

### 18.1 Groundwater

Objectives and Targets	<ul style="list-style-type: none"> <li>• Prevent pollution of groundwater;</li> <li>• Minimise drawdown impacts due to dewatering;</li> <li>• Work towards achieving water quality standards consistent with ANZECC guidelines for stock consumption purposes.</li> </ul>
Key Performance Indicator	<ul style="list-style-type: none"> <li>• Groundwater quality to be maintained at pre-mining concentrations, particularly for metals, salinity and pH;</li> <li>• Groundwater drawdown does not exceed the maximum required for effective mine dewatering.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Operate dewatering system as efficiently as possible by monitoring flows and groundwater levels during mining to ensure over-pumping does not occur;</li> <li>• Store fuels and chemicals in sealed and bunded facilities to contain potential spills;</li> <li>• Encapsulate problematic waste material to prevent contamination of ground water.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Monitoring will be undertaken prior to commencement, during and following the completion of mining activities until decommissioning;</li> <li>• Groundwater electrical conductivity and pH will be monitored from the dewatering system at monthly intervals;</li> <li>• Groundwater level fluctuations in existing groundwater monitoring bores will be monitored at monthly intervals;</li> <li>• Groundwater production will be measured from the dewatering system at monthly intervals;</li> <li>• A detailed chemical analysis involving major cations/anions and metals will take place at 6 monthly intervals from all existing monitoring bores and the dewatering system;</li> <li>• The site Environmental Officer will be responsible for the collection and dispatch of all water quality samples. Water samples will be dispatched to a NATA accredited water testing laboratory and results regularly reviewed.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• Results of groundwater management and monitoring will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Where an incident causing pollution occurs the EPA will be informed within 24 hrs, as per the <i>Waste Management and Pollution Control Act 1998 (NT)</i>.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Groundwater EMP: <ul style="list-style-type: none"> <li>➢ Groundwater contamination;</li> <li>➢ Significant impacts on surrounding vegetation.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Mine Management Act 2001 (NT)</i></li> <li>• <i>Waste Management and Pollution Control Act 1998 (NT)</i></li> <li>• <i>Water Act 1992 (NT)</i></li> <li>• <i>ANZECC Water Quality Guidelines 2000</i></li> <li>• <i>NEPM for contaminated sites</i></li> </ul>



### 18.2 Surface Water

Objectives and Targets	<ul style="list-style-type: none"> <li>• Minimise or prevent potential negative impacts on surface water quality;</li> <li>• Minimise disturbance to drainage through erosion or deposition, beyond natural fluctuations;</li> <li>• Contain potential acid mine drainage on site and prevent impact on local waterways.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Surface water quality to be consistent with ANZECC Water Quality guidelines for livestock consumption purposes.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Manage all earthworks to minimize disturbance to drainage channels and erosion;</li> <li>• Pass turbid waters through sediment traps, where required;</li> <li>• Construct internal drainage and sediment dams within the mining area to collect potentially contaminated run-off (particularly around the waste rock dump);</li> <li>• Revegetate bare earth as soon as practicable to slow water run-off and improve infiltration;</li> <li>• Construct haul roads with appropriate materials and compaction to minimise washout during storm events;</li> <li>• Store fuels and chemicals in sealed, bunded facilities and treat spills quickly so as to contain pollution.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Surface water quality testing upstream, in mine pits and mine water dam, and downstream in Ban Ban Creek and Margaret River (subject to presence of surface water). Parameters to be monitored include pH, EC, selected metals and hydrocarbons;</li> <li>• Soil erosion monitoring to include visual monthly checks and corrective actions if required;</li> <li>• The site Environmental Officer will be responsible for the collection and dispatch of all water quality samples. Water samples will be dispatched to a NATA accredited water testing laboratory and results regularly reviewed.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• Results of surface water management and monitoring will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Where an incident causing pollution occurs the EPA will be informed within 24hrs, as per the <i>Waste Management and Pollution Control Act 1998 (NT)</i>.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Surface Water EMP: <ul style="list-style-type: none"> <li>➢ Surface water contamination;</li> <li>➢ Significant erosion incidences;</li> <li>➢ Sedimentation and erosion of local watercourses.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Mine Management Act 2001 (NT)</i></li> <li>• <i>Soil Conservation and Land Utilisation Act 1985 (NT)</i></li> <li>• <i>ANZECC Water Quality Guidelines 2000</i></li> <li>• <i>Waste Management and Pollution Control Act 1998 (NT)</i></li> <li>• <i>Water Act 1992 (NT)</i></li> </ul>



### 18.3 Flora

Objectives and Targets	<ul style="list-style-type: none"> <li>• Minimize the area of land disturbed or cleared;</li> <li>• Prevent disturbance of flora outside of designated construction and operational areas;</li> <li>• Progressively rehabilitate cleared ground to reinstate the local ecosystem after mine closure.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Extent of clearing and level of disturbance outside operational areas;</li> <li>• Extent of weed infestation;</li> <li>• Health of large trees that have been retained on site;</li> <li>• Rehabilitation success.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Install temporary fencing or bunding around stands of native vegetation and large trees that are to be retained prior to any road or site works;</li> <li>• Instruct personnel to only use existing roads and avoid off-road driving, to minimise damage to native vegetation;</li> <li>• Educate personnel through inductions on the importance of protecting stands of native vegetation, and on measures to prevent the spread of weeds, and weed identification and reporting;</li> <li>• Rehabilitate disturbed area with native flora species that are found in the surrounding areas wherever possible;</li> <li>• Identify key flora species and collect seeds (where possible and appropriate) for revegetation programs.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Inspection of operational areas, the general lease area, access roads and rehabilitation areas annually by environmental staff for weed infestations;</li> <li>• Photographic monitoring of rehabilitation areas on an annual basis;</li> <li>• Rehabilitation success monitoring including revegetation success assessing litter captured and decomposing within the system, vegetation complexities as determined by the development of a tree layer, habitat complexity and extent of weed infestation.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The results of the flora management and monitoring program will be documented in BOPL's annual report of performance against the MMP.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Flora EMP: <ul style="list-style-type: none"> <li>➢ Unauthorised disturbance of vegetation outside designated areas;</li> <li>➢ Evidence of weed infestation;</li> <li>➢ Rehabilitation failure.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Weeds Management Act 2001 (NT)</i></li> <li>• <i>Territory Parks and Wildlife Conservation Act 1999 (NT)</i></li> <li>• <i>Environment Protection and Biodiversity Act 1999 (Comm)</i></li> <li>• <i>Soil Conservation and Land Utilisation Act 1985 (NT)</i></li> </ul>



### 18.4 Fauna

Objectives and Targets	<ul style="list-style-type: none"> <li>• Minimise impact of mining operations on local fauna;</li> <li>• Prevent the introduction and spread of feral animals;</li> <li>• Progressively rehabilitate cleared ground to reinstate the local ecosystem after mine closure;</li> <li>• Protect and appropriately manage threatened species that inhabit the vicinity of the mining area.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Recorded mammal deaths that have resulted from mining operations;</li> <li>• Recorded feral animal sightings;</li> <li>• Success of the Northern Quoll Endangered Species Management Plan;</li> <li>• Conservation of the ghost bat colony located near the North Point mine site.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Minimise areas of disturbance and vegetation clearing;</li> <li>• Trap and relocate northern quolls within the mining area as per the Northern Quoll Endangered Species Management Plan;</li> <li>• Carry out a follow-up survey of the ghost bat colony near North Point in the dry season following commencement of mining to identify impacts and appropriate management;</li> <li>• Report mammal deaths and injuries that result from mining activities (e.g. hit by vehicles) to the Environmental Officer, and implement mitigation strategies when required (e.g. altered driving hours, slower speeds at appropriate parts of haulage route);</li> <li>• Assess suitability of water (through Surface Water EMP and Groundwater EMP) in the pit voids and mine water dam for livestock drinking after mine closure, and fence off water bodies that are unsuitable for consumption</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Monitoring will take place as part of BOPL's incident reporting procedure, and will include the reporting of mammal deaths and feral mammal sightings;</li> <li>• Monitoring of groundwater and surface water will indicate the suitability of water in the pit voids and mine water dam for livestock after mine closure.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The results of the fauna management and monitoring program will be documented in BOPL's annual report of performance against the MMP.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Fauna EMP:             <ul style="list-style-type: none"> <li>➢ Negative impacts on native fauna;</li> <li>➢ Increase or spread of feral animals.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Biological Control Act 1986 (NT)</i></li> <li>• <i>Mine Management Act 2001 (NT)</i></li> <li>• <i>Territory Parks and Wildlife Conservation Act 1999 (NT)</i></li> <li>• <i>Environment Protection and Biodiversity Act 1999 (Comm)</i></li> </ul>



### 18.5 Weeds and Pests

Objectives and Targets	<ul style="list-style-type: none"> <li>• Prevent the introduction and spread of weeds and pests that could impact on native flora and fauna;</li> <li>• Progressively rehabilitate cleared ground to reinstate the local ecosystem after mine closure.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Extent of weed infestation in operational areas and surrounds;</li> <li>• Feral mammal species present and numbers sighted.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Prevent the accidental introduction of weeds to the mine sites through appropriate management of vehicle movement, including preventing vehicles driving off-road in vegetated areas;</li> <li>• Implement a weed control program where weeds already exist, to contain infestations and prevent spread, during and after mining operations;</li> <li>• Implement a feral animal control program if required;</li> <li>• Implement appropriate waste management strategies that do not attract feral animals to the mine site;</li> <li>• Educate key personnel on weed identification, feral animal identification and reporting.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Monitoring will take place as part of BOPL's incident reporting procedure, and will include the reporting of weed and pest introduction and/or spread.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The results of the weeds and pests management and monitoring program will be documented in BOPL's annual report of performance against the MMP.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Weeds EMP: <ul style="list-style-type: none"> <li>➢ Introduction of new weeds to the mine area and haul roads;</li> <li>➢ Spread of existing weeds throughout the mine area and haul roads;</li> <li>➢ Increase in feral mammal species and numbers to the mine area.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Weeds Management Act 2001 (NT)</i></li> <li>• <i>Biological Control Act 1986 (NT)</i></li> <li>• <i>Territory Parks and Wildlife Conservation Act 1999 (NT)</i></li> <li>• <i>Environment Protection and Biodiversity Act 1999 (Comm)</i></li> <li>• <i>Soil Conservation and Land Utilisation Act 1985 (NT)</i></li> </ul>



### 18.6 Dust, Noise and Vibration

Objectives and Targets	<ul style="list-style-type: none"> <li>• Minimise dust from construction and mining activities;</li> <li>• Minimise potential noise and vibration issues related to the operations and mitigate any potential noise impacts.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Registered complaints resulting from unacceptable noise and/or dust levels.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Installation of soundproofing and/or noise abatement devices where practicable;</li> <li>• Use of water to suppress dust during dry, windy conditions;</li> <li>• Utilise hearing protection equipment on site where required;</li> <li>• Install signs in operational areas where hearing protection is required;</li> <li>• Utilise appropriate blasting techniques to minimise vibration effects.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• A dust and noise monitoring program will be implemented if emissions are considered to reach an unacceptable level.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• Results of the dust and noise management and monitoring program will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Any complaints will be documented in and managed through to resolution via BOPL's incident reporting procedure;</li> <li>• Where an incident causing pollution occurs the EPA will be informed within 24 hrs, as per the <i>Waste Management and Pollution Control Act 1998</i>.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following will be classified as failure to comply with the Dust, Noise and Vibration EMP: <ul style="list-style-type: none"> <li>➢ Proposed dust mitigation strategies not being implemented;</li> <li>➢ Receipt of a noise or air quality complaint;</li> <li>➢ Vibration significantly affecting ghost bat colony.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Soil Conservation and Land Utilisation 1980 (NT)</i></li> <li>• <i>Waste Management and Pollution Control Act 1998 (NT)</i></li> <li>• <i>AS 1055.1 1997 – Acoustics – Description and measurement of environmental noise</i></li> <li>• <i>AS/NZS 1269.2:2005 Occupational noise management - noise control management</i></li> </ul>



### 18.7 Fire and Fuel

Objectives and Targets	<ul style="list-style-type: none"> <li>To prevent wildfires caused by ignition sources at the mine sites;</li> <li>To maintain conditions and low fuel loads in the vicinity of the mine sites, so that the fuel load will not support hot wildfires that may damage local ecosystems or rehabilitation (beyond normal bushfire impacts).</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>Occurrence of wildfires caused by ignition sources at the mine sites.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>Fire breaks to be maintained around the perimeter of the mine sites, with twice-yearly upgrades;</li> <li>Early dry season fuel reduction burning on an annual basis, in consultation with the site manager and the local Chief Bushfire Control Officer;</li> <li>Put in place a “No Unauthorised Fire” policy at the mine sites to reduce risks of wildfire outbreaks;</li> <li>Develop a procedure for quick response to fire outbreaks, including maintenance of fire-fighting equipment and water sources.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>Condition of fire breaks and fire fighting equipment will be assessed regularly as part of site maintenance.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>Results of the fire and fuel management and monitoring will be documented in BOPL’s annual report of performance against the MMP.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>The following will be classified as failure to comply with the Fire and Fuel EMP: <ul style="list-style-type: none"> <li>➢ Initiation of a wildfire from an ignition source at the mine sites;</li> <li>➢ Fire fighting equipment and water sources not kept in working order;</li> <li>➢ Fuel loads in the vicinity of the mine sites left to increase to high levels that would support a hot wildfire;</li> <li>➢ Unauthorised lighting of fires on or near the mine sites.</li> </ul> </li> <li>All incidents will be reported and managed through to resolution via BOPL’s incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li><i>BOPL’s Environmental Policy, BOPL’s Environmental Management Plan</i></li> <li><i>Fire and Emergency Act 2004 (NT)</i></li> <li><i>BOPL’s Environmental Management Plan</i></li> <li><i>Bushfires Act 1980 (NT)</i></li> <li><i>Territory Parks and Wildlife Conservation Act 1999 (NT)</i></li> </ul>



### 18.8 Hazardous Substances

Objectives and Targets	<ul style="list-style-type: none"> <li>• To safely use, store and dispose of chemicals and hazardous goods and prevent the uncontrolled release of chemicals into the environment;</li> <li>• To comply with relevant Australian standards (for the storage and handling of flammable and combustible liquids and dangerous goods) including:             <ul style="list-style-type: none"> <li>➢ AS 4452 The Storage and Handling of Toxic Substances;</li> <li>➢ AS 1940 The Storage and Handling of Flammable and Combustible Liquids.</li> </ul> </li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Reported spill incidents;</li> <li>• Reported non-compliance with Australian Standards regarding storage and handling of hazardous substances.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Handling and storage of all hazardous substances in accordance with information provided on the MSDS's, the Australian Standards for the Storage and Handling of Toxic Substances (AS – 4452) and the Australian Standards for the Storage and Handling of Flammable and Combustible Liquids (AS 1940 – 1993);</li> <li>• Construction of an appropriate area to install the mobile fuel tanker truck when needed on site;</li> <li>• Collection of small amounts of waste oil and other oily wastes including generator set oil, oil filters and rags in properly labeled 205 L drums. Take oily waste off site for appropriate disposal at a hazardous wastes facility;</li> <li>• Provide all personnel with safety equipment required for the correct handling of hazardous goods;</li> <li>• Provide all personnel with training in the appropriate handling, storage, disposal and containment practices for chemicals and hazardous goods as is relevant to their position;</li> <li>• Develop spillage clean-up procedures and spill stations for immediate clean-up of accidental spills;</li> <li>• Collect and remediate contaminated runoff and contaminated soil if spills occur, and transport to a suitable facility for disposal;</li> <li>• Maintain a register of all hazardous materials imported to the site or generated as a result of site activities.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Inspections of mobile fuel tanks and mobile explosive mixing facilities on a monthly basis;</li> <li>• Inspections of operational areas for spills will be conducted by the site supervisor on a weekly basis.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The Environment Officer will record and sign off on monthly inspections of mobile fuel and explosives equipment;</li> <li>• The results of the Hazardous Substances management program will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm, the EPA will be informed within 24 hrs as per the requirements of the <i>Waste Management and Pollution Control Act 1998 (NT)</i>.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following constitutes failure to comply with the Hazardous Substances EMP:             <ul style="list-style-type: none"> <li>➢ A fuel or chemical spill;</li> <li>➢ Mobile storage equipment not meeting Australian Standards, or</li> </ul> </li> </ul>





	<p>not containing suitable bunding;</p> <ul style="list-style-type: none"> <li>➤ Release of fuels or chemicals into the environment.</li> <li>• An Emergency Response Procedure will be developed to ensure an appropriate response can be made to minimise the environmental impact caused by incidents involving hazardous materials;</li> <li>• Personnel will have access to safety equipment required for the correct handling of hazardous goods;</li> <li>• Spill response kits will be provided at both Princess Louise and North Point for use in the event of incidents;</li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
<p>Relevant Legislation and Standards</p>	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Dangerous Goods Act 1981 (NT)</i></li> <li>• <i>Waste Management and Pollution Control Act 1998 (NT)</i></li> <li>• <i>Australian Standards for the Storage and Handling of Flammable and Combustible Liquids (AS 1940 – 1993)</i></li> <li>• <i>AS 4452 The Storage and Handling of Toxic Substances</i></li> </ul>



### 18.9 Domestic and Industrial Waste

Objectives and Targets	<ul style="list-style-type: none"> <li>• Minimise environmental impacts associated with the generation and disposal of waste from mining operations;</li> <li>• Promote the efficient use of resources, minimisation of waste and correct waste disposal.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Volumes of waste being generated;</li> <li>• Volumes of waste being recycled.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Domestic waste (including crib room and office waste), plastics, and rubber will be collected and transported for disposal at Brocks Creek landfill facility;</li> <li>• Small amounts of waste oil and grease will be collected and sent to a licensed disposal facility;</li> <li>• Contaminated soil will be sent for bioremediation;</li> <li>• Waste paper products will be shredded and recycled;</li> <li>• Mobile ablation facilities will be emptied by contractors in accordance with DHCS guidelines.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Inspections of waste facilities will be conducted on a weekly basis;</li> <li>• The Environmental Officer will record and sign off on monthly inspections of waste management and septic systems.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The results of the Domestic and Industrial Waste management program will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Where an incident causes pollution the EPA will be informed within 24 hours as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i> (NT).</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following constitutes failure to comply with the Domestic and Industrial Waste EMP: <ul style="list-style-type: none"> <li>➢ Unnecessary volumes of waste being sent for disposal;</li> <li>➢ Materials being disposed of rather than reused or recycled where possible;</li> <li>➢ Uncontrolled waste disposal;</li> <li>➢ Noncompliance with waste tracking procedures;</li> <li>➢ Soil, surface water or groundwater contamination.</li> </ul> </li> <li>• All incidents will be reported and managed through to resolution via BOPL's incident reporting procedures.</li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy</i>, <i>BOPL's Environmental Management Plan</i></li> <li>• <i>Litter Act 1972</i> (NT)</li> <li>• <i>Waste Management and Pollution Control Act 1998</i> (NT)</li> <li>• <i>Mine Management Act 2001</i> (NT)</li> </ul>



### 18.10 Waste Rock and Ore Stockpiling

Objectives and Targets	<ul style="list-style-type: none"> <li>• Contain all materials extracted from the mine pits to the appropriate areas – that is, the waste rock dump or the ROM pad for waste rock and ore respectively;</li> <li>• Minimize or prevent contamination of soils and surface water from acid mine drainage or heavy metals associated with waste rock and ores.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>• Groundwater and surface water quality consistent with ANZECC (2000) guidelines;</li> <li>• Successful rehabilitation of waste rock dump and ROM pad areas at the end of the life of mine;</li> <li>• No evidence of acid mine drainage from waste rock dump, ROM pad or open pit on cessation of mining.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>• Construction of the waste dump will be according to approved engineering design that encapsulates potentially acid producing materials, and prevents infiltration of air or rain;</li> <li>• Construction of the ROM pad will ensure that potentially contaminated water is contained within the operational area. All surface water within the operational area is directed to the sediment dam.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Monitoring will include: <ul style="list-style-type: none"> <li>➢ Groundwater monitoring program (outlined in section 18.1).</li> <li>➢ Surface monitoring program (outlined in section 18.2).</li> </ul> </li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• The results of the Waste Rock and ROM Pad management program will be documented in BOPL's annual report of performance against the MMP;</li> <li>• Where an incident causes pollution the EPA will be informed within 24 hours as per the requirements of the Waste Management and Pollution Control Act 1998 (NT).</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>• The following constitutes failure to comply with the Waste Rock and ROM Pad EMP: <ul style="list-style-type: none"> <li>➢ Contamination of surface water, groundwater, or soils;</li> <li>➢ Loss of flora or fauna due to contamination (poisoning).</li> </ul> </li> </ul>
Relevant Legislation and Standards	<ul style="list-style-type: none"> <li>• <i>BOPL's Environmental Policy, BOPL's Environmental Management Plan</i></li> <li>• <i>Mine Management Plan 2001 (NT)</i></li> <li>• <i>Waste Management and Pollution Control Act 1998 (NT)</i></li> </ul>



### 18.11 Cultural and Heritage

Objectives and Targets	<ul style="list-style-type: none"> <li>Prevent impacts from mine construction and operation on archaeological and historical sites of significance close to the mine area.</li> </ul>
Key Performance Indicators	<ul style="list-style-type: none"> <li>Damage or impact to an archaeological or heritage site located within the vicinity of the mine sites.</li> </ul>
Actions	<ul style="list-style-type: none"> <li>Designation of archaeological and historical sites of moderate significance close to the mining area as “No-Go Zones”. Signposting and fencing or bunding around these areas to alert mine personnel;</li> <li>Applications made to the Minister for Heritage to disturb the archaeological site inside the mine footprint before mining commences;</li> <li>Inclusion of information on archaeological and heritage sites in site inductions for mine personnel;</li> <li>Adoption of a Chance-Find procedure in the event that archaeological material is uncovered unexpectedly during mine operation or construction. In this case, the Environmental Officer will contact Heritage Conservation Services, Darwin (at NRETA) for advice.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>The site supervisor will undertake weekly inspections to check the fencing and signage around the No-Go Zones that are located near active operational areas, and ensure that the archaeological and heritage sites remain intact.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>The results of the Cultural and Heritage management program will be documented in BOPL’s annual report of performance against the MMP.</li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>The following would be classified as failure to comply with the Cultural and Heritage EMP: <ul style="list-style-type: none"> <li>➤ Damage or impacts to a known archaeological or heritage site in the vicinity of the mine sites;</li> <li>➤ Failure to gain Ministerial approval before disturbing known sites through mining activities;</li> <li>➤ Failure to stop work and notify Heritage Conservation Services in the event that archaeological material is unexpectedly found.</li> </ul> </li> <li>All incidents will be reported and managed through to resolution via BOPL’s incident reporting procedures.</li> </ul>
Relevant Procedures, Legislation and Standards	<ul style="list-style-type: none"> <li><i>Princess Louise and North Point Archaeological Chance-Find Procedure</i></li> <li><i>BOPL’s Environmental Policy, BOPL’s Environmental Management Plan</i></li> <li><i>Mine Management Act 2001 (NT)</i></li> <li><i>Heritage Conservation Act 2000 (NT)</i></li> </ul>

