DARWIN PROCESSING FACILITY: CONSOLIDATED COMMITMENTS TABLE

No.	COMMITMENT	TIMEFRAME
TERRESTRIAL ENVIRONMENTAL QUALITY		
Potential Contaminants of Interest (COIs)		
1.	Removal of fly-tipped waste from the site ensuring that the transport, handling and disposal of hazardous materials are in accordance with the *Dangerous Goods Act 1998* and associated regulations and licence conditions	Construction Phase
2.	Inspection of disturbed areas and fly-tipped waste for the presence of asbestos; removal, transport and disposal of asbestos using licensed specialists.	Construction Phase
Acid Sulfate Soils (ASS)		
3.	ASS management during clearing and earthworks will include the following: • A geotechnical assessment of development footprint will be undertaken prior to construction, to identify areas of occurrence of ASS; • Disturbance of ASS will be avoided where possible; and • Excavated ASS to be treated during construction in accordance with requirements of the ASS Management Plan to prevent acidic fluids leaching into surface water or groundwater.	Construction Phase
4.	Awareness training of ASS handling requirements will be provided to personnel involved with the movement of soils, particularly during the construction phase.	Construction Phase
5.	Bunds will not be constructed with material containing ASS.	Construction Phase
6.	When preparing compliant ASS treatment pads the area will be fully contained/constructed such that drainage/runoff water from the pad is directed to an appropriate receptacle for testing and treatment (if required).	Construction Phase
7.	Any spilled ASS material will be transferred to the ASS treatment pad immediately.	Construction Phase
8.	Treatment of ASS and potential ASS will involve the following: • ASS treatment pads will have a guard layer of agricultural lime applied at a nominal rate of 10kg/m^2; • ASS material will be transferred to the treatment pad and placed on top of the guard layer. If ASS is to be treated in more than one layer, enough time will be allowed for validation testing and compliance of a layer before addition of extra material; • ASS material is to be spread out in windrows of 300 mm loose thickness for drying. Once dry, fine agricultural lime will be applied evenly over the surface and thoroughly mixed into the soil; • The Acid Neutralising Value of the agricultural lime supplied may not be 100% (as assumed for pure lime) and will be identified from documentation provided by the lime supplier. If less than 100%, a correction factor of 100/ Acid Neutralising Value will be applied to reach the equivalent of pure fine agricultural lime; and	Construction Phase

No.	COMMITMENT	TIMEFRAME
	• Treated ASS shall not be removed from the site until validation monitoring indicates that performance indicators have been met.	
9.	All stormwater, retained water or ASS leachate from stockpiles or other exposed areas shall be: • Diverted to a retention pond for monitoring and treatment (if required); • Monitored for changes in pH, water level, Electrical Conductivity, total iron and aluminium concentrations; and • Treated with hydrated lime for pH adjustment of water if required.	Construction Phase Operation Phase
10.	Soil erosion resulting in disturbance of ASS will be mitigated by the following: • Implementation of the Erosion and Sediment Control Plans (CCESCP and SBSMP) (Contained within Appendix C); and Water Management Procedure (EP-07) in the EMP (Appendix M); • Vegetation clearing will be undertaken in stages and in dry season conditions wherever possible; and • Erosion protection measures (bunding, spoon drains, silt fencing and sediment ponds) will be installed to contain any erosion.	Construction Phase Operation Phase
11.	Lime will be stored in a containment area adjoining the treatment pad (so that any discharge from the area is directed into the treatment pad). Hydrated lime will be stored in appropriate weatherproof storage.	Construction Phase
Contamination		
12.	Implement the Hazardous Material Management Procedure (EP-10), in the EMP (Appendix M), including the following: • Ensure stockpiles of bulk materials are located well clear of any waterway or drainage system; • Construct bunds around fuel and chemical storage areas according to *Australian Standards 1940: 2017 – The Storage and Handling of Flammable and Combustible Liquids* (unless quantity of the liquid stored is within that allowable as minor storage), environmental protection licence or Major Hazard Facility licence requirements; • Train personnel in implementation of safe work practices to minimise risks and impacts of spillage of fuels, chemicals and other contaminants; • Train personnel in incident reporting and emergency management procedures and encourage the reporting of issues and near misses; • Record and report all Petroleum, Oil and Lubricant (**POL**), chemical and hazardous substance spills; • Ensure personnel have access to spill kits that contain an absorbent material, clearly marked oily waste disposal drum and a shovel;	Construction Phase Operation Phase

No.	COMMITMENT	TIMEFRAME
	• In the event of a chemical or hazardous substance spill, containment measures should be enacted and SDS requirements complied with; • SDSs are to be located within storage areas, as well as centrally located and readily available to staff for use in case of an emergency. SDSs are to remain current at all times; • In the event of a POL spill less than 20L on soil, remove the soil and dispose of in oily waste disposal drum; • In the event of a POL spill of between 20 and 80L, soak up as much as possible using absorbent, and turn/aerate the soil to allow natural processes (i.e. aeration and microbial systems) to breakdown the organic compounds (i.e. hydrocarbons). Remove contaminated soil if the spill occurs in the vicinity of drainage lines and waterways. If on a hard surface such as road or concrete, use absorbent and dispose in the oily waste disposal drum; • In the event of a POL spill greater than 80L, all contaminated soil is to be removed, and disposed of in a clearly marked oily waste disposal drum; • Undertake validation sampling of soil if the spill, or combined record of spills, is greater than 80L to confirm all contaminated soil has been removed; • All contaminated soil and absorbent in the oily/chemical waste disposal drum should be disposed of by a licensed waste contractor; • Keep sites free from build-up of waste materials by directing regular clean ups; • Avoid storing large volumes of materials on site; • Ensure equipment and vehicles have been washed down and inspected for POL leaks, prior to being transported to work sites; and • Ensure herbicides used for weed control are registered and only applied by appropriately trained personnel.	
TERRESTRIAL ECOSYSTEMS		
Vegetation Clearing		
13.	Vegetation clearing to be undertaken only in approved areas.	Construction Phase
14.	To mitigate, or avoid where possible, the loss of fauna habitat through vegetation clearing by ensuring that: • Habitat to be cleared is well represented elsewhere on the Middle Arm Peninsula, and in the region; • Implement the Ground Disturbance and Vegetation Clearing Procedure (EP-05) within the EMP (Appendix M) including the development and implementation of an internal Ground Disturbance Permit system, whereby no land clearing is undertaken without completing a series of checks to ensure: o The proposed clearing has been approved; and	

No.	COMMITMENT	TIMEFRAME
	o Conditions in relation to fauna clearing and other requirements have been assigned. o Approved permits are assessed for compliance with permit conditions. o Proposed area of clearing is demarcated prior to clearing to avoid excessive or prohibited clearing.	
Conservation Significant Flora		
15.	Prior to commencement of construction review the development envelope of the Project to ensure populations of the following flora species are excluded where possible: • *Cycas armstrongii* (VU); • *Tricoryne elatior* (NT); • *Polymeria pusila* (DD); and • *Buchnera sp. ciliate bracts* (DD).	Construction Phase
Surface Water Flow Alteration		
16.	Implementation of the CCESCP and SBSMP (contained within Appendix C) and Implementation of the Water Management Procedure (EP-07) contained within the EMP (Appendix M) including: • Use of sediment basins where required; and • Use of a dedicated stormwater management system during operations. Maintain natural flow paths wherever possible.	Construction Phase Operation Phase
Uncontrolled Fire		
17.	Implementation of the Fire Management Plan (Appendix N) including: • Project personnel will be trained in fire protection; • The site will be equipped with fire suppression equipment; • A hot work permit system will be implemented; and • Grassy weeds will be eradicated on Site.	Operation Phase
Weeds		
18.	To avoid the spread and/or proliferation of weeds the Weed Management Procedure (EP-06) contained in the EMP (Appendix M) will be implemented with the aim to: • Review existing weed mapping and signpost areas of significant weed infestation; • Induct mine personnel on the identification and management of key weed species; • Implement weed hygiene procedures; • Avoid the spread of weedy grasses by having an objective of eradication; • Assess risk of spreading weeds with the Ground Disturbance Permit System in the Ground Disturbance and Vegetation Clearing Procedure (EP-05) within the EMP (Appendix M); and • Routinely undertake site infestation control measures and monitoring of infestations.	Operation Phase
Rehabilitation		

No.	COMMITMENT	TIMEFRAME
19.	To avoid inappropriate or ineffective rehabilitation a monitoring program, as detailed in the Rehabilitation Management Plan will be implemented to identify issues and management actions triggered by quantitative thresholds.	Construction Phase Operation Phase
Dust Emissions		
20.	Implementation of the Dust Emission Management Procedure (EP-08) contained within the EMP (Appendix M) including: • Regular watering of active, potentially dust generating areas and stockpiles; • Efficient and effective machinery operation; • Limit vegetation and soil clearing; and • Biannual photographic monitoring of vegetation health at site. • Maintain the concentrate at Dust Extinction Moisture level; • Use of water sprays or misting nozzles during stacking operations; • Sprays on reclaim feeders and transfer points; • Physical enclosure of transfer points and operating equipment; • Select operational procedures to take place inside sheds; • Open areas not required for vehicle access for operations will be sprayed with hydro mulch or sealed through the application of dust suppressant chemicals; and • Active road surfaces sealed, treated with a dust suppressant chemical or sprayed with water.	Operation Phase Operation Phase
Contaminated Water		
21.	Contaminated water impact on soil and vegetation will be mitigated by the following: • Water storage facilities and /or hazardous materials will be restricted to designated impermeable storage areas located at least 50m from any vegetation; • Storage areas will be bunded and have appropriate drainage systems designed to capture any potential spills or leaks; and • Water used for dust suppression will be of a quality that does not negatively impact flora and vegetation.	Construction Phase Operation Phase
Impacts to Fauna		
22.	Minimise the impact of fragmentation through rehabilitation of disturbed areas identified in the Rehabilitation Management Plan.	Construction Phase
23.	To mitigate, or avoid where possible, incidents of vehicles striking fauna by ensuring the following: • Maintain suitable speed limits; • Erect warning signs in any locations where fauna are regularly sighted; and • Ensure employee and local contractor awareness of local fauna and encourage reporting of sightings and any incidents of vehicle strike or near misses.	Operation Phase
24.	To minimise likelihood of attracting introduced fauna:	Construction Phase

No.	COMMITMENT	TIMEFRAME
	• Implement the Domestic and Industrial Waste Management Procedure (EP-11) within the EMP (Appendix M) to ensure all putrescible waste is securely stored until removed from site • Monitor sightings of feral fauna and undertake control measures in consultation with stakeholders.	Operation Phase
25.	To mitigate, or avoid where possible, the likelihood of fauna entrapment in infrastructure by the ensuring the following: • Fence ponds; • Install fauna egress points in water storage dams and/or sumps; • Engineering settling ponds to have steep raised embankments with no edges. • Ensure vegetation around barbed wire fences is kept to a minimum; • Avoid the use of barbed wire in fences where possible; and • Barbed wire fences will be inspected for trapped animals (particularly bats), and mitigation measures explored.	Operation Phase
Light and Noise		
26.	All light sources will be aimed towards work areas and away from surrounding habitat, using light shields as necessary to minimise light spill.	Operation Phase
HYDROLOGICAL PROCESSES		
General		
27.	To avoid site flooding or inundation from storm surge: • Primary infrastructure will be located in areas above the 1 % AEP flood levels; • Model 0.1 % AEP inundation and flood levels and locate processing plant infrastructure above these levels; and • Implementation of diversion infrastructure around site infrastructure, where identified through stormwater assessments.	Construction Phase Operation Phase
28.	Retain as much of Lot 1817 in a condition that will assist recharge of aquifer. This includes retaining (and/or enhancing through site rehabilitation activities) existing vegetation and soils.	Construction Phase
INLAND WATER ENVIRONMENAL QUALITY		
Contamination		
29.	Implement the Hazardous Material Management Procedure (EP-10) , within the EMP (Appendix M) to mitigate, or avoid where possible, contamination of surface and groundwater systems.	Construction Phase Operation Phase
30.	To avoid surface runoff transporting potential COIs into surface waters: • Infrastructure associated with sources of COIs will be located above the 1000-year storm surge elevation; • All runoff waters within areas where sources of COIs are stored, transported or used will be diverted into a managed water circuit separate from the general stormwater circuit, which incorporates appropriate bunding, sumps and isolation points	Construction Phase Operational Phase

No.	COMMITMENT	TIMEFRAME
	where required. Water from these areas will be directed to the WRP for treatment; • All runoff waters within the Development Envelope (outside of areas where COIs are stored, transported or used) will be diverted into a managed water circuit for monitoring and treatment (if required) in the stormwater system or WRP; • Rainfall will be intercepted on roofed spaces and diverted to a rainwater pond; • The chemical bulk storage tanks will be located in suitably bunded areas adjacent to the dedicated chemical transfer bay, with consideration for *Australian Standard AS1940:2017*; • Update of the Conceptual SBSWMP (Appendix C) to a detailed design including: o Detailed water quality modelling; o Final design of the minor and major stormwater systems, minor diversion systems and stormwater quality management features (e.g. SQUIDs, bioretention basins etc); o Detailed engineering hydraulic design/modelling; o Determine the optimised stormwater harvesting design; o Operational management, monitoring and maintenance plans developed with clear responsibilities assigned to relevant site personnel; and o The stormwater management system will be designed to effectively treat sediment, gross pollutants, nutrients and incidental hydrocarbons within stormwater runoff from non-process areas of the site.	
31.	To avoid seepage via misting/fogging/spray transporting potential COIs into groundwater: • Low permeability bases will be used in areas where COIs are stored, i.e., concrete floors or hardstanding; • Ponds will be lined with impermeable liners to prevent seepage; • Ponds will be placed above the wet season water table; • Water used for dust suppression will be of suitable quality; and • Waste will be containerised immediately and not stockpiled.	Operational Phase
32.	To avoid seepage from contaminated water used for irrigation: • Recycle greywater through the WRP prior to use for irrigation; and • All waters are managed within the water circuit and monitored for quality prior to use for irrigation.	Construction Phase Operational Phase
33.	To avoid seepage of potential COIs within existing soils at site including AASS in irrigated/bare land/unlined operational areas: • AASS sites identified and managed according to ASS Management Plan (Appendix L); • Low permeability covering for operational areas associated with COIs i.e. hardstanding/ buildings/roads; and • Interception of rainwater on roofed spaces.	Operational Phase

No.	COMMITMENT	TIMEFRAME
34.	To avoid seepage of potential COIs within ponds: • Ponds are lined with an impervious liner; and • Ponds are placed above the water table	Operational Phase
Sedimentation		
35.	To avoid stormwater transporting sediment during the Construction phase: • The Conceptual Construction Erosion and Sediment Control Plan (CCESCP; Appendix C) will be upgraded to include a more detailed design including: o Further soil sampling, including Emerson Class sampling and jar testing to inform final sediment basin design; • Appropriate sediment control mechanisms will be installed, as determined through the updated CCESCP and the detailed design phase.	
MARINE ENVIRONMENTAL QUALITY		
Non-process Waste		
36.	Appropriate Domestic and Industrial Waste Management Procedure (EP-11), within the EMP (Appendix M), to be implemented for the Site: • Recyclable materials, including cardboard, paper, glass, batteries, waste hydrocarbon drums and scrap metal, will be recycled wherever possible; • Housekeeping inspections of all work areas will be undertaken weekly; • Littering on site is prohibited and work and office sites are to be kept clean and tidy; • Rubbish containers are to be carried in vehicles and provided at all work area; and • Waste management will be addressed in the site induction.	Operation Phase
Spills		
37.	To avoid chemical spills implement the following: • Implement management procedures detailed in Hazardous Material Management Procedure (EP-10), contained within the EMP (Appendix M). • Spill control equipment will be stored in critical locations to allow for a quick response to spills; • Spillages will be contained and appropriately managed by the use of absorbent material and the excavation and removal of contaminated soil to an appropriate facility . • Competency based Spill response training to be delivered to relevant personnel.	Operation Phase
Sedimentation		
38.	To minimise, or avoid where possible, the sedimentation impacts from clearing by including the following: • No clearing of mangrove habitats; • Implement management procedures detailed in EMP (refer to Ground Disturbance and Vegetation Clearing Procedure (EP-05) contained within the EMP (Appendix M);	Construction Phase

No.	COMMITMENT	TIMEFRAME
	• Implementation of appropriate site drainage to avoid or mitigate sedimentation impacts during the construction phase of the Project; • The GDP application will include risk based assessment of all environmental risks and identify controls to reduce the impacts of ground disturbance; • An estimate of the area to be disturbed and topsoil volumes to be moved and stored should be included in the GDP request submission where possible; • Lay down, parking and other storage areas will be located in approved GDP areas only. Where possible, existing cleared areas will be used for laydown areas. Vegetation clearing for these areas will be avoided where possible; and • Topsoil and subsoil will be stripped prior to earthworks and managed in accordance with the Rehabilitation Management Plan (Appendix B).	
39.	• Maintain natural groundwater seepage and stormwater runoff flows into the adjacent intertidal zone from non-operational areas.	Construction Phase
AIR QUALITY		
Fugitive Dust		
40.	Implement the Dust Emission Management Procedures (EP-08) within the EMP (Appendix M), including: • Regular watering of active areas and stockpiles areas; • Use of dust control equipment and housekeeping practices within the Processing Facility; • Vehicle speeds on site roads will be restricted; • Active road surfaces will be either sealed, treated with a dust suppressant chemical or sprayed with water, as required to reduce dust generation; • All equipment utilised on site will be maintained in an efficient and effective manner; • Limit vegetation and soil clearing to reflect operational requirements; • For cleared vegetation, minimise burning activities by re-using vegetation during the rehabilitation phase or chipping it for use on site or to export chips off site. • Retention of sufficient moisture in the concentrate stream to maintain the concentrate at its Dust Extinction Moisture Level; • Use of water sprays or misting nozzles during stacking operations; • Water cannons/sprays on stockpiles; • Sprays on reclaim feeders and transfer points; • Physical enclosure of transfer points and operating equipment;	Construction Phase Operations Phase
Stack emissions		
41.	In order to reduce stack emissions TNG will: • Use scrubbers and/or filters for the control of atmospheric emissions from the Project stack sources, in accordance with the Air Quality Management Plan (Appendix B of Appendix G)	Construction Phase Operations Phase

No.	COMMITMENT	TIMEFRAME
	• Comply with requirements of the Environmental Protection Licence, where applicable.	
ATMOSPHERIC PROCESSES		
CO_2 emissions		
42.	TNG will commit to developing a detailed GGMP prior to the commencement of operations that will: • Outline strategies to avoid, reduce, mitigate and offset the Projects direct (Scope 1) emissions contributing towards the State's aspiration of net zero GHG emissions by 2050; • Review the final facility design in relation to GHG intensity/efficiency; • Commit to five-yearly reviews of energy efficiency and renewable use over the life of the project with a view of reducing Scope 1 emission by an average of 1 % a year over 20 years; • Prepare an offset package; • Utilise strategies that are unique to the Project's specific circumstances; • Take into account opportunities for emissions reduction; • Propose timeframes as well as regular interim and long-term targets that reflect an incremental reduction in Scope 1 emissions over the life of the proposal; • Include requirements for periodic public reporting against targets; and • Account for and align with Commonwealth targets.	Operations Phase
COMMUNITY AND ECONOMY		
Employment		
43.	To promote the employment of local personnel: • wherever possible and where necessary skills are available. • Develop an Employment Strategy and Local Recruitment Policy. • Establish a skill training scheme. • Establish partnerships with local businesses, such as food catering companies, transport companies and a range of other service providers.	Construction Phase Operations Phase
Public Safety		
44.	In the interest of maintaining public safety: • Install a boundary fence, entry gate, gate house and signage to deter unauthorised access to the site • Develop a Supply Chain Management Plan covering a wide range of transportation and supply chain matters, including public safety along transport routes and managing third party personnel conduct at work. • Ensure emergency exit points are situated at strategic locations around the site, for use in an emergency.	Construction Phase Operations Phase
Noise		

No.	COMMITMENT	TIMEFRAME
45.	To avoid noise impacts at sensitive receivers during non-standard hours (7pm to 7am) by: • Prohibiting noise generating construction activities in non-standard hours and recommending construction activities occur during standard hours (7am – 7pm) where possible. • If out of hours construction is required, avoid operating particularly noisy machinery before 7am and after 7pm.	Construction Phase
46.	To minimise, or avoid where possible, noise impacts by: • Implementing mitigation strategies detailed in the Noise Management EP-17 from the EMP (Appendix M). • Provide an induction to construction personnel (including sub-contractors) addressing responsibilities with regard to noise management outlined in the EMP (Appendix M). • Ensure truck drivers are informed of designated vehicle routes, parking locations, delivery hours and minimising engine braking and idling. • Provide education of supervisors, operators and sub-contractors on the need to minimise noise through toolbox meetings. • Avoid noisy plant working simultaneously where possible. • Ensure all equipment is equipped with appropriate noise controls (e.g. mufflers, silenced exhausts, acoustic enclosures, flashing lights as an alternative to revising beepers) and equipment is shut down and not left idling when not in use. • Ensure equipment is operated in the correct manner and adequately maintained - including replacement of engine covers, tightening of rattling components, repair of leakages in air lines and shutting down equipment not in use. • Consider the use of temporary solid screens for mitigation of noisy stationary equipment. • Establish a Complaints and Grievance Protocol to address noise complaints	Construction Phase Operations Phase
Traffic		
47.	To minimise, or avoid where possible, impacts to traffic by: • Developing a Traffic and Transport Management Plan (Draft version included as Appendix Y of Draft EIS. This document will be finalised as part of final design stage of the Project). • Provide a bus service to and from the site for staff, reducing traffic volumes on roads in the vicinity of the Project. • Investigate options of utilising existing infrastructure for 'Park and Ride' locations. • Develop safe and efficient parking on the site. • Maximise the length of the proposed rail siding line to minimise the potential for delay at the level crossings. • Liaise with rail providers to review timing of rail movements to minimise impact on road traffic as much as practicable.	Construction Phase Operations Phase
Visual Amenity		

No.	COMMITMENT	TIMEFRAME
48.	Minimise visual impacts of Project from Palmerston and Elizabeth River Boat Ramp by: • Ensuring core Processing Facility infrastructure is constructed on the southern peninsula of the site. • Install the sulphate stack is located in area aimed at minimising visual impacts as much as practicable.	Construction Phase Operations Phase
49.	Maintain or establish the following vegetation: • Screening vegetation along Channel Island Road wherever possible. • Mangrove belt around site boundary • Landscaping around site to improve amenity.	Construction Phase Operations Phase
Light		
50.	To mitigate light impacts: • Design lighting in accordance with Australian Standard 4282:1997 *'Control of the obtrusive effects of Outdoor Lighting'* • Install directional lighting wherever possible to reduce 'light spill' effects. • Establish a Complaints and Grievance Protocol to capture any issues related to light impacts from the Project.	Construction Phase Operations Phase
Cultural Heritage		
51.	To protect cultural heritage values by: • Including management of Cultural Heritage values in the EMP (refer to Aboriginal and Cultural Heritage Procedure (EP-04) in the EMP (Appendix M). • Develop a Code of Conduct for workers and inductions that cover awareness and protection of heritage values. • In the event that any skeletal remains are unearthed TNG will stop work and immediately report such disturbance to the Northern Territory police, and to the Director Heritage Branch, Department of Tourism and Culture (refer to the ERP – Draft EIS Appendix AA). • Any previously unrecorded archaeological sites encountered will be reported to the Northern Territory Heritage Branch for advice on how to respond. Procedures for unexpected heritage finds will be included in the EMP (refer to Aboriginal and Cultural Heritage Procedure (EP-04) in the EMP (Appendix M).	Construction Phase Operations Phase
Stakeholders and Community		
52.	Implement the Community and Stakeholder Engagement Strategy (Appendix O) to guide the long-term consultation outcomes for the Project.	Construction Phase Operations Phase
53.	Implement efficiency measures into the final design phase to reduce use of community resources as much as practicable.	Construction Phase Operations Phase
54.	Implement a complaints and grievance procedure for community members, incorporating an investigation and corrective action process, as appropriate.	

No.	COMMITMENT	TIMEFRAME
55.	Establish a process of stakeholder engagement and participatory planning with the Larrakia people in order to: • Engage with relevant Indigenous stakeholders to ensure traditional activities in nearby areas are understood and not impacted. • Implement mitigating strategies for environmental factors applicable to the Project to ensure no downstream impacts occur to heritage items and values as a result of Project activities.	Construction Phase Operations Phase
56.	Ensure soil material originating from the site remains within the site and is not disposed off-site unless it is not suitable for rehabilitation.	Construction Phase
57.	Comply with the conditions and requests of the Authority Certificate obtained from AAPA.	Construction Phase Operations Phase
HUMAN HEALTH		
Hazardous Materials		
58.	To avoid the release of hazardous materials through road or rail accident: • Ensure all vehicles are licensed and carry appropriate equipment to respond to a spill, including PPE. • Apply *Australia Dangerous Goods Code (ADG Code) for Transport by Road and Rail* requirements to all transport activities. • Establish designated transport routes to avoid local residential areas. • Conduct and document a safety assessment in relation to the operation of the facility, which involves a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety that could occur in the operation of the Major Hazard Facility. • Implement control measures that eliminate or minimise the risk of a major incident occurring at the Project. • Establish a Safety Management System (**SMS**) for the operation of the Project. • Prepare a Safety Case for the Facility that demonstrates that the Project SMS will control risks arising from major incidents and hazards that could cause a significant impact. The Safety Case must demonstrate the adequacy of the measures to be implemented by the operator to control risks associated with the occurrence of major incidents.	Operations Phase
59.	*Australian Dangerous Goods Code* requirements for storage compatibility will be adhered to.	Operations Phase
Personnel		
60.	Staff will be provided with sufficient training to competently and safely handle hazardous materials, respond to spill incidents and a sound understanding of PPE requirements and equipment handling.	Operations Phase

No.	COMMITMENT	TIMEFRAME
61.	To minimise personnel exposure to climatic elements: • All personnel (including contractors and office workers) will be trained in the risks associated with climate exposure, the signs and symptoms of over-exposure to heat and its effects (e.g. dehydration) and what to do in case of an emergency. First-aid facilities will be equipped to provide at least an initial response to incidents of this type. • Drinking water will be available across the site at clearly signposted locations. • To reduce sun exposure appropriate PPE (e.g. long sleeved shirts, trousers, hats and/or helmets) and sunscreen will be made available and their use made compulsory. Develop and implement a Cyclone Response Plan.	Construction Phase Operations Phase
Explosions		
62.	To avoid an explosion on site: • Design and construction of the Facility in accordance with Australian and International Standards, Building Codes and Licence requirements. • Control of emission of flammable vapours, gases and mists (e.g. through the use of enclosed container and transfer systems, vapour recovery connections, sufficient ventilation). • Elimination of ignition sources from hazardous areas. • Installation of leak detection systems. • Storing the minimum required quantities of flammable / explosive materials. • Control of 'hot work' through an established permitting system. • Good housekeeping practices on site. • Implement the ERP, as required.	Construction Phase Operations Phase
Uncontrolled Fire		
63.	To minimise, or avoid where possible, the potential for a fire: • Implement the ERP (Draft EIS Appendix AA), as required. • Implement the FMP (Appendix N). • Ensure fire response equipment (e.g. fire breaks, extinguishers, fire reels) is available, operational and maintained. Fire extinguishers to be used in accordance with *Australian Standard 1841.1-2007 (Portable Fire Extinguishers – General Requirements*). • Fire hydrants will be connected on a ring main throughout the Facility, designed as per *Australia Standard 2419.1-2005 (Fire Hydrant Installations*). Fire water will be sourced from the fire water surge tank. • A foam injection and deluge system will be required for the solvent extraction mixer settling units where the organic solution is used. The foam deluge system shall be designed as per *Australian Standard 2118.3-2010 (Automatic Fire Sprinkler Systems – Deluge Systems*).	Construction Phase Operations Phase

No.	COMMITMENT	TIMEFRAME
	• Use of firewalls between high risk units where appropriate. • Personnel trained in the use of fire response equipment. • 'Hot work' permit system in operation. Where there is a perceived high risk (e.g. on Total Fire Ban days), ensure trained personnel are on standby when hot work is carried out on site. • Deliberate lighting of fires on site to be prohibited.	
Animal and Insect Bites		
64.	To minimise, or avoid where possible, bites from animals or insects by: • Site induction and personnel training to address potential risks associated with biting animals, how to avoid them and what to do in case of a bite or emergency. • Personnel provided PPE to provide protection from biting animals and deter biting insects e.g. boots, gloves, long sleeves, trousers. Implement BIMP (Appendix BB of Draft EIS).	Construction Phase Operations Phase