

Moree Hot Springs Health Resort, Gwydir Caravan Park and Evaporation Ponds

Frome Street Investments No11 PTY LTD

Pollution Incident Response Management Plan

EPA Licence Numbers 12266, 21015 and 21323

January 2022

Introduction

This plan has been developed to document the processes required to prepare for and respond to pollution incidents for evaporation ponds for the storage and evaporation of thermal artesian waters at a number of Moree locations operated by Frome Street Investments No11 Pty Ltd. This Pollution Incident Response Management Plan (PIRMP) has been prepared in accordance with the following EPA Licence Numbers:

Environment Protection Licence Number	Location	Address
12266	Moree Hot Springs Health Resort	Corner of Newell Highway and Jones Avenue, Moree NSW 2400
21323	Gwydir Thermal Pools Motel & Caravan park	6 Amaroo Drive, Moree NSW 2400
21015	Evaporation Ponds	52 Industrial Drive, Moree NSW 2400

The plan ensures that hazards to the environment, human health and safety are minimised across all three locations. It has been prepared in accordance with EPA Licence Numbers, the requirements of the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012.

1.0 Objectives

This PIRMP aims to:

1. Ensure comprehensive and timely communication about a pollution incident to staff at the premises, patrons, the Environmental Protection Authority, other relevant authorities specified by the Act, and people outside the facility who may be affected by the impacts of the pollution incident; and
2. Minimise and control of risk of a pollution incident at the facilities by requiring identification of risks and the development of planned pre-emptive actions to minimise and manage these risks; and
3. Ensure that a plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

2.0 Definition of “Pollution Incident”

A pollution incident is defined as follows:

Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of ‘material harm to the environment’, which is defined in s147 of the PoEO Act 1997 as:

- a) Harm to the environment is material if:
 - i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- b) Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Pollution incidents must immediately be reported to the EPA, NSW Health, Fire and Rescue NSW, Work Cover NSW and the local council.

3.0 Description and Likelihood of Potential Hazards

The development consists of the following features:

- Pipelines from Gwydir Caravan Park and Moree Hot Spring Health Resort (MHSHR) to transport the artesian water to the evaporation storages; and
- Evaporation storages.

The following hazards are addressed by this plan:

Hazard description	Risk Level
Rupture of inflow pipe of saline water from either Gwydir Caravan Park or MHSHR	Low
Spill or overflow from evaporation storages	Low
Spill or overflow from pools at Gwydir Caravan Park or MHSHR	Low

Evaporation storage bank failure	Very low
Chemical Spill	Low

4.0 Pre-emptive Actions to be taken

The following pre-emptive actions shall be implemented to mitigate the hazards.

Hazard description	Pre-emptive action
Rupture of inflow pipes from Gwydir Caravan Park and MHSR, leading to escape of artesian water to surrounding land in breach of licence	<ul style="list-style-type: none"> • Installation of pipes to high design and implementation standards by appropriately qualified persons; and • Routine inspection of hydraulic lines and pumps.
Spill or overflow from evaporation storages	<ul style="list-style-type: none"> • Design evaporation storages with 1m freeboard to allow for wave action and potential extreme rainfall events, to minimise risk of overflow events.
Spill or discharge from pools/pipes at Gwydir Caravan Park or MHSR	<ul style="list-style-type: none"> • Design pool, pump and filtration systems to cope with water influx from extreme rainfall events; and • Routine inspection of hydraulic lines and pumps; and • Routine inspection of pool integrity to ensure no leaks occur.
Storage bank failure	<ul style="list-style-type: none"> • Design of storage by suitably qualified engineers to ensure structural integrity of banks; and • Construction of storage by suitably qualified construction professionals; and • Routine inspection and maintenance of banks to maintain structural integrity.
Chemical Spill	<ul style="list-style-type: none"> • Spill kit onsite • Maintained fire extinguishers located at main office • Chemical inventory updated regularly • Pool chemicals store is kept secure • Storage is ventilated • Weekly check of stock and storage areas.

5.0 Inventory of Potential Pollutants

The proposed development involves the transportation and storage of Artesian water, which is considered to be a potential pollutant.

Typical water quality details of the Artesian water are provided below:

Conductivity	1200 - 1300µS/m
pH	8.8 - 9.0
Sodium	260 - 280mg/L
Chlorine (mg/L)	67 – 100mg/L
Sodium Absorption Ratio	36 - 55

Varying amounts of chlorine for use in the Caravan Park and MHSHR pools will also be stored on each site respectively. These are stored in sealed plastic drums in a designated chemical storage room away from patrons. An up to date chemical inventory list is also kept in each storage location to track volumes onsite.

No other potential pollutants will be utilised or stored on site.

6.0 Safety Equipment

Chlorine is the only pollutant in storage which could pose a hazard to human health. An up to date chemical inventory list is kept at both the Caravan Park and MHSHR. Spill kits and appropriate PPE (gloves, safety glasses etc.) are also located on each site to assist in the event of a chlorine spill.

Appropriate fire extinguishers are also kept onsite and checked by Code Red Monthly to ensure equipment is up to date and intact.

All staff are trained in the use of this equipment and aware of their locations at the Caravan Park and MHSHR. A copy of this PIRMP and contacts list is also kept at the following locations for quick referral:

- MHSHR – in cabinet near fire control panel.
- Caravan Park – in Office on the wall.
- Evaporation Ponds – in steel shed at the Industrial drive concrete batching plant.

In the event of a significant incident (e.g. a pipe breaking or a bank failure), staff and/or contractors will be inducted in site management protocols and issued with appropriate safety equipment as required (such as hi-vis vests and hard hats) to ensure on-site safety.

7.0 Contact details

If the incident presents an immediate threat to human health or property, “000” will be called first as Fire & Rescue NSW, the NSW police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency, or once the “000” call has been made, it is required under the Protection of the Environment Operations Act 1997 that the following authorities are notified when material harm to the environment is caused or threatened: EPA, NSW Health, Fire & Rescue NSW, WorkCover NSW and the local Council.

The Evaporation Ponds are also located in the vicinity of the Moree railway line. In the event of a pollution incident in which the railway line has the potential to be impacted, the Australian Rail Track Corporation’s North Network Control Centre should be contacted.

The 24 hours hotline for each authority is given:

Authority	Contact Number
Fire, Police and Ambulance	000
NSW Environment Protection Authority Environment Line - Armidale	131555 or 6776 0000
Moree Hospital	6757 0000
Work Cover	131050
Moree Plains Shire Council	6757 3222
ARTC North Network Control Centre	4902 9410

The following lists key personnel responsible for actioning this plan and managing the response to a pollution incident.

Key Personnel		
Name	Role	24-hour contact
Wal McDonald	Director	0427 522 260
Matthew McDonald	Director	0427 524402
Allan McDonald	Director	0427 524403

8.0 Minimising Harm to Persons on the Premises

All three EPL locations are covered by mobile phone reception. If any development or works are conducted onsite, phone numbers of the site managers will be provided to site visitors and contractors, to enable rapid communication in the event of an incident.

Visitors to the Caravan Park and MHRHS will be made aware of evacuation procedures and locations on each site. Emergency information and procedures are displayed in each guest

room and building as well as the pool areas. The evacuation point at the Caravan Park is the car park directly adjacent to the Admin Building. The evacuation point at the MHSHR is located in the carpark North east of the main pool building.

In the event of a chemical spill or pool rupture/pipeline discharge the P/A system will be used to instruct all patrons to leave the pool or affected area. Patrons will be instructed to congregate at the evacuation point while the authorities are notified and a temporary barrier around the affected area is erected to prevent patron access.

The Evaporation ponds only have staff onsite for maintenance works and monitoring. As the site is accessible from multiple directions by roads and tracks, there is no formal evacuation point. In the event of an emergency, personnel on site are encouraged to take the nearest accessible road or track to evacuate the site, and to notify all personnel which may be on site of the incident via mobile phone.

Evacuation points for each site is displayed in figures at Appendix B.

9.0 Communicating with Neighbours and the Community

Early warning and regular update to owners and occupiers of premises who may be affected by an incident occurring with regards to the evaporation storages, Caravan Park, MHSHR and associated water delivery pump networks will be notified as follows:

Properties surrounding the facilities:

Should a neighbour be required to take action due to an impending or actual pollution risk, a call to the telephone (landline and /or mobile) of the resident or business where a pollution impact may be experienced will be made by the management of the facility.

In the event of a major pollution incident, residents or businesses may be further contacted by an emergency service representative, such as in the case where evacuation or critical safety actions are necessary.

An “all-clear” telephone call will also be made to residents when the incident is no longer of concern or normality has been restored.

Wider community:

Depending on the nature, scale and timing of the incident, management of the facility will provide information via the local media.

10.0 Actions During or Immediately After Pollution Incident

This section of the plan details specific measures that are to be undertaken in the event of a pollution incident.

Hazard description	Action
Rupture of inflow pipes from Gwydir Caravan Park and MHSAU, leading to escape of artesian water to surrounding land in breach of licence	<ul style="list-style-type: none"> • Stop flow to ruptured pipes • Prepare temporary barrier surrounding the location of the breach to prevent public access; and • Assess the situation. In the event of water spilling onto public roads and/or railway lines, contact Council and/or the ARTC. • Communicate with any affected neighbours and community through measures outlined. Reassure community that the matter is being dealt with appropriately. • Undertake pipe repair and any other remedial action as required
Spill or overflow from evaporation storages	<ul style="list-style-type: none"> • Spilling or overflowing from the evaporation storages is only likely to occur during extreme rain events leading to flooding. In this instance, the site should be evacuated. The primary risk of harm to persons on the premises in this instance would be the risk of adverse weather and flooding. • In the event of overflow or discharge from the evaporation ponds, water quality samples must be taken as soon as possible and not more than 12 hours after any overflow commencing in accordance with requirements M2.1 of EPA License Number 21015.
Spill or discharge from pool/pipes at Gwydir Caravan Park or MHSHR	<ul style="list-style-type: none"> • Clear affected areas of all non-essential personnel and install temporary barriers where necessary. • Isolate flow to ruptured pipe/pool and shut down all pumping operations. • Notify Site Management • Notify relevant statutory authorities under Section 148 of POEO Act 1997. • Communicate with any affected neighbours and community through

Hazard description	Action
	<p>measures outlined. Reassure community that the matter is being dealt with appropriately.</p> <ul style="list-style-type: none"> • Ensure formal “all clear” is given prior to resuming normal operations. • Undertake pipe repair and any other relevant remedial action as required.
Storage bank failure	<ul style="list-style-type: none"> • Evacuate the site downstream of the direction of the bank failure; and • Notify neighbours and community members downstream of the direction of the bank failure; and • Cease delivery of Artesian water from Gwydir Caravan Park and MSHSR to the affected storage; and • Prepare a temporary barrier surrounding the location of the incident to prevent unauthorised site access.
Chemical Spill	<ul style="list-style-type: none"> • Don relevant PPE and safety apparatus. Sound alarms and is possible, notify relevant agencies. • Evacuate affected areas of all non-essential personnel. • Isolate source of pollution wherever possible. • Contain the pollution wherever possible. • Call Hazmat / fire brigade if chlorine • Notify Site Management • Notify relevant statutory authorities under Section 148 of POEO Act 1997. • Communicate with any affected neighbours and community through measures outlined. Reassure community that the matter is being dealt with appropriately. • Ensure formal “all clear” is given prior to resuming normal operations. • Undertake any remedial action as required.

This PIRMP must also be reviewed within one month of a pollution incident occurring.

11.0 Severe Weather Forecast to February 2022

On 23 November 2021 the Bureau of Meteorology declared that a La Nina has developed in the Pacific Ocean. This complex weather pattern is expected to cause above average rainfall across the eastern, northern and central parts of Australia. Higher than average rainfall, severe storms and flash flooding are likely to be common from now through to February 2022.

Heavy rainfall and flooding may increase the likelihood that a pollution incident may occur on the premises. The following actions will be undertaken until the end of February 2022 to minimise the risk of a pollution event:

- Storing chemicals stored above areas that are prone to inundation;
- More regular inspections of the evaporation ponds; Weekly
- Treating and removal of stormwater from the ponds if deemed required by management;
- Maintaining bunds empty and implementing measures to prevent them from being filled with stormwater.

12.0 Staff Training

All staff required to implement this plan and associated documents must have training in its use and be inducted into it. This is to ensure they are aware of the content, processes and requirements of this plan and can competently implement it if necessary. Additionally, relevant staff will be involved in a regular exercise/drill to test the implementation of the plan. In the event of a significant incident, an investigation and debrief will be conducted, documentation updated (if required) and staff will be re-inducted.

Staff are required to have training in and hold the following qualification / certificates where applicable:

- First Aid
- Chemical Handling

13.0 Testing Plan

This plan must be tested every 12 months to ensure that the information contained is accurate and up to date and that the plan is effective. A desktop simulation revisiting the PIRMP and an annual stocktake of potential pollutants is deemed sufficient for testing requirements. The PIRMP test record is included as Appendix C.

14.0 Site Plan

The attached plans (Appendix A) show the location of:

- Water supply pipelines to the storages (Appendix A)
- Monitoring/discharge points (Appendix A)
- Evacuation locations (Appendix B)

15.0 Further Information

The PIRMP has been developed to comply with legislative obligations and is not an indication of increased pollution risk from the facility. Management welcomes any further enquiry about the PIRMP which can be made by calling MHSR directly on (02) 6752 2723.

16.0 Version History

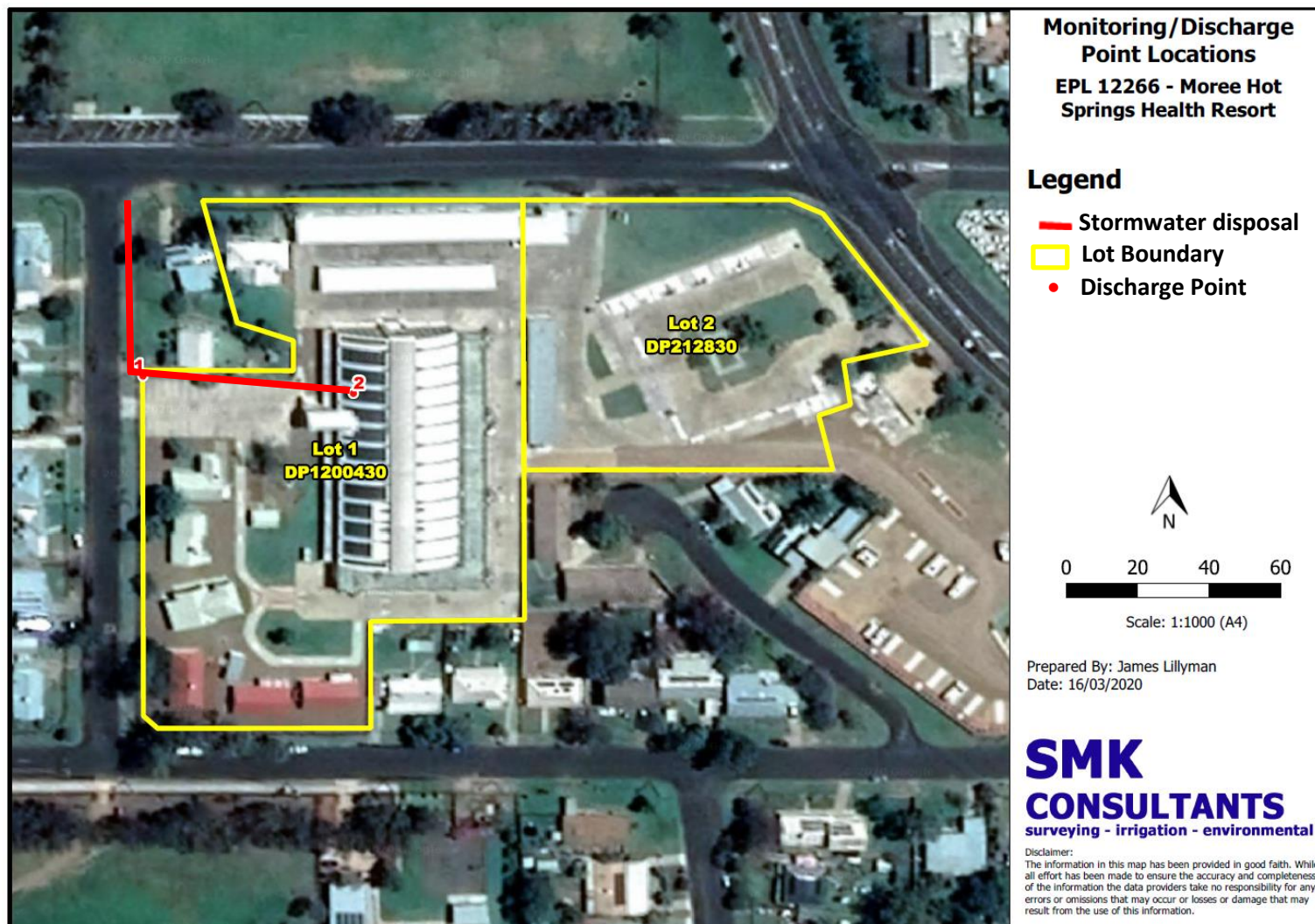
This report was last updated by Marie Duffy of SMK Consultants on 31st January 2022.

17.0 References

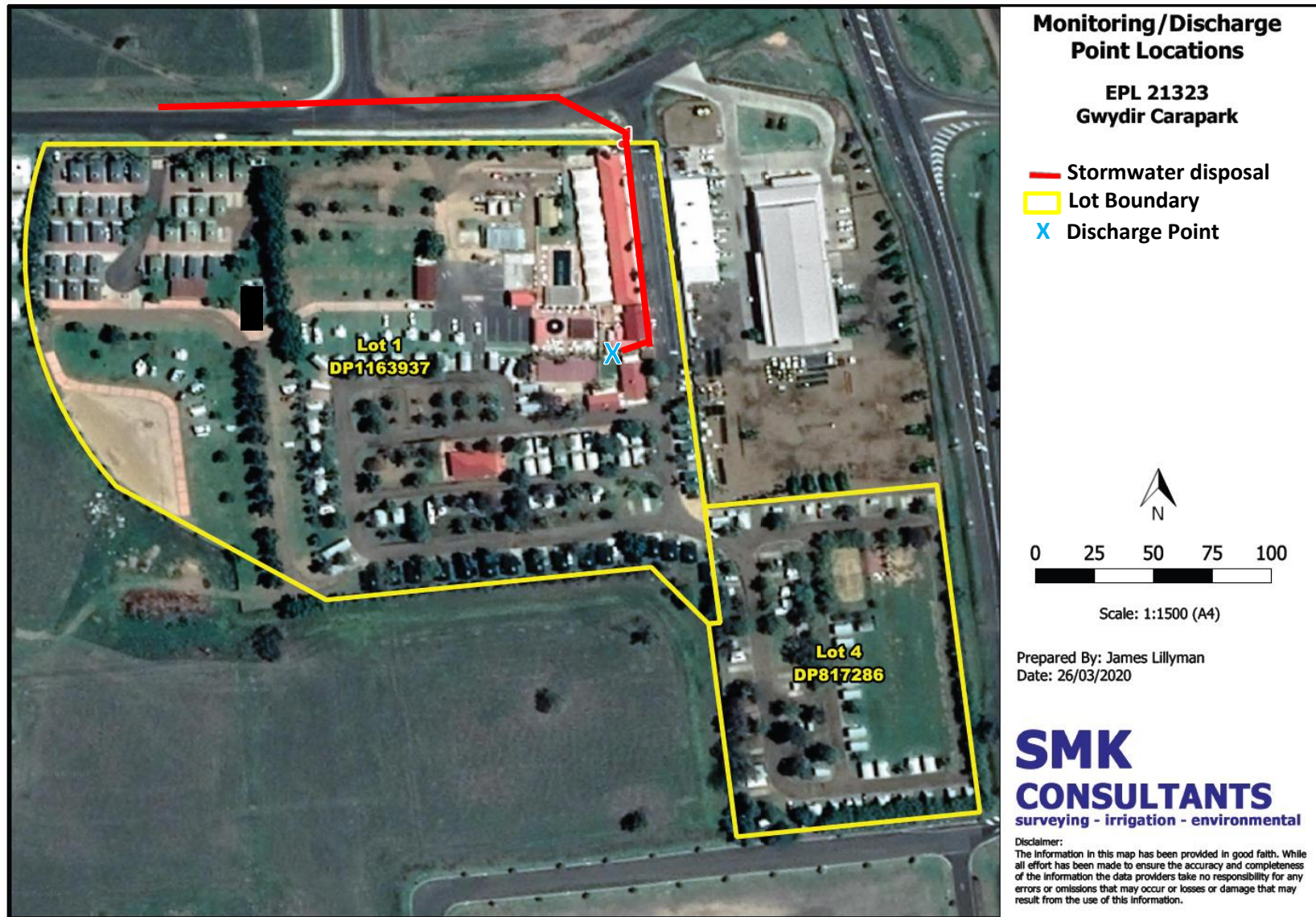
- EPA NSW Environmental Guidelines: Preparation of pollution incident response plans
- Local Government Act 1993
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (General) Regulation 2009
- Public Health Act 1991
- Water Administration Act 1986

Appendix A: Site Plans

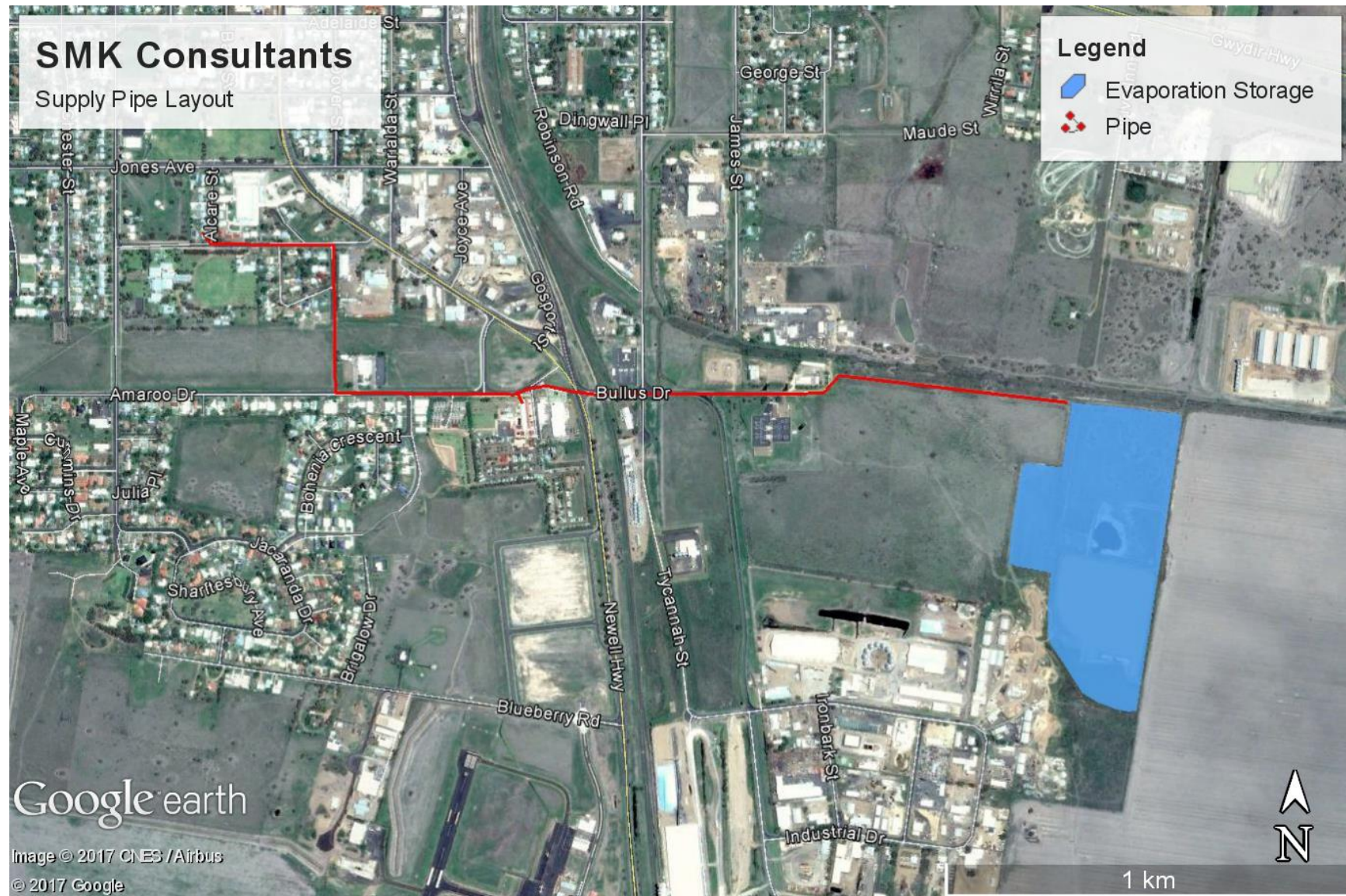
1) Moree Hot Springs Health Resort



2) Gwydir Caravan Park



3) Evaporation Ponds



Appendix B: Evacuation Points

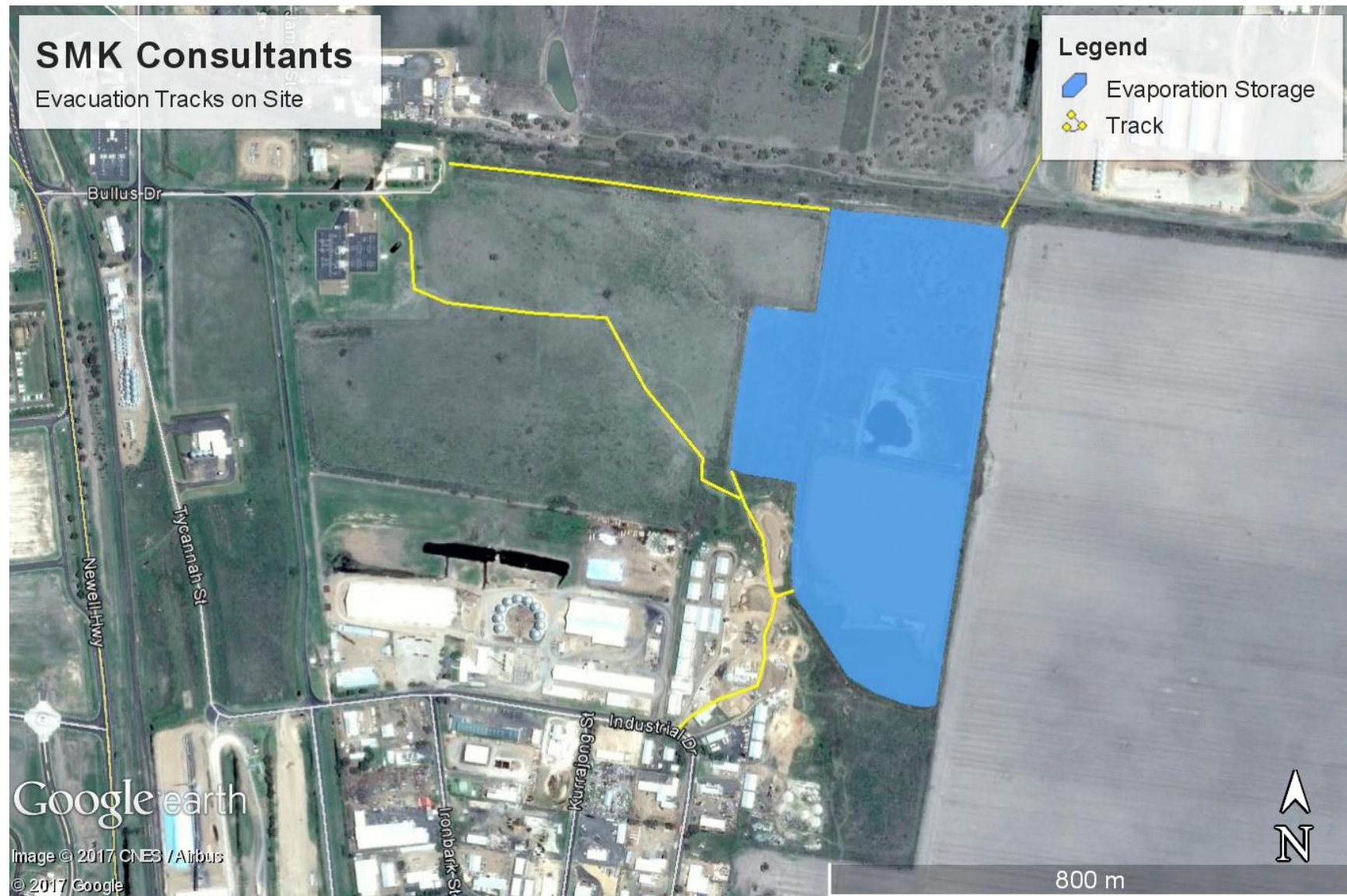
1) Moree Hot Springs Health Resort



b) Gwydir Caravan Park



c) Evaporation Ponds



Appendix C: PIRMP Testing Record

PIRMP Test Record – 2020	
Date of test	29-10-2020
Tested by	Allan McDonald
Details of test	Review of PIRMP, stocktake of potential pollutants
Are all procedures associated with the PIRMP readily available?	Yes
Are all procedures associated with the PIRMP current?	Yes
Is all internal information in the PIRMP correct?	No – PIRMP was updated. See Appendix D.
Is all external information in the PIRMP correct?	Yes
Test findings, including issues identified	No issues identified.
Next scheduled test date	October 2021

PIRMP Test Record - 2021	
Date of test	29-10-2021
Tested by	Matthew McDonald
Details of test	Review of PIRMP, stocktake of potential pollutants
Are all procedures associated with the PIRMP readily available?	Yes
Are all procedures associated with the PIRMP current?	Yes
Is all internal information in the PIRMP correct?	Yes
Is all external information in the PIRMP correct?	Yes
Test findings, including issues identified	No issues identified.
Next scheduled test date	October 2022

Appendix D: Record of Revision

Date	Version	Details of changes
February 2018	1	N/A
November 2020	2	Include all EPLs: 12266, 21015, 21323. Overall review and update.
January 2022	3	Include additional measures relating to La Nina weather event