



COMPLIANCE CODE FOR CLASS U2 PERMITS

Compliance Code History

Version	Date of Effect	Description
1	30/09/2016	Compliance Code first issue
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3		
4		
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Purpose

The purpose of this *Compliance Code* is to establish a standard set of requirements for the systems of Nuclear Material Control, Transport Plans and *Nuclear Security* for all Class U2 Permits to Possess Nuclear Material issued under section 16 of *the Act*. It also sets out forms for the submission of applications, notifications and reports.

Where individual criteria or requirements of the *Compliance Code* cannot be met, *ASNO* may accept alternate compensatory measures if they provide an equivalent level of *nuclear security*. Such alternate measures shall be explicitly addressed in the Nuclear Material Transport Plan and must be approved by the *Director General*.

Scope

This *Compliance Code* applies to Permits identified under paragraph 3 of the Permit as a Class U2 Permit. The requirements of the *Compliance Code* apply to all *nuclear material* in the possession of the Permit Holder except *nuclear material* which is declared under section 11 of *the Act* as exempt from the application of Part II of *the Act*.

Objective

The objectives of the systems for Nuclear Material Control and *Nuclear Security* are to:

- protect against unauthorised removal (theft) of *nuclear material* ;
- locate and recover missing *nuclear material*;
- protect *nuclear material* against sabotage;
- mitigate or minimize the radiological consequence of sabotage; and
- maintain control of *nuclear material*.

For the purpose of this *Compliance Code*, *nuclear security* will be taken to apply to *nuclear material* (including *UOC*) but not to other radioactive materials.



1. Risk Assessment

The Permit Holder shall conduct and document a risk assessment that identifies specific security threats to *UOC* relevant to the Permit Holder.

Guide: It is preferable that risk assessments are done according to AS/NZS ISO 31000:2009 or an applicable industry standard.

2. Nuclear Material Transport Plan (The Plan)

2.1. Transport Governance

The Permit Holder shall maintain a system for *nuclear material* control and *nuclear security* in its possession that addresses the conditions in the Permit and the current *Compliance Code* including appendices, or any other instruction authorised in writing by the *Director General*.

The system for the control and security of *nuclear material* shall at all times be described in documented *Plans* and arrangements. The Permit Holder shall:

- 2.1.1. appoint responsibilities for the activities involving *UOC* and clearly define the scope of each responsibility;
- 2.1.2. produce or adopt a *Plan* covering the transport and any storage incidental to transport, addressing the risks identified in section 1, including scalable nuclear security measures and procedures capable of being implemented rapidly in response to identified elevated threats. The scalable threat model shall be linked to the Australian Security Intelligence Organisation (*ASIO*) National Security Threat Assessment (*NSTA*) levels as described in Appendix A as applicable.
The Plan may be an exclusive *Plan* or incorporated into plans compiled for other purposes;
- 2.1.3. obtain *Director General's* approval of this *Plan* prior to the commencement of activities involving *UOC* allowed by this Permit;
- 2.1.4. implement all measures specified in *The Plan*;
- 2.1.5. review *The Plan* at least once during the term of this Permit, or at the request of the *Director General*, or as required to respond to changes in circumstances, whichever is the sooner and:
 - a) inform the *Director General* of the detail and outcome of these reviews; and
 - b) as required, make application for proposed changes to *The Plan*, or advise that no changes were assessed as necessary;
- 2.1.6. restrict access to information about *The Plan* and auxiliary *security* information except to persons with a need-to-know, ensuring dissemination accordingly.



The Plan shall be labelled (header and footer) with protective markings commensurate with its sensitivity (e.g. “Sensitive - Security”);

2.2. Control Measures

The Permit Holder shall:

- 2.2.1. detect any *loss of control of nuclear material* listed on the *manifest*;
- 2.2.2. maintain organisational arrangements enabling the Permit Holder to determine the precise location of any material on the Permit Holder’s *manifest* or in storage incidental to transport, in less than 2 hours;
- 2.2.3. keep an up-to-date *manifest of nuclear material*;
- 2.2.4. ensure that *TEU* containers of *nuclear material* are individually labelled as on the Permit Holder’s *manifest*, with unique identification markings in a way that enables timely matching for verification;
- 2.2.5. ensure that tamper indicating devices (e.g. seals) are applied to all shipping containers, each with a unique identification, and procedures are in place to control and track tamper indicating devices for each shipping container; and
- 2.2.6. keep up-to-date records of transfers of *nuclear material* and retain records of holdings and transfers for a period of 5 years.

Holdings: Nuclear material held in storage incidental to transport during the timeframe that the transporter was held responsible for the consignment (chain of custody)

2.3. Route

The Permit Holder shall transport the *nuclear material* only by road/rail transportation and along approved transport route(s):

- 2.3.1. specified in the Application for Permit to Transport Nuclear Material; or
- 2.3.2. nominated by the consignor, and approved by the *Director General* (Application form ASO113).

2.4. Pre-Transport Arrangements

Prior to transport, the Permit Holder shall:

- 2.4.1. confirm that all *TEU* containers are in an acceptable condition for transportation and assuring that tamper indicating devices remain intact, recording the results of these inspections;
- 2.4.2. provide instructions to *carriers* to deliver the consignment only to the intended destination (Approved Location, consignee or authority at the port of discharge specified by the consignor) and to observe all procedures and directions given by the Permit Holder prior to, and during, the transfer; and
- 2.4.3. ensure that communication systems are operating effectively.



2.5. Arrangements during Transport

The Permit Holder shall:

- 2.5.1. for single vehicle transport, have procedures to detect the interruption of the transport or deviation from the set route. To this end, state-of-health or situational awareness reporting between the consignor, transporter or mine site security staff shall be established at maximum 2 hourly intervals;
- 2.5.2. for multiple vehicles, adopt a (loose) convoy for multiple vehicles transporting *UOC* or a support vehicle for single vehicle *conveyance*, where drivers maintain visual contact between vehicles;
- 2.5.3. establish methods for effective communication compensating for limited coverage of reception and ensure:
 - a) communication equipment is in good operational condition with ongoing capability to communicate with the consignor, transporter, local police, emergency services and mine site security staff;
 - b) vehicles are fitted with appropriate equipment to enable two-way communication between vehicles at all times;
 - c) communication redundancy in case of failure; and
- 2.5.4. provide adequate security and situational awareness during brief stationary periods (e.g. rest stops).

2.6. Storage Incidental to Transport

- 2.6.1. *The Plan* shall describe the *nuclear security* arrangements for storage incidental to transport of *UOC*, including diagrams and specifications of the *security* infrastructure that identifies the layout of *security* boundaries and the position of any *security* equipment including cameras, detection devices and access control features.
- 2.6.2. The Permit Holder shall only use compounds approved by the *Director General* (i.e. “approved locations”) for the use of storage incidental to transport which meet the requirements set out in section 2.6.3.

2.6.3. Table 1: Requirements for Approved Locations

Stationary Timeframe	Security Requirements for Storage Incidental to Transport
a) ≤ 72 hours	Store <i>TEU</i> containers in a compound in control of the Permit Holder, under continuous monitoring and surveillance. (<i>Conveyance</i> drivers, including drivers from support vehicles, are not to be assigned <i>security</i> response or guard duties.)



b) > 72 hours	Store <i>TEU</i> containers in a secure compound in a <i>door-facing-door configuration</i> and segregated from other cargo, being an enclosed area protected by a barrier consisting of either a security fence* or building fabric or other barrier, with access control and: <ul style="list-style-type: none">a) 24 hour security guard(s) presence or equivalent arrangement; orb) a high assurance of detection and assessment of unauthorised access with a security response available within 30 minutes; or
* Any fenced area should meet AS1725 (or equivalent) with at least 2.4m security fencing and cranked barbed wire top or equivalent palisade or sheet fencing with cleared standoff area on both sides to prohibit defeating or assisting in breaching the boundary measures and applying additional compensatory measures where this is not practicable.	

2.6.4. When it is not possible, for any reason, to unload *TEU* containers at the intended destination or to hold them at Approved Storage Locations, the containers shall be delivered to a compound that maximally matches the criteria for an “approved location” and the Permit Holder shall consult with the *Director General* regarding storage arrangements and *security* measures.

2.7. Emergency Procedures

2.7.1. The Permit Holder shall implement procedures:

- a) to re-establish lost communication with the transport;
- b) to maintain adequate *nuclear security* in the event of an accident or vehicle breakdown during transport;
- c) to defer to an alternate route for security or safety reasons, in the event of an unforeseen incident or circumstances; and
- d) to provide for a timely and effective response in the event that theft, loss or unauthorised handling of *nuclear material* occurs during transport.

2.7.2. *Carriers* shall be regularly trained in the above-mentioned procedures; and

2.7.3. The *Director General* shall be informed of any escalated incident for above-mentioned procedures.



3. Reports, Notifications and Requests for Approvals

- 3.1. The Permit Holder or *Designated Individual* shall report to, notify or apply to the *Director General* as appropriate for each activity or item listed in section 4.
- 3.2. Each such report, notification or application shall be made by completing the specified forms listed in section 4 or using other formats as approved by ASNO.
- 3.3. The reports, notifications or applications shall be delivered to the *Director General* in accordance with the reporting requirements specified on the respective form.

4. ASNO Forms

Forms are reviewed or amended from time to time. Current forms can be downloaded from the ASNO website at: www.dfat.gov.au/asno

4.1. Approval forms

APPLICATION FORMS TO CONDUCT CERTAIN ACTIONS: ¹	TIMEFRAME LIMITS FOR APPLICATIONS, NOTICE OR REPORTING: ²	FORM TO USE:
Application to Create a New Approved Location ³	- 7 day notice	ASO112
Application to Approve a New (or Variation to a Current) Transport Plan	- 20 day notice for new route - 10 day notice for modified transport plan	ASO113
Application to Subcontract Functions Subject to Permit Restrictions and Conditions	- 14 day notice	ASO135

4.2. Notification forms

NOTIFICATION IS REQUIRED FOR: ¹	TIMEFRAME LIMITS FOR APPLICATIONS, NOTICE OR REPORTING: ²	FORM TO USE:
Notification of an Incident	- Report <i>incidents</i> by phone within 2 hrs. of detection - submit form within 4 hrs.	ASO201
Notification of Designation of an Individual		ASO214
Notification of Change to Permit Holder's Particulars	- Within 10 days of effect of change	ASO231

4.3. Report Forms

REQUIRED REPORTS: ¹	TIMEFRAME LIMITS FOR APPLICATIONS, NOTICE OR REPORTING: ²	FORM TO USE:
Report on Incident Investigation	- Within 30 days of initial report	ASO303

¹ Each report, notification or application should be made by the *Permit Holder's Representative* or by a *Designated Individual* as notified under ASO214, responsible for compliance with that application requirement.

² Refer to related form for detailed timeframe requirements. All days refer to consecutive business days.

³ Interim storage location incidental to transport.



APPENDIX A

1. Scalable Threat Model

- 1.1. The purpose of the scalable threat model is to establish a system of standardised transport protection measures for a wide range of security threats and their resultant risks to the production and subsequent handling of *UOC*. The scalable model's categories prescribe levels of transport protection measures that shall be implemented for each of the different levels of threat and resultant risks.
- 1.2. *The Plan* should include a scalable system of interim measures that collectively address changes in threat levels and their associated risks. These measures shall be capable of being implemented rapidly in response to an elevated threat, and for the system to remain cost effective, it is desirable that the interim measures be readily discontinued.
- 1.3. Five *security* threat levels, identified below for uranium mines and associated transport, are applicable but not equivalent to the Australian Security Intelligence Organisation (*ASIO*) National Security Threat Assessment (*NSTA*) levels. The *Director General* will notify the Permit Holder of the *security* threat level that applies at any given time after having received advice from *ASIO* and/or law enforcement authorities.
- 1.4. The Permit Holder is required to defend against the identified level of threat, which is specified in table 1 and to provide sufficient *nuclear security* measures specified in table 2 below.

1.5. Table 1: Threat Levels

National Threat Alert Levels	Previous Threat Level Descriptors	Description
Not Expected	LOW	There is no indication of any <i>security</i> threat to mine activities; This level is the <u>baseline uranium mining threat level</u> ¹
Possible	MEDIUM	There is no specific <i>security</i> threat targeted towards mine activities (limited intent or capability)
Probable	HIGH	There are concerns of a heightened threat and mine activities should exercise a high degree of caution
Expected	EXTREME	There are <i>security</i> concerns of a threat with intention and capability planned against mine activities
Certain		A specific <i>security</i> threat is certain or underway

¹ At time of issuing this permit, the national terrorism threat level was set at **PROBABLE**, however the specific threat level, set for uranium mining activities, has been assessed to be at **NOT EXPECTED**. The *Director General* will inform permit holders of any changes to mining threat level assessments.



2. Table 2: Scalable Transport Measures

Threat Level	Description		
2.1 Not Expected	This level of threat represents the minimum threat posed and the conditions constitute <u>the baseline nuclear security measures to be applied for the transport of UOC</u> and its process and functions under normal operating conditions. Measures are captured in Section 2 in the Compliance Code – Nuclear Material Transport Plan.		
<p>In addition to baseline <i>security</i> measure applicable at the NOT EXPECTED threat level, the following requirements apply at elevated threat levels. Further to the measures stipulated below the Permit Holder may also propose additional measures at POSSIBLE and PROBABLE threat levels:</p>			
Threat Level	Description	Pre-Travel Arrangements	Arrangements During Transport and Storage incidental to transport
2.2 Possible	<p>This level applies when attack against the Permit Holder’s infrastructure or activities is assessed as feasible and could well occur.</p> <p>This level can be issued by the <i>Director General</i>, on the advice of <i>ASIO</i> or the Australian Federal/State/Territory Police (<i>AFP</i>). It is possible that once this level is implemented it may remain for several years.</p> <p>Maintain all NOT-EXPECTED level requirements and the following treatment measures shall be implemented:</p>	<ul style="list-style-type: none"> a) increased liaison with local Police; b) increased oversight of staff and <i>subcontractor</i> activities associated with the transported <i>UOC</i> process; and c) maintain high degree of vigilance and <i>security</i> awareness. 	<ul style="list-style-type: none"> d) provide constant GPS tracking of all <i>UOC</i> road/rail transports; e) provide driver(s) with escalated risk contingency including approved alternate transport route(s) or return of consignment options; f) single vehicle transport shall be accompanied by a support vehicle ; and g) provide accurate and concise information for a diligent emergency response.
2.3 Probable	<p>This level applies when an attack against the Permit Holder’s infrastructure or activities is assessed as likely.</p> <p>It is possible that once this level is reached it may remain up to 12 months. Maintain all NOT-EXPECTED and POSSIBLE level requirements and the following treatment measures shall be implemented:</p>	<ul style="list-style-type: none"> a) road transport to have an armed escort, with guard presence at loading and unloading of shipping containers; and b) in consultation with <i>AFP</i>, <i>ASIO</i>, <i>ASNO</i>, and local Police develop and identify, where possible, alternate road transport routes and arrangements that provide a higher degree of assurance for safety and <i>security</i>. 	<ul style="list-style-type: none"> c) increase driver reporting and decrease passive GPS waypoint reporting distances; and d) store <i>UOC</i> only in secure compounds; e) increase frequency of verification of tamper indicating devices.



Threat Level	Description	Pre-Travel Arrangements	Arrangements During Transport and Storage incidental to transport
2.4 Expected	<p>This level of <i>security</i> applies when attack against the Permit Holder's infrastructure or activities is assessed as imminent. At this level there is credible specific intelligence of planned sabotage or theft of <i>UOC</i>.</p> <p>It is expected that this level would be applied for short periods (e.g. 30 days or until the threat is dealt with). The following measures shall apply:</p>	<p>a) all movements of <i>UOC</i> are to cease. <i>UOC</i> is to remain in secure compounds. Loaded containers are to remain in the sealed condition and placed in <i>door-facing-door configuration</i>.</p>	<p>b) <i>UOC</i> shipments in transit when this level is raised are to proceed to the nearest approved secure compound and unloaded, however it may be deemed necessary to take the shipment to a more secure location if required by the <i>Director General</i>. The <i>Director General</i> will determine if an armed escort is required.</p> <p>c) the Permit Holder will continuously monitor the location and quantity of all <i>UOC</i> in its control and immediately notify the <i>Director General</i> of any changes.</p>
2.5 Certain	<p>This level of <i>security</i> applies when attack against the uranium industry or activities is imminent or occurring (Riots, looting, intrusion or heist). At this level, planned sabotage or theft of <i>UOC</i> is in progress or being perpetrated.</p> <p>This level is evident by the attack or is issued by the <i>Director General</i>, <i>ASIO</i>, local Police and/or the <i>AFP</i>. It is expected that this level would be applied for short periods (e.g. hours / days or until the threat is dealt with).</p> <p>All persons are to make every effort to preserve life and prevent violent conflict. (Personal safety has priority over the protection of <i>nuclear material</i>.)</p>		