to support the planned transport process which would be subject to ASNO and/or the relevant state or territory regulatory approvals and permits at that time.

The Port Adelaide Terminal and the NQX facility at Berrimah, Darwin are both ASNO licensed secure areas for the storage of UOC in 20 ft GP containers. Security measures in place at these facilities include, but are not limited to:

- Chain mesh fencing and locked gates to restrict the movement in and out of the storage location;
- CCTV;
- Appropriate lighting;
- Continuous monitoring (i.e. 24 hours a day, seven days a week); and
- Other measures deemed appropriate to restrict, prevent and detect unauthorised access.

Access to the port area at Port Adelaide and the East Arm Wharf, Darwin Port is controlled under maritime security legislation and would be coordinated with the respective port authorities.

All employees, contractors and visitors would be inducted and undertake the appropriate training in the key requirements of the site management system for storing UOC.

A site security pass would only be issued to approved personnel.

Visitors would be allowed to enter the site once formal documentation and authorisation had been provided to the site gatehouse. Visitors would be issued with a temporary site pass (to be returned on exit) and would be escorted at all times while in the facility.
7 INCIDENT MANAGEMENT

7.1 Introduction

This section provides a summary of the arrangements associated with an incident involving the transport of UOC from the Project.

Toro would have a separate Emergency Response Plan (ERP) for any transport accident involving UOC. The ERP would cover in more detail:

- Purpose and scope of the ERP;
- Roles and responsibilities under the ERP;
- Incident classification, notification and incident response escalation procedure; and
- Preparedness requirements.

7.2 Toro Crisis and Emergency Management Overview

Toro has a corporate Crisis and Emergency Management Plan (CEMP) that provides levels of protection for life and property, and recovery assistance in the event of an incident, emergency or crisis situation associated with the Project.

The CEMP provides the foundation for maintaining preparedness and establishing policies in the event of an incident or emergency situation by outlining thresholds for:

- Assessing the magnitude of and prioritising incident, emergency or crisis situations;
- Escalation of an incident to an emergency or crisis situation;
- Activating Incident Management (IMT), Emergency Management (EMT) and Crisis Management (CMT) teams depending on incident, emergency or crisis situations;
- Notifying Project and Toro executive management;
- Procedures for notification and activation of IMT, EMT and CMT;
- Roles and responsibilities of all IMT, EMT and CMT members; and
- Guidelines and checklists to facilitate an effective and organised response.

Figure 7.1 shows the structure of the Toro CEMP.
### 7.3 In the Event of an Incident

In the event of an incident involving a consignment of UOC being transported to either Adelaide or Darwin, the initial responses to be adopted at the incident would include:

- Assessing the incident;
- Gathering facts;
- Notifying emergency services as required;
- Toro management prioritising the need for rescue, life-saving, first aid, fire control and control of any other hazards;
- If product has escaped both its steel drum and shipping container, using a response kit in the immediate containment of any spill;
- Isolating the incident area with barricades to exclude members of the public for at least 25 m in all directions;
- Keeping unauthorised people away from the vehicles until emergency services or Project personnel arrived;
- Advising people at the incident site to remain upwind and be aware of dust;
- Upon arrival emergency services establishing a 70 m zone around the incident site; and
- Escalating the incident as necessary, by following any instructions provided by emergency services personnel.
7.4 Safety Precautions

UOC has a slight chemical toxicity. It is weakly radioactive and is only a potential health hazard if inhaled or ingested. Provided precautions are taken to avoid inhalation or ingestion, any spilt UOC would not present a health hazard.

In the event of loss of containment resulting from a transport accident, the main exposure for personnel in attendance is likely to occur through inhaling suspended material (dust). Like other spills involving dangerous goods, the use of correct PPE (i.e. dust mask and gloves) and restricting the time spent working around the spilt material would reduce the risk of radiation exposure.

The affected area should be suitably controlled and segregated, and access to enter or remain in the area should be restricted. Qualified persons such as emergency services representatives would take control of the incident and supervise the response operation, including the salvage operation.

7.5 Emergency Management and Response

Important Note:
The loss of containment and the presence of radioactive material should not prevent qualified persons, such as emergency services personnel, from undertaking rescue operations, such as attending injured person(s) or fighting fires.

Emergency planning and preparedness for responding to a transport incident involving UOC is similar to that required when responding to transport incidents involving other types of dangerous goods, such as flammables, explosives, and corrosives.

As the emergency services in the respective state and territory (i.e. police, State Emergency Service, fire brigade, ambulance service and volunteer emergency services) or other agency personnel are the first line of response, they already have emergency plans that deal with dangerous goods as defined in the ADGC. The Toro emergency plan for dealing with UOC would conform and integrate as closely as possible with procedures for dealing with other transport incidents involving other classes of dangerous goods. This would include provisions for notifying local, state, territory and/or other Australian authorities.

Any incident involving a loss of containment or damage to a container of UOC would be reported to Australian and state/territory governments as soon as practicable after the incident. Qualified Toro representatives would provide specific expertise to on-site personnel regarding radiation, contamination issues, recovery and rehabilitation matters associated with a transport incident.

When responding to transport incidents involving radioactive material, the main steps involved would be to:

- Rescue injured personnel and provide any emergency first aid/medical attention required;
- Evacuate non-essential personnel and members of the community;
- Use respiratory protection, protective clothing and eyewear as outlined in the Safety Data Sheet (SDS) for UOC to reduce the possibility of inhaling radioactive material;
- Minimise the time spent nearby and maximise the distance to any spilt UOC;
- Control fires and other common consequences of transport accidents;
- Identify any other associated hazards (e.g. other dangerous goods such as fuel spills, electrical sources) and establish a controlled cordoned-off area;
- Control and prevent any additional spread of radioactive contamination;
- Recover the radioactive material, packaging and transport equipment;
- Quarantine people who may have come in contact with the material, decontaminate personnel and recover contaminated material (i.e. PPE, clothing) for correct disposal;
- Decontaminate equipment in preparation for rail and/or road transport; and
- Decontaminate and restore the surrounding environment to an acceptable standard.
8 MANAGEMENT SYSTEM

8.1 Procedures

In consultation with the TSP, specific working procedures and process documents would be developed to control the various tasks associated with UOC consignments as described in Section 6 and would be aligned to support the TMP objectives (Section 1.3).

8.2 Documentation

The transport documentation for each UOC consignment would include certificates and permits (Section 3.2.5) to be lodged with:

- Australian, state and territory government agencies;
- TSP;
- Destination country government agencies; and
- Competent authorities in countries through which UOC consignments may pass prior to their final destination.

All documentation for each shipment would be stored in accordance with Toro document control procedures.

8.3 Security During Transport

The objective of transport security is to prevent unauthorised personnel from acquiring radioactive material, such as UOC, while it is in transit.

The IAEA has a code of conduct for the security of radioactive material which addresses prudent management practices, and basic and enhanced security levels.

The Security in the Transport of Radioactive Material Code (IAEA Nuclear Security Series No. 9, 2008) defines security levels based on the radioactivity of the contents of a single package of the material being transported. UOC is classified as LSA-I and requires prudent security management practices to be implemented.

The transport of UOC, including transfers between transport modes from the Project to the nominated export ports of Port Adelaide and East Arm Wharf, Darwin Port, occurs in the public domain. While in transit, delays such as modal transfers and waiting times would be kept to a minimum to minimise the risk of unauthorised access, unexplained loss or theft, or other malicious acts.

A security plan that complies with Australian regulatory requirements and achieves the above objectives would be developed, implemented, periodically reviewed and communicated to all relevant parties associated with transporting UOC from the Project site. The security plan would:

- Allocate responsibilities for security;
- Specify measures to provide advanced transport notification (where required), monitor shipments and maintain records of material transported;
- Include a review of operations and an assessment of vulnerability;
- Specify measures used to reduce security risks (e.g. driver vetting and security checks);
- Include procedures for reporting and dealing with security threats, breaches and incidents;
- Provide threat information on an ongoing basis and actions to be taken in the event of a change in threat level (this is and would continue to be provided by ASNO);
- Include provisions for evaluating, testing, reviewing and updating the security plan;
- Outline measures to secure information and limit distribution of sensitive information; and
Ensure appropriate emergency response and security contingency plans are in place for accidents, breakdowns or any other delays along the approved transport route.

The objectives of the security plan are to:

- Deter, detect and delay unauthorised access to the material while it is being transported or stored outside the Project site;
- Prevent any attempted theft or malicious act while the material is being transported or stored; and
- Enable an appropriate response and allow recovery or contingencies to commence promptly.

8.4 Residual Risks

The main risks identified for UOC transport-related activities are:

- Injury to personnel during loading;
- Safety on the road;
- Loss of control leading to a loss of containment; and
- Breach of security.

A risk assessment was completed for the proposed transport of UOC from the Project site to the nominated Australian export ports. The results are provided in Table 8.1.

8.5 Training

Training programs would be established by Toro and coordinated across all relevant organisations likely to be involved in transporting UOC. Regular refresher programs would be conducted to maintain the proficiency of all personnel.

The TMP supplements organisational training aimed at specific target groups, which includes training presentations on:

- Radiation awareness for transport workers involved in transporting, handling, storing or loading UOC onto road, rail or shipping vessels;
- Radiation awareness for the respective state and territory emergency services (i.e. State Emergency Service, fire brigade, ambulance service and volunteer emergency services) or other agency personnel involved in the initial response to an incident involving UOC; and
- Emergency response and clean-up of spilt UOC material for emergency services personnel.

The training focuses on providing participants with awareness regarding:

- Requirements relating to the safe handling, storage and transportation of Class 7 radioactive materials;
- The characteristics of UOC; and
- Radiation safety protection requirements, first aid and personal safety.
## Table 8.1: Risk Assessment for Transportation of UOC

<table>
<thead>
<tr>
<th>Risk Issue</th>
<th>Description</th>
<th>Causes</th>
<th>Likelihood</th>
<th>Consequence</th>
<th>Mitigation and Controls</th>
<th>Residual Risk</th>
</tr>
</thead>
</table>
| Injury to personnel during loading and unloading | Injury to personnel during loading and unloading | 1. Mobile plant/light vehicle/truck and human interaction  
2. Equipment failure  
3. Fit for work  
4. Operator error/rule breach | Low | Low–Medium | • Administrative and contractual controls  
• Inspection and preventative maintenance systems  
• Training for securing loads | Low |
| Road transport safety | Unpaved road incidents:  
1. Collision  
2. Roll-over/hitting infrastructure  
3. Leaving road | Accident or collision due to:  
1. Vehicle congestion in towns/on route  
2. Environmental conditions (poor visibility such as sun/fog, wet, bushfires)  
3. Condition of road (i.e. wet, slippery, black spots)  
4. Fatigue/fitness for work  
5. Level crossing interaction  
6. Rule violation | Low | Low–Medium | • Preferred contractor, audits, licensing compliance  
• Transport management plan, driver training for unsealed roads  
• Compliance with chain of responsibility/fatigue management regulations  
• Regular road maintenance to reduce dust and maintain road condition | Low |
| | Paved road incidents:  
1. Collision  
2. Roll-over/hitting infrastructure  
3. Leaving road | Low | Low–Medium | • Preferred contractor, audits, licensing compliance.  
• Compliance with chain of responsibility/fatigue management regulations  
• Transport Management Plan | Low |
<table>
<thead>
<tr>
<th>Risk Issue</th>
<th>Description</th>
<th>Causes</th>
<th>Likelihood</th>
<th>Consequence</th>
<th>Mitigation and Controls</th>
<th>Residual Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of control leading to a loss of containment</td>
<td>During transport due to:</td>
<td>1. Accident or collision</td>
<td>Low</td>
<td>High</td>
<td>• Emergency Management Plan, emergency response protocols</td>
<td>Low-Medium</td>
</tr>
<tr>
<td></td>
<td>2. Fatigue</td>
<td>2. Fatigue</td>
<td></td>
<td></td>
<td>• Packaging methods (drums secured in containers)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Over loading (unlikely)</td>
<td>3. Over loading (unlikely)</td>
<td></td>
<td></td>
<td>• Preferred contractor, audits, licensing compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Road conditions</td>
<td>4. Road conditions</td>
<td></td>
<td></td>
<td>• Fatigue management program, chain of responsibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Weather conditions</td>
<td>5. Weather conditions</td>
<td></td>
<td></td>
<td>• Administrative procedures (in-vehicle and on-route monitoring systems, pre-start and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Failure to follow systems or procedures</td>
<td>6. Failure to follow systems or procedures</td>
<td></td>
<td></td>
<td>packaging/vehicle loading audits)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unauthorised access</td>
<td>1. Malicious Intervention</td>
<td>Low-Medium</td>
<td>High</td>
<td>• Transport and security plan</td>
<td>Low-Medium</td>
</tr>
<tr>
<td>Security risks</td>
<td>Unauthorised access</td>
<td>2. Third party (terrorism)</td>
<td></td>
<td></td>
<td>• Police intervention, driver training</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Vandalism/sabotage</td>
<td></td>
<td></td>
<td>• Service provider management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Protesters/blockades</td>
<td></td>
<td></td>
<td>• Federal government intervention</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Theft</td>
<td></td>
<td></td>
<td>• Monitoring NGO website protest activity</td>
<td></td>
</tr>
</tbody>
</table>
8.6 Monitoring Systems: Objectives and Assessment Criteria

Ongoing monitoring and performance systems would be established to determine the effectiveness of the transport solution and radiation protection for workers and the community.

Such systems would be continually reviewed to ensure the information being collected was relevant and identified areas of concern that may need additional or increased control/mitigation strategies. Table 8.2 sets out the objectives and assessment criteria associated with the transport of UOC from the Project.

Table 8.2: Assessment Criteria

<table>
<thead>
<tr>
<th>Item</th>
<th>Objective</th>
<th>Assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of a spill, management of exposure to UOC</td>
<td>No adverse impacts to health of employees or the public from exposure to radiation from UOC.</td>
<td>Radiation doses to members of the public and emergency services are less than 1 mSv/a above background</td>
</tr>
<tr>
<td>In the event of a non-conformance with the TMP</td>
<td>Regular auditing of the TMP to identify any non-conformances as outlined in Section 8.9</td>
<td>Audit outcomes with non-conformances addressed and closed out within agreed time frames.</td>
</tr>
</tbody>
</table>
| Performance monitoring | Establishment, data capture and regular reporting of transport indicators relating to compliance with permit and contract conditions | Performance indicators including:  
  - Communications;  
  - Compliance with Permits and Chain of Responsibility;  
  - Documentation;  
  - Driver fatigue management;  
  - Incidents;  
  - Safe loading practices;  
  - Scheduling;  
  - Speed compliance; and  
  - Vehicle safety. |

8.7 Change Management

As part of the Toro Management System, this TMP would be reviewed and updated as necessary to reflect the ongoing Project transport requirements for UOC.

As the TMP is a controlled document within the Management System, any changes to the TMP would be dealt with in accordance with the change management process.

8.8 Inconsistencies

Where any inconsistencies arise between the procedures or policies stipulated in this TMP, and the procedures of government regulators or other relevant parties to the TMP, such inconsistencies would be identified, addressed, resolved and corrected by the Project as soon as possible.
8.9 Review of the Transport Plan

As part of the Toro Management System, the TMP would be comprehensively evaluated and reviewed by inspections, audits and other methods as appropriate to ensure:

- Compliance with all regulatory obligations; and
- Operations associated with the transport task were under control and produced results to satisfy Toro’s management and quality objectives.

The TMP would be modified as required to take account of changes in procedures, organisation and personnel changes and to ensure the continuing applicability of the TMP to both the operational and regulatory environment.