



A GLENCORE COMPANY

# Visitor Handbook

## BING BONG LOADING FACILITY

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# Visitor Checklist

You must complete the following **before** your visit to Bing Bong:

- Complete our on-line induction before you visit. This is available at <http://www.mcarthurrivermine.com.au.webauth/EN/Pages/visitor-induction.aspx>
- Complete the following forms located at the back of this booklet:
  - Visitor Personal and Medical Information
  - Visitor Induction Assessment
- Send your completed forms to your host so your travel can be booked
- Confirm your travel arrangements with your host well in advance of your visit
- Read this handbook and familiarise yourself with its contents.

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# Welcome

Welcome to Bing Bong Loading Facility, part of McArthur River Mine, a zinc-lead and silver mine, which has been operating in the Gulf region of the Northern Territory since 1995. MRM is a Glencore company, one of the world's largest global diversified natural resource companies.

Located 900 km from Darwin and 65 km from the nearest township of Borroloola, we extract zinc, lead and silver ore through open pit mining, process it to concentrate form and transport the products by road to Bing Bong loading facility to begin the ocean voyage to export markets.

## Mining

We use conventional bench mining methods to develop the stages of the open pit. The mining process begins by drilling rock then charging the holes with explosives to break it down to a size that can be handled by our mining fleet. Blasting can occur on any day and notices are posted throughout the site to make you aware of the next blast time.

The ore bodies are defined by geologists, selectively mined and hauled to the ROM Pad for processing. The overburden, or waste rock, is taken to overburden emplacement facilities, shaped into mounds and ultimately rehabilitated.

## Processing

Ore from the open pit mining operation is stockpiled on a Run-of-Mine (ROM) pad in separate piles according to ore type, with the ore ratio to be fed to the crusher established by our metallurgists.

The **crushing circuit** consists of a primary jaw crusher (Metso C160) and primary double deck screen followed by one secondary and two tertiary cone crushers (Metso HP5) in closed circuit with a second double deck. The crushed material (-14mm) is transferred to either the Heavy Medium Plant (HMP) feed stockpile or the 20,000 tonne surface stockpile, prior to entering the primary grinding circuit.

The **Heavy Medium Plant** uses ferrosilicon in slurry medium at a specific gravity of between 2.7 and 2.9 Kilos per Litre to separate liberated low density reject material (waste) from the ore via cycloning. The cycloned product is washed on screens to recover the Ferrosilicon. The upgraded ore is then conveyed to the surface stockpile and the rejects or waste is conveyed to the rejects pile ready for use as sheeting material for haul roads within the mine.

The primary **grinding circuit** is fed from the surface stockpile via two oscillating plate feeders and two belt feeders. The feed rate is controlled to provide the correct ratio of water and ore to feed the Semi-Autogenous Grinding Mill (SAG). The discharge of the SAG is screened and the -3mm material in slurry form is fed to the Ball Mill. The Ball Mill discharge is pumped to a cluster of cyclones for sizing. The fine particles of around 50 micron report to the flotation circuit whilst the coarse underflow of the cyclone reports back to the Ball Mill to be reground.

The primary **flotation stage** is call the Rougher and the concentrate that is produced from this stage progresses through to the Regrind Milling Circuit and Cleaning Flotation Circuits to eventually be upgraded to become a saleable concentrate. Froth pumps and hoppers located under the flotation circuit pump concentrates to their next stage. An in-stream analyser measures the zinc, lead, iron and percentage solids to monitor and control the flotation circuit. The reagents used in the flotation process are Frother, Copper Sulphate, Xanthate and Baymin

Traditionally, MRM only produced a bulk Zinc (Zn) Lead (Pb) concentrate but recent development of a new separation process has enabled MRM to produce separate Pb and Zn concentrates providing material for different markets. The new process is called **PBOX** and it utilises the rapid oxidation rate of fine lead mineral (galena) that supports the further separation of the Zinc mineral (sphalerite) thus producing two concentrates from the original Bulk Concentrate. The reagents used in this process are Sulphuric Acid and Compressed Air.

## Transport

Our concentrate products are trucked from the mine to the loading facility at Bing Bong, 120km north on the Gulf of Carpentaria. Our contract fleet of road-trains have fully covered, side-tipping trailers and they take the concentrates to a storage shed at Bing Bong. Inside the concentrate shed, a front-end loader moves concentrate to feeders on a fully enclosed conveying system which loads directly onto the barge, the *MV Aburri*. There is no deep water access at Bing Bong, so the barge transports concentrate to bulk carriers waiting within an offshore transfer zone at sea.

# Important requirements before you visit

Before you can visit or stay at MRM mine site or Bing Bong, you need to undergo an induction so you understand our safety rules and procedures as well as other important aspects of our operations. Our induction program includes three parts:

- View our Visitor Induction Video on our website at [www.mcarthurrivermine.com.au/induction](http://www.mcarthurrivermine.com.au/induction)
- Complete the forms included at the back of this handbook
- Send your completed forms to your host so your travel can be booked.

This handbook provides you with general information about our site and facilities as well as what to expect when you arrive, particularly if you are staying overnight in our village.

Every visitor is assigned a host, who will take responsibility for your travel arrangements as well as your safety on site. Make sure you know the name of your host and confirm your arrangements with them.

# Travel and arrival

## Your flight out of Darwin

Direct flights operate between Darwin and McArthur River operated by Airnorth with a flight time of approximately one hour.

- You will need to check in at Airnorth at Darwin International Airport one hour before your flight is due to depart. Check in closes 45 minutes prior to departure.
- Photo identification will be required for your flight.
- You need to advise us if you require more than one piece of checked luggage.
- Meals are not served on the plane but will be available at Bing Bong once you arrive.
- If you are unable to make your flight for any reason, contact your host.

## Arrival at McArthur River

On arrival into McArthur River Airport you will be met by your host, who transport you by car to Bing Bong loading facility to complete your induction process.

- **Do not leave the airport by the bus. Wait for your host to collect you.**
- All visitors must be signed in at reception and given a visitor's pass which must be worn at all times, except in the village. You may be issued with a port-authorized visitor's pass depending on the nature of your visit.
- Your host is responsible for your safety and is there to provide direction and help. Please follow their instructions at all times.
- You must be accompanied by your host whenever you are outside the village. The Concentrate Storage Shed and any area signposted or indicated with barricading are specifically off limits.
- You must not enter the Landside Restricted Area without a port-authorized visitor's pass. Access to this area may change due to varying security levels.
- You must not enter or board the *MV Aburri* Barge without prior arrangement between your host and the Vessel Master. While on board you must be escorted at all times.

# Policies and procedures

As a visitor, you must follow site rules and procedures which govern environmental protection, cultural heritage management, health and safety. You may also be seen as a representative of our site if you are in contact with our Gulf regional community.

The rules governing the conduct of everyone on site are based on Work Health and Safety legislation, mining management legislation and company policy statements. Copies of these materials are available at reception and on noticeboards around site. The key things you need to know are summarised in this handbook as well as the online Visitor Induction Video.

## Environment

MRM is committed to responsible environmental management and all employees, contractors and visitors are required to comply with the associated processes. Our aim is to preserve the long-term health, function and viability of the natural environment where we operate.

The MRM environment is generally open woodland with areas of riverine forest. Two waterways - the McArthur River and Barney Creek – encircle the open pit below a bund wall. This prevents floodwater from entering the pit.

Water management is one of our highest priorities at MRM. Both inflows from ground water and surface water are managed on site through a closed system to ensure no water is discharged to the surrounding waterways except under approved conditions.

The health of the birds, fishes and plant life around the McArthur River system both at the site and downstream is important for both the natural environment and the Aboriginal communities who rely on it. Biodiversity and marine surveys are undertaken annually on and near the mine site, around the coast at Bing Bong and further out to sea at the Sir Edward Pellew Islands. Our monitoring program includes studies of birds, fish, oysters, sea grass, macro invertebrates, seafloor and beach sediments, seawater and riverine ecosystems.

MRM has waste management plans designed to reduce, re-use, recycle or responsibly dispose of waste. Facilities are provided to allow for the recycling of oil, steel, batteries and aluminium. Non-recyclable rubbish is disposed of on site. Keeping dust to a minimum protects air quality for our people and the surrounding environment, particularly during the dry season. Water carts are used on roads and dusty areas while air filters have been installed where possible, such as at the concentrate shed at Bing Bong. Dust monitoring is in place across the site.

In line with these initiatives:

- Do not interfere with any valves, controls or equipment unless under strict instruction.
- Ensure all vehicles and equipment are washed before leaving the MRM or Bing Bong sites. Wheel washes are in place for all vehicles.
- Follow all vehicle speed conditions to help manage dust.
- Do not disturb any flora or fauna.
- Only dispose of rubbish in designated areas and use waste recycling facilities where available.
- If taking the opportunity to fish while in the area, release any freshwater sawfish that may be caught, as these are endangered species.



## Cultural heritage management

There are 17 sites of cultural significance on the mine site that either have a direct link to dreamtime stories or are important to the history and culture of the local Aboriginal people. Bing Bong is not home to any identified sites. We respect local customs and values and require all visitors to do the same.

Sacred and significant sites are registered with the Aboriginal Areas Protection Authority and are protected under legislation. For further protection, we require any clearing anywhere on site to be formally approved, regardless of whether or not it is adjacent to a registered sacred site.

All sites at MRM are signposted and fenced to protect accidental entry.

- Do not enter protected sites under any circumstances
- Follow any instructions given by your host with regard to protected sites.
- There are severe legal penalties and fines for anyone interfering with cultural heritage.

## Community

While MRM is a remote site, we are a member of the Gulf regional community. This area of 147,000 square kilometres stretches from the base of the Gulf of Carpentaria south to Brunette Downs and from Mataranka east to the Queensland border.

As a member of this community, we have built strong relationships with our neighbours on the basis of respect, mutual benefits and effective engagement.

We value our relationships with the traditional owners of the four Aboriginal language groups who reside in the Gulf region.

By hiring and buying locally and through programs like the MRM Community Benefits Trust and annual sponsorships and donations, we have contributed to the development of infrastructure, services and opportunities within the region.

Our community relations team is the key point of contact between the mine and the community. Each year, we undertake programs that inform our stakeholders about our operations, respond to their questions or concerns, consult on matters where their input is sought and partner with local organisations and committees.

Any visitors to site who attend events or meetings in the region should be aware they may be regarded as representatives of the mine.

- Be polite and respectful of community members
- Be receptive to community members who ask questions about your work
- Ask the name of anyone asking you questions about MRM operations that need a response and pass these details to the MRM community relations team
- Be conscious of commercially sensitive or confidential information that should not be shared outside operations
- Do not speak on behalf of the mine.

Native title has been determined over much of Borroloola. Photographs must not be taken without permission and some areas of the community are not accessible.

# Health and Safety

As part of our health and safety culture on site, every individual is responsible for their own personal safety and to act in a way that does not create a health and safety risk for anyone working around them. We are committed to providing a safe, injury free workplace and to ensuring all our people, including visitors, go home in the same state of health that they arrived.

## Personal Protective Equipment

The correct personal protective equipment, or PPE, must be worn at all times when in operational areas or as signposted.

- The minimum standard of dress in administration areas is long trousers, a collared shirt and enclosed footwear.
- The minimum requirement in all operational areas includes high visibility cotton-based clothing, a hard hat, safety glasses, safety boots and gloves. Respirators must be carried in operational areas.
- In some areas, additional PPE must be worn. If you need to enter these areas, your host will provide you with the necessary equipment and instruct you in its use.

## Alcohol and drugs

The Alcohol and Drug Procedure is in place to protect the safety of our workforce.

No-one is permitted to enter our site under the influence of alcohol or drugs. Everyone entering our sites must submit to compulsory daily alcohol breath testing.

- Possession and consumption of alcohol outside of designated areas is strictly prohibited.
- Possession of drugs anywhere on site is also prohibited. Random drug testing is conducted with our workforce and visitors alike.
- If you are required to submit to a random drug test, you will be notified when you complete your breath test at the start of shift.

## Mobile equipment

A wide range of mobile equipment is used on site ranging from light vehicles through to heavy earth moving equipment.

- If you are on foot around any of these vehicles you must stay out of their path until you get the operator's attention.
- Never assume the operator has seen you. Operators of mobile equipment can have poor visibility and blind spots.

## Driving

- Visitors are not permitted to drive on site or operate plant or equipment.
- Ensure your seatbelt is worn at all times.
- Keep vehicle windows closed when driving in operational areas to help stop dust and heat from getting inside.

## Hazardous substances

- Hazardous substances used and stored on our site include fuels and oils, chemicals, reagents and explosives.
- Signs indicating restricted access to these areas are in place.

## Hygiene

Because the MRM orebody is rich in lead, personal hygiene is very important to prevent any impact on your health.

- After working in or visiting operational areas, you must shower or change before leaving the site or returning to the village.
- Towels and clothing bins for site uniforms are provided in the change rooms.
- Clothes are washed and returned to designated points as arranged by your host.
- Contaminated work clothing must not be washed in the village washing machines.

## Drinking water

- Not all water on site is fit for drinking.
- Only drink from designated outlets signposted 'Potable Water', such as water coolers.

# Staying in our village

If you are staying with us overnight, your host will guide you to the village catering office where you will be given your room key.

## Your room

The majority of our rooms are motel style with en-suite facilities, satellite digital television and a refrigerator. There are also some barrack style rooms, which have shared bathroom and laundry facilities. All accommodation is fully air-conditioned.

- Your room is equipped with linen and towels
- You will need to bring all toiletries, including soap
- In your room you will find a copy of the village evacuation plan, which will give the location of your room relative to the village landmarks and the emergency evacuation muster point
- The village evacuation muster point is located adjacent to the entrance boom gate. If you are unsure of its location, ask your host
- If maintenance is required in your room, you can report it by completing a maintenance request form located in the dining room
- You are advised to lock your room when leaving it unoccupied
- When leaving site, your room key should be returned to the accommodation office.

## Mess facilities

The mess, or dining room, is open for meals at the following times:

- Breakfast – 6am to 7am
- Lunch – 12.30pm to 1pm
- Dinner – 6.30pm to 7.15pm

You must be reasonably dressed in the dining area. Soiled work clothing and dirty footwear must not be worn. Thongs are acceptable footwear and singlets are not allowed in the dining room.

Our wet mess is open from 5.30pm to 6.30pm and from 7.15pm to 8.30pm. During these times drinks are available along with phone cards, soft drinks, snack items and toiletries. Our wet mess operates a Sensible Service of Alcohol policy.

## Other facilities

Everyone staying in the village enjoys access to a range of recreational facilities, including an air-conditioned gymnasium as well as a pool table and table tennis table in the wet mess.

You may fish during your visit, but some areas are restricted due to operational requirements. Please ask your host for further information.

- Internet access is available in the 24-hour crib room adjacent to the wet mess.
- Laundries are located throughout the village for free use by everyone on site. Please remember you must not use village laundries for soiled or contaminated work clothing.

- A public telephones are located adjacent to the CSS office. Telephone cards can be purchased at the wet mess.
- Mobile telephone reception is NOT available.

## Getting around

The site and village at Bing Bong are co-located, which means it is an easy walk to most facilities. Because of this easy access, it is important to remember that operational areas must not be entered by visitors.

Restricted areas include:

- The Concentrate Storage Shed
- Any area signposted or indicated with barricading, and
- The landside restricted area of the port.

If you require transport to the mine site or airport, you will need to organise this with your host.

## Climate and temperature

McArthur River Mine and Bing Bong are located in a wet-dry tropical climate. The wet season, from November to April, is characterised by warm humid days and nights, tropical storms and monsoonal rain at times. The dry season, from May to October, brings cool to cold nights and generally warm days.

- Dry season mornings can be very chilly. It is advisable to pack a jumper or jacket
- In the wet season, it is advisable to bring a raincoat or umbrella.

## Wildlife

A wide variety of wildlife inhabits the village area. Do not approach or feed the animals.

In the warmer months, snakes are often seen within the village area. Make sure to walk only on the foot paths and report snake sightings to your host. We have a number of employees trained in the identification and removal of dangerous snakes.

Mosquitos and other biting insects may be present at certain times of the year. Cover up and ask your host for insect repellent if required.

# Emergencies, evacuation and protection

Our Emergency Response Team located at the mine site is equipped and trained to handle all emergencies. Emergencies must be reported immediately by notifying your host or any other MRM employee.

## Evacuation assembly points

The emergency evacuation point is located adjacent to the entry boom gate. In an emergency you should immediately proceed to the point to await further instructions.

## First aid

The MRM First Aid Centre is located behind the Training Centre building. It is staffed by paramedics from The Bing Bong First Aid Centre is located adjacent to the administration office. We have trained first aiders on site and the paramedics at MRM are on-call after hours for serious injuries and emergencies.

If you receive any injury, including electric shock, you must report it immediately to your host. Regardless of how minor the injury, you will need to go to the First Aid Centre for assessment and monitoring.

## Fire protection

Comprehensive fire protection systems are in place including fire suppressors, hoses and extinguishers. Do not use this equipment unless you have had specific training in their use.

## Incident and hazard reporting

All safety and environmental incidents must be reported to your host and the appropriate incident report form completed.

## Tagging and barricading

You may see a range of tags on equipment and barricades around site. Tags are designed to protect people and equipment and include important information that you should read. Do not remove tags or attempt to operate any equipment that has been tagged. If you come across barricading or caution tape, stay outside the area and obey all signs in place. If you are unsure about a hazard, talk to your host.

# Other important information

## Communication

- Communication systems on site include telephone and 2-way radio. You must not operate this equipment without permission from your host except in an emergency.
- Mobile phone coverage is NOT available.

## Smoking

Smoking is not permitted in any of the following areas:

- Inside buildings and vehicles
- Within ten metres of explosives and magazines
- Inside fuel and chemical storage areas
- At evacuation or muster points
- In any designated 'No Smoking Area'
- If you are unsure about where you can smoke, ask your host.

## Photography

- Photography is not permitted in any operational area without the express permission of site management
- You must not share photographs or video taken on site through social media or any other means
- Respect the privacy of other visitors and staff and remember that all areas on site, including the village, are private property.

## Mosquitos

- Insect repellent is available for your use. Please cover up when biting insects are present.

## Airport

McArthur River Mine Airport is controlled under the Civil Aviation Safety Authority. Please follow signs and instructions given to you by airport staff.

# Important contact numbers

- Bing Bong Office ..... 8975 9673
- Airport ..... 8975 8138
- Community Relations ..... 8975 8216
- MRM Medical Centre ..... 8975 8121

### My host

\_\_\_\_\_ (name)

\_\_\_\_\_ (phone)



# Visitor information & medical form

This form must be completed and given to your host before or on arrival. Failure to complete this form will result in access to site being denied.

## Personal details

**Name:** \_\_\_\_\_

**Date of birth:** \_\_\_\_\_ **Gender:**  Male  Female

**Postal address:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Next of kin:** \_\_\_\_\_

**Emergency contact details:** \_\_\_\_\_

**Reason for your visit:** \_\_\_\_\_

**Your host's name:** \_\_\_\_\_

## Photo release permission

We sometimes take photographs of visitors to site for use on our website and in MRM publications. Do you give permission for your photograph to be used?

Yes  No

## Agreement to follow safety directions

Do you agree to abide by the requirements and regulations of MRM and follow the directions of your host at all times?

Yes  No

Emergency medical information

This information allows us to provide immediate medical aid in the event that you fall ill or are injured on site.

Do you suffer from any of the following conditions?

- Asthma or other respiratory illness
- Heart condition
- Other
- Fainting or dizziness
- High blood pressure

Please provide details below:

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Do you suffer from any allergies, including foods or medications? Please provide details below:

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When was your last tetanus injection? \_\_\_\_\_

Do you give permission for this medical information to be passed on to medical personnel who may be required to treat or transport you in the event of illness or injury?

- Yes
- No

Signature: \_\_\_\_\_

Date:

# Assessment form

You must complete this assessment to demonstrate you have understood the information provided in this booklet. Failure to do so may result in access to site being denied.

## You must report an accident or near miss to your host:

- No matter how minor
- Only if it is serious
- Only if there is an injury
- If it involves damage to equipment

## Who may be required to undergo alcohol and/ or drug testing?

- Only employees
- Contractors
- Visitors
- All of the above

## In the event of an emergency anywhere on site that requires evacuation:

- Run to the office
- Proceed to the evacuation point at the security gate
- Go to the Mess area
- Drive to MRM

## In the case of emergency:

- Dial 000
- Dial 222
- Find the emergency button
- Contact an MRM employee

## Should you need to use the communication equipment, you must:

- Check it is not being used
- Obtain permission from your host
- Get instructions on how to use it
- Keep a record of your conversation

## When entering operational areas, visitors should be accompanied by their host:

- In hazardous areas
- Whenever on foot
- At all times
- Until this induction has been completed

## Areas that are off limits to visitors without authorisation are:

- The concentrate shed
- The portside area
- The *MV Aburri*
- All of the above

## At Bing Bong, the First Aid Centre is located:

- At the CMS office
- Next to the concentrate shed
- Next to the site office
- In the village

**When outside a vehicle in operational areas, all visitors must wear:**

- Hard hat
- Safety glasses
- Safety boots
- All of the above

**No smoking policy:**

- Smoking is not permitted in buildings
- Smoking is not permitted in vehicles
- Ask your host where smoking is permitted
- All of the above

**On both site and in the village, you should only drink water that:**

- Comes from a tap
- Is signposted 'Potable Water'
- Comes from the village
- Is bottled

**I acknowledge that I understand the contents of this induction and the answers in this assessment are my own.**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**McArthur River Mine representative**

**Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_