

14.1 Sources of Waste

It is anticipated that the types of wastes generated by operations, other than waste rock which is addressed in Section 4, will include construction wastes and general operational waste.

Waste generated during construction activities will include general construction waste, hydrocarbons and other chemicals such as solvents, paints and cleaning products, and also sealants and adhesives. Much of these wastes will arise off-site, as pre-fabricated offices and ablution blocks will be brought to site.

General operational waste will include oily waste produced from generators and vehicles, including waste oil, oily rags, oil filters and other disposable parts during operations. Up to 40 operational personnel will be on site at any one time, generating putrescible wastes, including solid waste, liquid waste and sewage. It is not anticipated that any chemicals, other than general domestic cleaning chemicals, will be required at the mine sites during the operational phase.

It is expected that the total waste volumes generated will be low, due to the one-off, short-term nature of the proposed mining operations.

14.2 Existing Waste Management Program

BOPL has an existing waste management strategy that focuses upon:

- Minimising waste generation;
- Ensuring all health and environmental hazardous materials are disposed of appropriately; and
- Recycling and reusing waste wherever possible.

This strategy will be adopted for the Princess Louise and North Point Operations. However in addition, it is noted that any wastes generated on site at Princess Louise and North Point will be transported off-site for disposal as per current BOPL procedures, which are described below.

A draft waste EMP for Princess Louise and North Point Operations is outlined in Section 18.9. All personnel will be briefed on the draft waste EMP during the induction process.

All health and environmental hazardous materials will be disposed of according to the relevant legislation, in particular the *Waste Management and Pollution Control Act 1998*.

14.3 Management of General Wastes

Table 14.1 outlines BOPL's disposal strategy for identified waste items that may arise at North Point and Princess Louise. Again this disposal strategy is based on current waste management programs in place at BOPL. The management of hazardous waste is discussed in section 14.4.



Table 14-1 Waste Disposal Strategy for Princess Louise and North Point

Waste Material	Disposal Strategy
Wood pallets and boxes	Landfill
Food scraps, general crib rubbish	Landfill
Waste plastics	Recycled / landfill
Rubber tyres	Removed from site
Chemical wastes – non-recyclable	Removed from site
Chemical wastes – recyclable	Removed from site or recycled
Scrap metal	Recycled / removed from site
Vehicle batteries	Recycled / removed from site
Waste oil, grease and oily waste	Recycled / removed from site
Contaminated soil (if arising)	Bioremediation farm
Waste paper products	Shredded and recycled

Portable ablution facilities will be used on site, and sewage will be treated by the use of septic tanks. The vents and inspection points will be fitted with mesh or sealed to prevent the likelihood of mosquito breeding. The maintenance of the ablution facilities and septic tank/system will be in accordance with Department of Health and Community Services guidelines.

As indicated above, it is anticipated that waste volumes for the duration of the mining operation will be very low. It is estimated that food scraps, office waste and general rubbish will only fill one or two 240 litre rubbish containers per week. This equates to one to two cubic metres of uncompacted rubbish per month (MBS Environmental 2006). Combined with other inert and hazardous wastes (such as packaging, pallets, oily waste, and batteries etc), it is estimated that up to approximately four cubic metres per month of waste will be produced.

The inert wastes will be removed from site weekly for disposal at existing landfills at Brocks Creek. A recycle bin will be placed near the office for collection of waste paper and other recyclables.

A vehicle wash-down area will be provided on site, comprising a compacted hard-stand area, with water passing to a settling pond. This area will be ripped and rehabilitated upon the completion of mining activities.

14.4 Hazardous Substance Management

The mining equipment utilised in the operation of the mine will be diesel powered. Diesel will also be used to power drills, pumps and generators. An 8000L mobile fuel tanker truck will be brought to site during mining operations to refuel mine equipment including excavators, loaders, haul trucks and stationary diesel powered equipment. The mobile fuel tanker will be utilised in accordance with the *Dangerous Goods Act 2003*.



Light vehicles will use the existing refueling facilities at Cosmo and Brocks Creek. Minor regreasing of machinery may occur on site but scheduled servicing will be carried out at established workshops at Brocks Creek.

Explosives will not be stored on site, other than quantities necessary for one day's use. All bulk explosives will be stored in the existing magazines located at Brocks Creek. Bulk products will be mixed on site using an Orica Mobile Mixing Unit (MMU). As the ingredients to form explosives are mixed onsite and delivered directly into the blast holes, handling and spillage incidences will be minimised.

All hazardous and dangerous goods will be handled according to the information provided on the Material Safety Data Sheets (MSDS). Copies of the MSDS for each of the hazardous and dangerous goods used on site will be held at both Princess Louise and North Point. All personnel will be trained in appropriate handling, storage, disposal and containment practices for chemicals and hazardous goods as is relevant to their position.

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. Personnel will have access to safety equipment required for the correct handling of hazardous goods. Spill response kits will be provided at both Princess Louise and North Point for the use, should an incident occur. URGM and Brocks Creek Mine Emergency Response Teams will also be of service to Princess Louise and North Point.

All processing of ore will take place off site, and therefore no large quantities of chemicals will be required on site. General chemicals, used for hygiene and other related purposes, will be stored as per the manufacturer's specifications.

Any hazardous waste such as chemicals, batteries and/or oily waste, which are expected to be in very minor quantities, will be taken to Katherine Waste Transfer Station, where chemicals and batteries will be disposed of correctly and oil will be transferred to a waste oil tanker.

Registers of all hazardous materials imported to Princess Louise and North Point sites or generated as a result of site activities will be maintained. This will document the hazardous materials name, MSDS, location, approximate volume, storage method and where applicable, disposal method for the substance and containers. The registers will be held at both sites.

14.5 Commitments

BOPL commits to all waste materials being disposed of in accordance with relevant legislation.

BOPL commits to the maintenance of mobile ablution facilities and sewage disposal in accordance with Department of Health and Community Services guidelines.

BOPL commits to utilising a mobile fuel tanker in accordance with the Dangerous Goods Act 2003.



Waste and Hazardous Goods Management

SECTION 14

BOPL commits to handling all hazardous and dangerous goods in accordance with the relevant MSDS. Copies of all relevant MSDS's will be held at both Princess Louise and North Point sites.

BOPL commits to training all personnel in the appropriate handling, storage, disposal and containment practises for chemicals and hazardous goods, as relevant to their position.

BOPL commits to developing an Emergency Response Procedure to ensure that the appropriate action is taken to minimise the environmental impact caused by incidents involving hazardous materials.

BOPL commits to providing all personnel with access to safety equipment required for the correct handling of hazardous materials.

BOPL commits to providing spill response kits at both Princess Louise and North Point mine sites.

BOPL commits to maintaining a register of all hazardous materials imported to the site or generated as a result of site activities at both Princess Louise and North Point.

