Murray River Council

Moama Sewer and Sewage Treatment Plant

Pollution Incident Response Management Plan

Updated: April 2020

CONSULTANT DETAILS	
Business Name:	Advanced Environmental Systems (AES)
Nominated Individual:	Mr Peter Clinnick (B. Ag. Sci. Hons)
Address:	Suite 2/75 Hume Street Echuca Vic 3564
Email	pc@environmentalsystems.com.au
Phone Number:	(03) 5482 5882 Mob: 0412 151 225

CLIENT DETAILS	
Business Name:	Murray River Council
Nominated Individual:	Manager Engineering Services
Address:	21-25 Conargo Street Mathoura NSW 2710
Email	admin@murrayriver.nsw.gov.au
Phone Number:	1300 087 004

MOAMA SEWER AND SEWAGE TREATMENT PLANT

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

TABLE OF CONTENTS

1. INTRODUCTION 1

2. ACTION PLAN 2

TRIGGERS FOR ACTION 2

EMERGENCY AND OTHER CONTACTS 3

WASTE HAZARDS 6

CHAIN OF COMMUNICATION AND REPORTING 9

PRE-EMPTIVE ACTIONS TO BE TAKEN 9

ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT 10

INVENTORY OF POLLUTANTS 11

SAFETY EQUIPMENT 12

COMMUNICATING WITH NEIGHBOURS AND THE COMMUNITY 12

MINIMISING HARM TO PERSONS ON THE PREMISES 12

STAFF TRAINING 13

APPENDIX 1. MAPS, SEWER MAINS, PUMP STATIONS, SEWAGE TREATMENT PLANT, FLOOD EVENT 15

APPENDIX 2. MAP AND LIST OF OCCUPIED SITES - STP 25

LIST OF OCCUPIED SITES - CONTACT NUMBERS 25

APPENDIX 3. EMERGENCY RISK MANAGEMENT AND GENERATOR SUPPLY 28

APPENDIX 4. POLLUTION NOTIFICATION FORM 31

APPENDIX 5. SYSTEM FOR ASSESSING RISK RATING 34

Notes:

MOAMA SEWER AND SEWAGE TREATMENT PLANT

Pollution Incident Response Management Plan

1. Introduction

The Protection of the Environment Operations Act (1997) and an addition under Part 5.7A requires licensees to prepare, implement and test pollution-incident management plans (that include community notification and communication protocols) for each of their licensed activities according to the requirements set out in part 5.7A of the POEO Act and details contained in a regulation *Protection of the Environment (General) Amendment (Pollution incident response management plans) Regulation* 2012 which amends the *Protection of the Environment Operations (General) Regulation* 2009.

The objectives of these plans are to:

- Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, SafeWork NSW, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident.
- Minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks.
- Ensure that the 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.

A 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 there are unwanted hazards to human health or a threat to the environment has been placed or disposed of on premises, but it does not include 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 section 147 of the POEO Act 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.

2. Action Plan

Triggers for action

Trigger	Immediate Action	Follow-up Actions
Smoke and fire	Contact 000 - Fire brigade.	Attempt suppression, if safe to do so. Senior staff to implement Displan if required. Contact Manager Engineering Services who will notify EPA.
Chemical / fuel / oil spill	Contact 000 - Fire brigade.	Attempt containment and clean-up if safe to do so. Senior staff to implement Displan if required. Contact Manager Engineering Services who will notify EPA.
Unusual odours	Evacuate area. Contact 000 - Fire brigade.	Senior staff to implement Displan if required. Contact Manager Engineering Services who will notify EPA.
Persons or wildlife incapacitated (e.g. confined space rescue)	**In confined spaces** support services must conduct rescue; **do not attempt rescue.** Contact 000 - Fire brigade, ambulance, police / wildlife officer.	Evacuate. Assess wind direction Contact Manager Engineering Services who will notify EPA and Ministry of Health. Engineering Manager may need to contact neighbours.
Flood / Inundation	Contact State Emergency Services.	Secure pump stations - isolate from electricity supply. Sand bag sewer access points and covers. Senior staff to implement Displan if required.
Pump station failure	Contact State Emergency Services.	Evacuate. Attempt containment and clean-up, if safe to do so. Contact Manager Engineering Services who will notify EPA.

Emergency and other contacts

Fire Brigade – Ambulance – Police Police Moama (03) 5482 0099	**000**
Murray River Council	1300 087 004 admin@murrayriver.nsw.gov.au
Mathoura Office----------	1300 087 004
Moama Office ----------	1300 087 004
Solid Waste Depot (Moama Landfill) ---------	(03) 54800414
Manager Parks Gardens & Open Spaces------	0418 544 230 - Luke Keogh
Director Planning, Environment & Economic Development----------	0427 305 727 - David Wilkinson
Director Engineering----------	0428 245 485 - Scott Barber
Manager Engineering Operations----------	0427 344 739 - Fred Groenewald
Manager Engineering Services ----------	0418 515 475 - Jack Bond
Water & Sewer Emergency Operator ---------	0417 747 911 - Terry McLaughlin
Ranger ----------	0488 190 613 - Mark Birrell
Manager of Waste Services ----------	0428 229 346 - Gavin Carlisle
Electricity (Essential Energy)	132 080
NSW Environment Protection Authority	131 555 or Albury: (02) 6022 0600 info@epa.nsw.gov.au
NSW Public Health Line	(02) 6080 8900 (press 2 for Public Health Officer)
NSW Roads and Maritime Services	132213
State Emergency Service (NSW)	132 500
SafeWork NSW	131 050 Albury: (02) 6042 4600
Other contacts	
Emergency Electricity and Generator Supply	
Southern Generators and Electrical	1300 350 706 (24 hrs) (03) 9558 3600 Mob 0425 389 303 (Tyden Latty)
Emergency Septic Waste Removal	
- Closter's Group	(03) 5480 1469
Oz Septic Industries	(03) 5482 6305 OR 0428 505 402 (Peter Green)
Department of Planning and Environment	(02) 9228 6111

Department of Primary Industries (24 hrs)	1800 675 888 (Emergency Animal Disease 24 hrs)
Ellwaste	(03) 5456 2500 (A H) 0417 371 702
Environmental Impact Advice (local)	5482 5882 or 0412 151 225
Moama Veterinary Clinic	(03) 5480 6071
NSW DPI Water	(02) 8281 7777
Pesticides, herbicides, chemical spills (24 hrs - EPA)	131 555
Hazardous Materials, Chemical and Radiation Section EPA (Advice and support)	(02) 9995 5959 or (AH) 131 555
RSPCA (Bendigo 10 am - 4 pm)	(03) 5441 2209
Poisons Information Centre (24 hr Advice)	131 126
WIRES (NSW Wildlife Information Rescue & Education Service) Wagga Wagga	0407 600 755

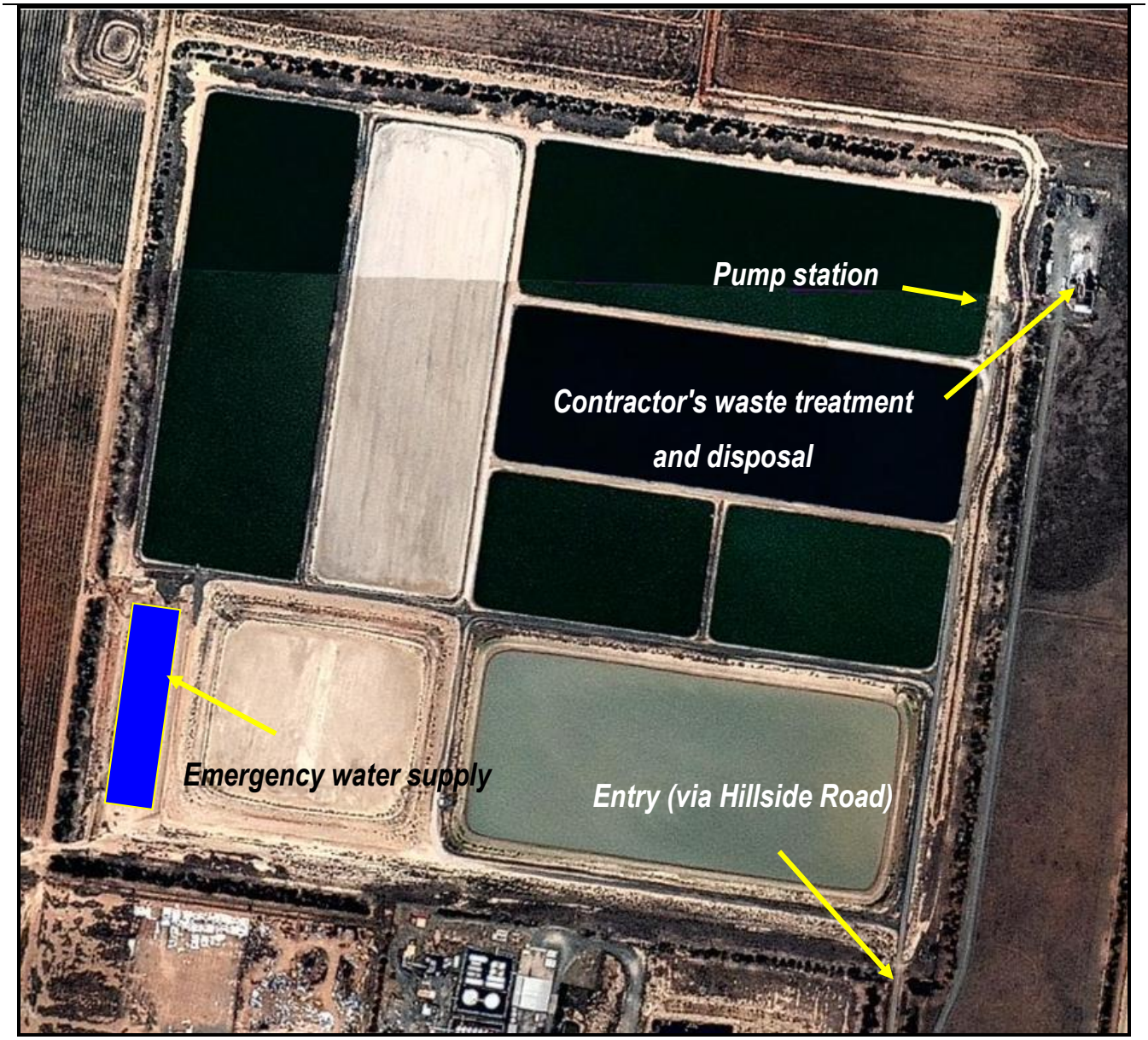


Figure 1. Moama Sewer treatment plant

Waste hazards

The system used to assess the Risk Rating for hazards to human health and the environment are detailed in Appendix 1.

Hazards to the environment

Waste type	Threat	Environmental or Other Impact	Likelihood	Consequence	Risk Rating (L x C)	Events increasing risk	Action
Hazardous waste agricultural and industrial waste, tradewaste	Leakage or escape of contaminants - Chemicals including heavy metals, copper, lead, chromium, cobalt, selenium and cadmium, pathogens.	Impact on wildlife.	Improbable (A)	Insignificant (1)	Low (1A)	Wind and fire. Extreme rainfall, site flooded, retaining structures leak or breached.	Suppression of dust and fire (Contact Fire brigade) Contain, repair leak or breach Contact fire brigade, secure site. Contact Manager Engineering Services to notify EPA.
		Contamination of the treatment plant microorganisms and biosolids.	Remote (B)	Moderate (3)	Low(3B)		
Dust and litter	Airborne chemicals and fibrous material, such as asbestos, loose paper and plastic.	Low level contamination.	Occasional (C)	Insignificant (1)	Low (1C)	Summer / Dry periods, excess site traffic/Wind and fire.	Suppression using water tanker Contact fire brigade, secure site, contact Manager Engineering Services to notify EPA.
Smoke	Chemical and particulate hazard.	Atmospheric pollution. Traffic hazard.	Minor (C)	Minor (2)	Medium (2C)	Fire / storms / machinery operations on hot days. Spontaneous combustion of compost or waste material.	Contact fire brigade. Extinguish if safe to do so. Secure site, contact Manager Engineering Services to notify EPA.
Volatile fluids (petrol) or	Explosion.	Atmospheric pollution. Traffic hazard (smoke).	Minor (C)	Minor (2)	Medium (2C)	Fire / storms / machinery, not	Contact Fire brigade. Extinguish if safe to do so.

Poisonous gases *(methane)*						intrinsically safe equipment.	Contact Manager Engineering Services to notify EPA.
Sullage *(House boats and other watercraft)*	Leakage or escape of contaminants.	Contamination of the river system and aquatic environment with pathogens, detergents and carcinogenic substances, damage to river ecosystem. Impacts on recreational use of river and tourism.	Minor (C)	Minor (2)	Medium (2C)	Flood / Transfer incident.	Evacuate area. Notify fire brigade, Police and Maritime Services. Attempt containment and clean-up, if safe to do so. Contact Manager Engineering Services who will notify EPA.

Hazards to human health

Waste type or material on site	Threat	Human or Other Impact	Likelihood	Consequence	Risk Rating (L x C)	Events increasing risk	Action
Organic domestic waste spill (e.g. pump station)	Growth of microbial pathogens.	Infectious and chronic diseases	Occasional (C)	Catastrophic (5)	Extreme (5C)	Warm and humid conditions.	Maintain hygienic handling. Contact waste contractors.
Hazardous materials, agricultural and industrial waste	Chemicals and fibrous material, such as asbestos and radioactive hazards.	Chemical exposure leading to poisoning and diseases, cancer.	Occasional (C)	Catastrophic (5)	Extreme (5C)	Wind and fire.	Fire - contact fire brigade and Engineering Manager. Chemical exposure contact 000.
Waste treatment site	Health hazards for the neighbourhood - from spillage contact spread by vectors, such, birds, rodents and insects.	Exposure leading to diseases in livestock and humans.	Remote (B)	Catastrophic (5)	Very High (5B)	Illegal dumping / leakage.	Eliminate /control vectors control.
Dust / Odour / Airborne microbes	Health hazard arising from air born pathogens and or respiration hazards.	Eye and respiratory infections, cancers resulting from exposure	Occasional (C)	Catastrophic (5)	Extreme (5C)	Summer / Dry periods, fire, excess site traffic/	Odours - Evacuation, contact fire brigade, contact Manager Engineering

		to organisms / chemicals on dust.				wind.	Services. Dust suppression if required.
Smoke	Chemical and or respiration hazards.	Risk of chronic respiratory diseases, including cancers.	Occasional (C)	Catastrophic (5)	Extreme (5C)	Fire.	Contact fire brigade, consider evacuation. Extinguish fire if safe to do so, contact Manager Engineering Services.
Large quantity chemical, oil or fuel spill	Chemical and / or explosion hazard.	Exposure to chemicals, Injury/death.	Occasional (C)	Catastrophic (5)	Extreme (5C)	Wind, fire direct contact or exposure. Not intrinsically safe equipment.	Close down sewer pump station. Neutralise spill if possible. Management only by trained staff wearing personal protective equipment and apparel. Contact Manager Engineering Services.
Volatile or Poisonous gases *(Methane)*	Substantial leak / Explosion *(e.g. from welding or grinding operations)* / respiration hazards.	Major injury /fatality. Toxic exposure to waste gases.	Occasional (C)	Catastrophic (5)	Extreme (5C)	Fire - direct contact.	Contact fire brigade, evacuation, contact Manager Engineering Services. Screening of waste and daily cover.
Flood / Inundation	Health hazards for the neighbourhood - from spillage contact danger and vectors, such, birds, rodents and insects.	Infectious and chronic diseases	Occasional (C)	Catastrophic (5)	Extreme (5C)	Rain / flooding	Evacuate. Attempt containment and clean-up, if safe to do so. Contact Manager Engineering Services to notify EPA.

Site plans

Refer Appendix 1.

Chain of communication and reporting

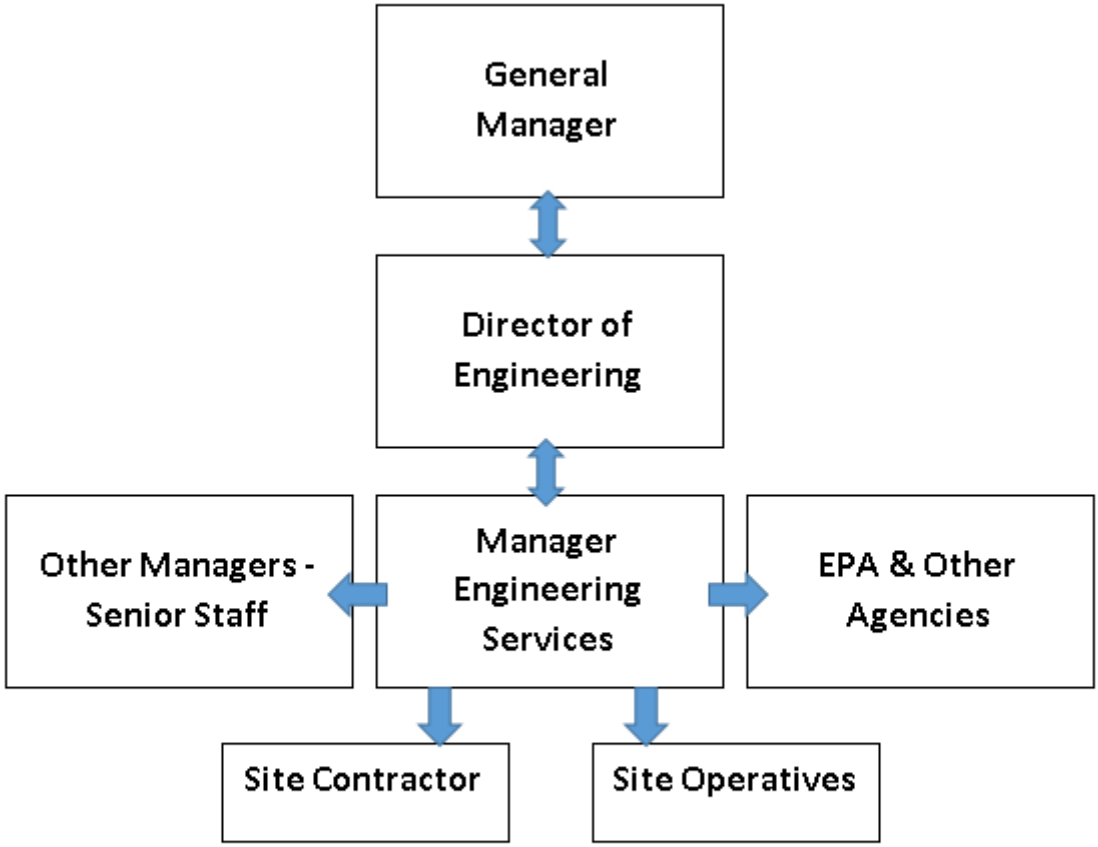


Figure 1. Chain of communication and reporting of pollution incidents

Pre-emptive actions to be taken

The following pre-emptive actions will be taken to minimise or prevent any risk of harm to human health or the environment arising from the activities undertaken at the premises.

Personal protective equipment and response

The appropriate personal protective equipment is to be worn at all times and operators are to be trained in appropriate levels of pollution response and / or confined space rescue, depending on the nature of the incident.

Fire

1. Mobile telephone facilities for contact with the Murray River Council / Moama Urban or Bushfire Brigade Network.
2. Portable fire extinguishers (Dry chemical) are to be fitted on all Council service and contractor vehicles.
3. A static 2 ML water supply is generally available for fire suppression at the south western section of the facility.
4. A map of other suitable water locations is to be affixed to the front gate and at the front of this Plan.

Chemical and fuel / oil spills

A spill containment kit will be maintained on site in the event of hazardous substances or liquids being accidently released.

Kamlok fittings on all vessels with pump-out facilities.

Water tests

Final pond effluent testing (EC, pH, BOD, Suspended solids) is to be conducted monthly.

Vermin control

Refuse and waste to be covered daily.

Dust and litter

Ensure adequate ground cover around treatment ponds and gravel on road surfaces.

Actions to be taken during or immediately after a pollution incident

A plan indicating the location of surrounding residences (and contacts -confidential) is provided in Appendix 1.

Site Drainage

The site drainage is generally to the west down Hillside Road to 24 Lane. The site is remote and largely contained in relation to water courses and natural drainage lines that might readily convey pollutants to a waterway.

Site clean-up and remediation

Site cleanup and any required remediation will follow the actions outlined in Tables 2.1, 2.3.1 and 2.3.2. Disposal will depend on the nature and quantity of the material involved. Where required, consultation will be sought with the relevant authorities (e.g. EPA, Ministry of Health)

Protocol for the Murray River Council Site Manager Engineering Services - notification of pollution incidents

The Murray River Council Site Manager Engineering Services will be responsible for notifying each relevant authority (identified below) when material harm to the environment is caused or threatened.

Call 000 if the incident presents an immediate threat to human health or property. Fire and 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, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:

EPA – phone Environment Line on 131 555

Ministry of Health via the local Public Health Unit – (02) 6080 8900
(www.health.nsw.gov.au/publichealth/infectious/phus.asp)

SafeWork Authority – phone 13 10 50

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by WorkCover.

Inventory of pollutants

There are no potential pollutants kept on the premises or used in carrying out activities at the premises.

Safety equipment

Specific personal protective equipment required for the handling of materials will include:

Safety high visibility vest

Heavy duty gloves;

Waterproof gloves;

Respirator mask;

Steel capped boots;

Waterproof chemical resistant gum boots;

Goggles / safety glasses.

A spill containment kit will be maintained at the Water Treatment Plant in the event of hazardous substances, or liquids being accidently released prior to entering the sewage system.

Personnel wash down shower and eye wash facilities will be established on the site.

Communicating with neighbours and the community

1. A plan indicating neighbouring residences is provided in Appendix 1.
2. Neighbours will be made aware of the PRIMP and contact details will be maintained with the Site Manager Engineering Services at the Mathoura and Moama Offices.
3. An evacuation plan will be prepared catering for any incident impacting on the sewage system.
4. In determining the extent of community notification for potential air emissions, the site Manager Engineering Services will consider aspects such as the type of pollutant, prevailing winds, height and magnitude of an emission, as well as the location of any on-site fallout or off-site impacts, the likelihood of the pollutant reaching ground level, and possible impacts on sensitive receptors such as nearby farm water tanks.

Minimising harm to persons on the premises

A registration system will be established at the main gate and staff will be trained to instigate arrangements that will minimise the risk of harm to any persons who will be on the premises or who are likely to be on the premises should an incident occur.

Evacuation procedures will be established, clearly advertising muster locations to site personnel and visitors.

Contractors attending the site will have be briefed about site evacuation and other requirements relating to this Plan.

All contact details for contractors and a list of suitable consultants to provide expert medical, toxicology or environmental impact advice will be kept at the site and at the Mathoura and Moama Offices.

It is the responsibility of the state emergency response agencies with radiation protection guidance from State Radiation Safety Officers to respond to a radiation emergency within their jurisdiction. Contact: Manager Hazardous Materials, Chemicals and Radiation Environment Protection Authority (refer list).

Staff training

Objective

The primary objective of staff training is to ensure the health and safety of operators, contractors and visitors and to minimise pollution hazards and impact on life forms and the environment.

Training

All site employees and contractors will be provided with an induction course relating to site hazards, emergency and other procedures.

Training Frequency

Formal staff training will be conducted on a needs basis or when new staff or contractors are appointed.

Plan Testing, Emergency Response Exercises and Records

The frequency of testing (desktop simulation or practical exercise) will be once per year, or if a substantial change occurs in response arrangements or facility management.

Simulated incident exercises, including with emergency services will be conducted at a level suitable for the level of risk and likelihood of incidents at the premises.

Records must be kept of:

(i) How the plan was tested; and

(ii) Who was involved with the testing.

Knowledge

- Site operatives need to demonstrate knowledge of potential system pollution hazards in relation to humans and the environment.
- System operatives and Engineering Managers should be able to describe the nature and characteristics and required action for different types of pollutants or site hazard situations.
- Understand the fundamental aspects of applying dry and wet techniques for removal of pollutants.

Staff Skills

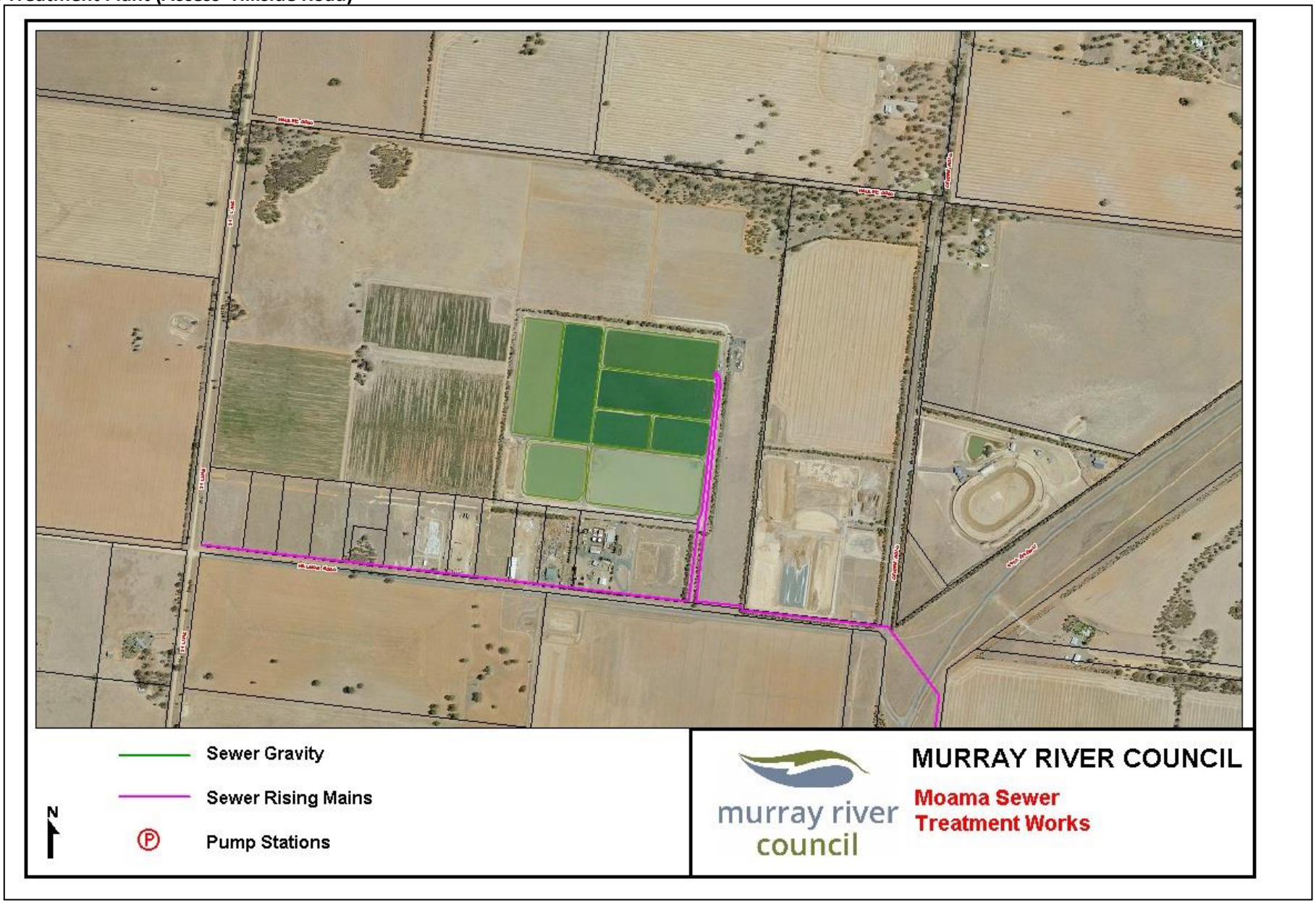
- Evaluate situations and determine appropriate actions.
- Identify relevant pollution warning and control actions and use of equipment for incidents.
- Awareness of potential health threats.

Attitude

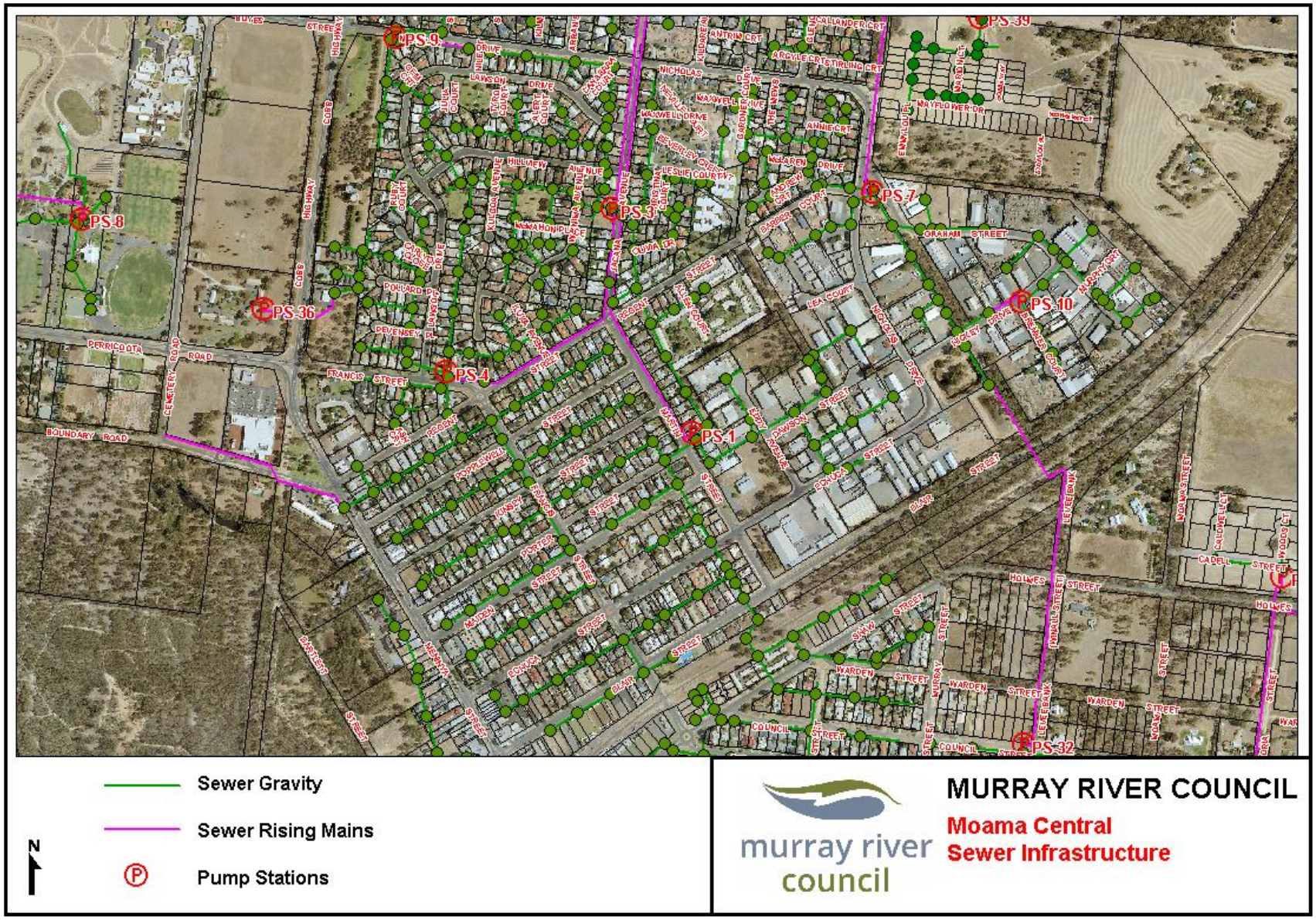
Consistently strive to reduce the risk of pollution through prevention and control of the site and material entering the site.

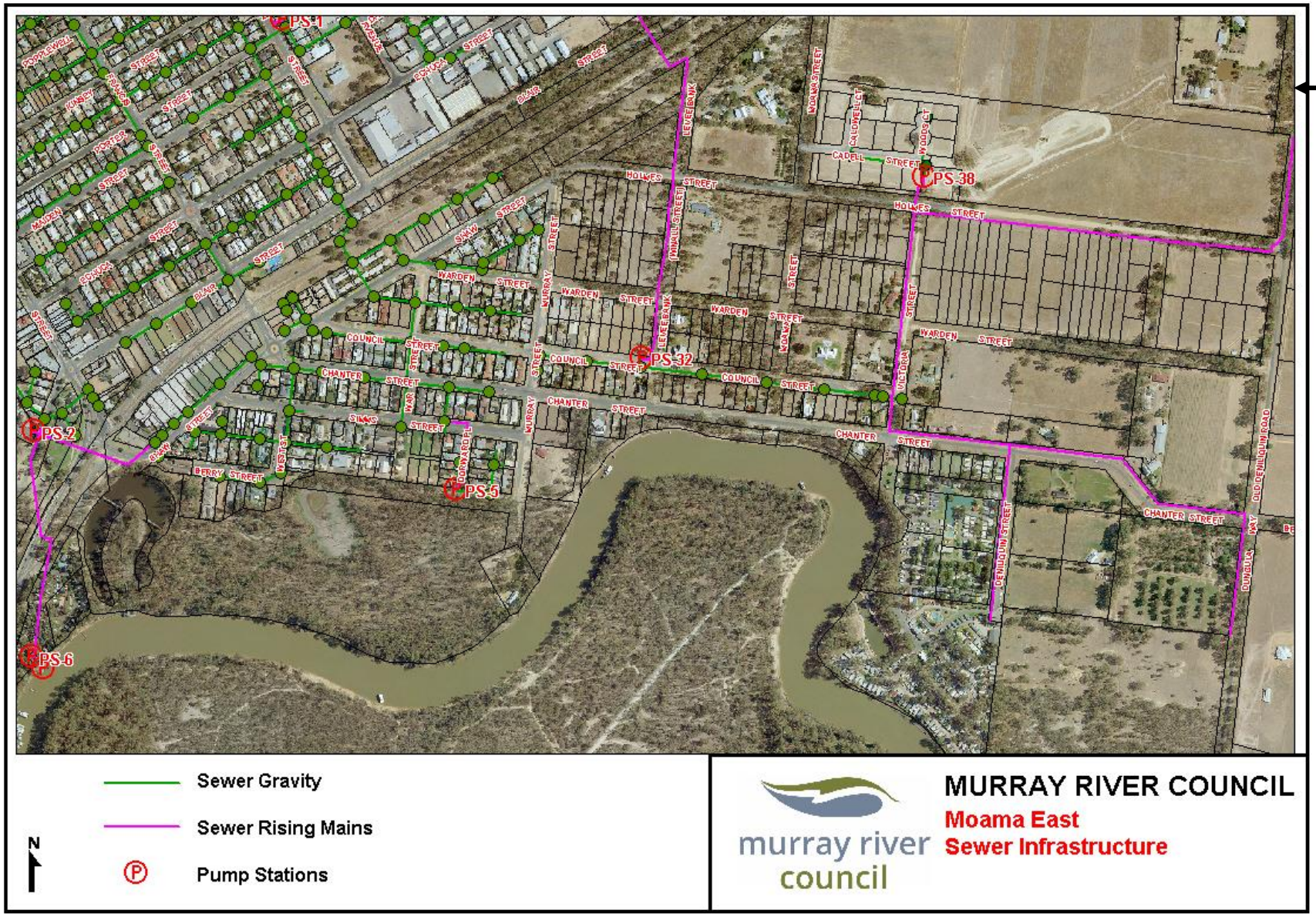
Appendix 1. Maps, Sewer Mains, Pump Stations, Sewage Treatment Plant, Flood Event

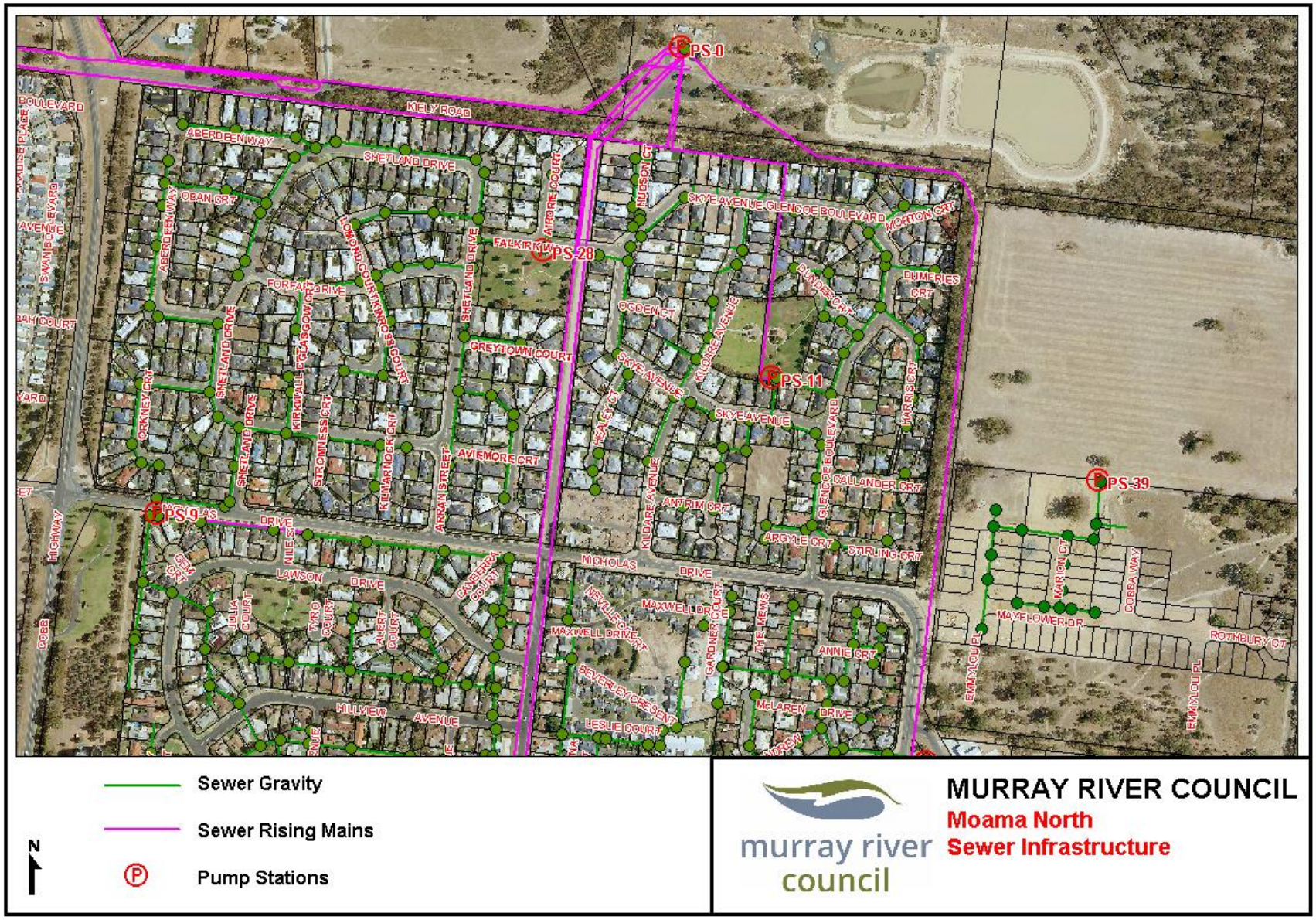
Sewage Treatment Plant (Access -Hillside Road)

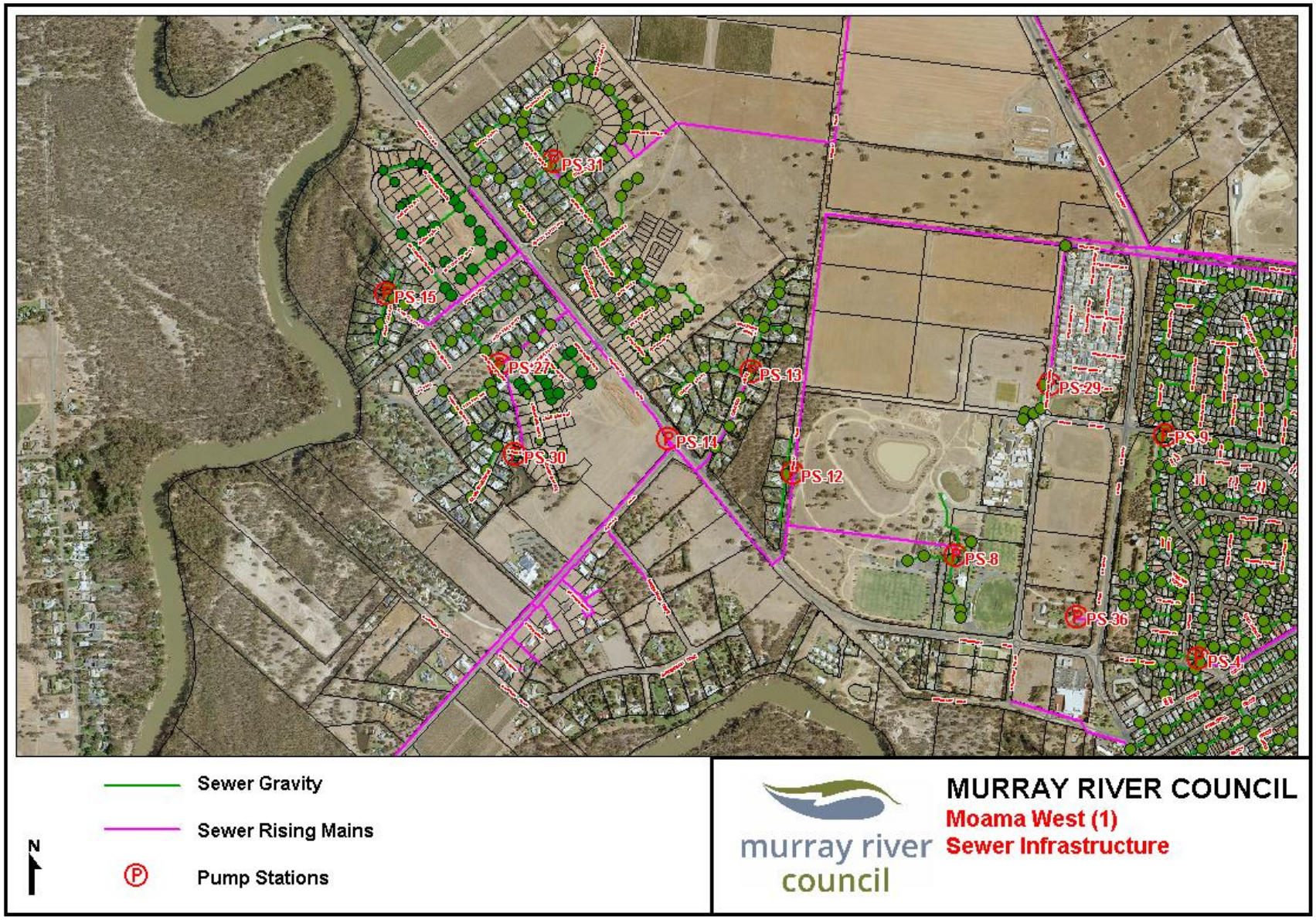


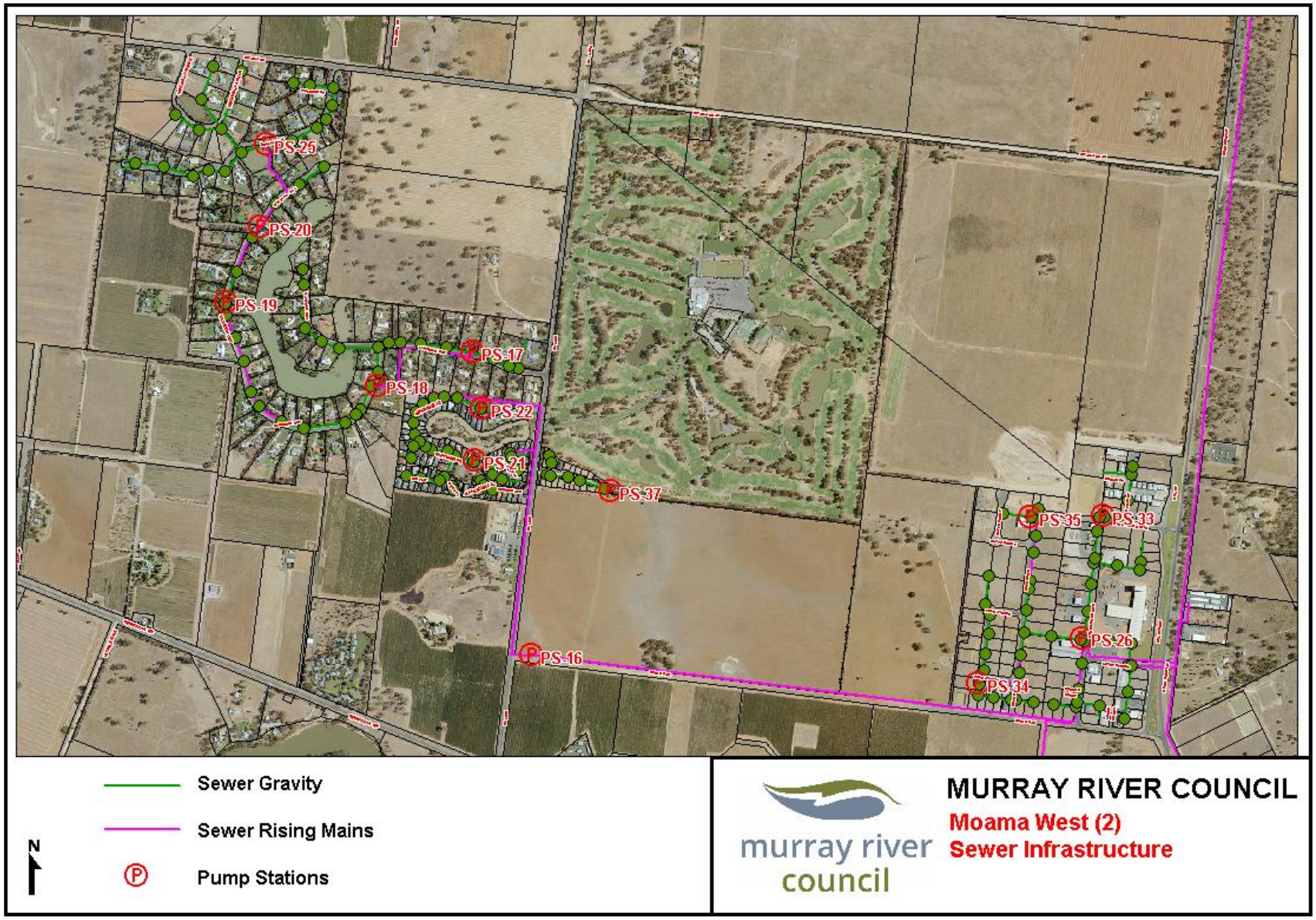

Contractor's waste treatment
and disposal
Pump station
Emergency water supply
Entry (via Hillside Road)

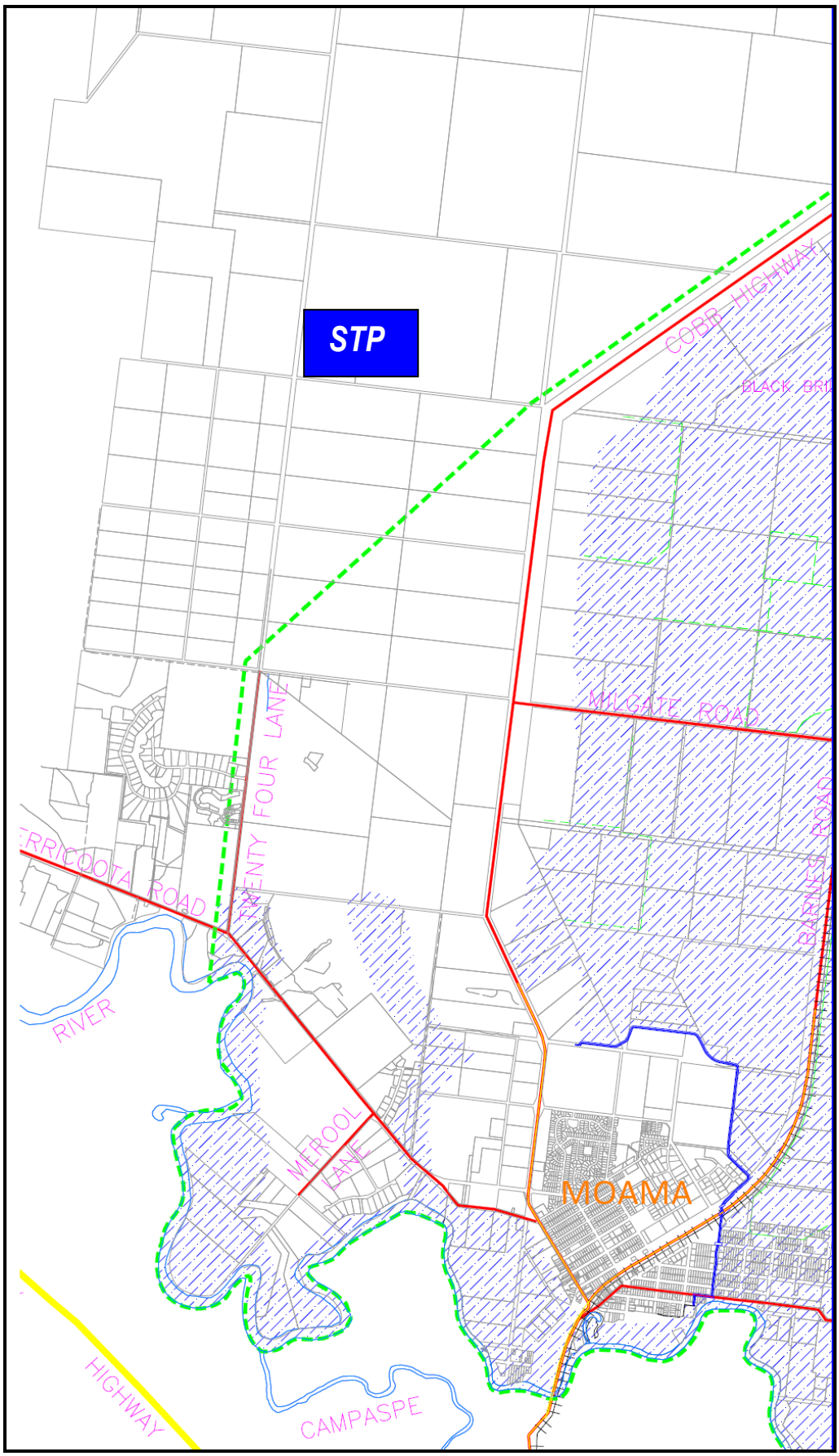

PS-9
PS-8
PS-36
PS-3
PS-4
PS-1
PS-7
PS-10
PS-39
PS-32
Sewer Gravity
Sewer Rising Mains
Pump Stations
N
MURRAY RIVER COUNCIL
Moama Central
Sewer Infrastructure
murray river council


From Horseshoe Lagoon
PS-1
PS-2
PS-5
PS-6
PS-32
PS-38
HOLWES STREET
WARDEN STREET
COUNCIL STREET
CHANTER STREET
MURRAY STREET
LEVEE BANK
MOAMA STREET
VICTORIA STREET
CADELL STREET
BERRY STREET
DENILIQUIN STREET
CHANTER STREET
OLD DENILIQUIN ROAD
Sewer Gravity
Sewer Rising Mains
Pump Stations
N
MURRAY RIVER COUNCIL
Moama East
Sewer Infrastructure
murray river council

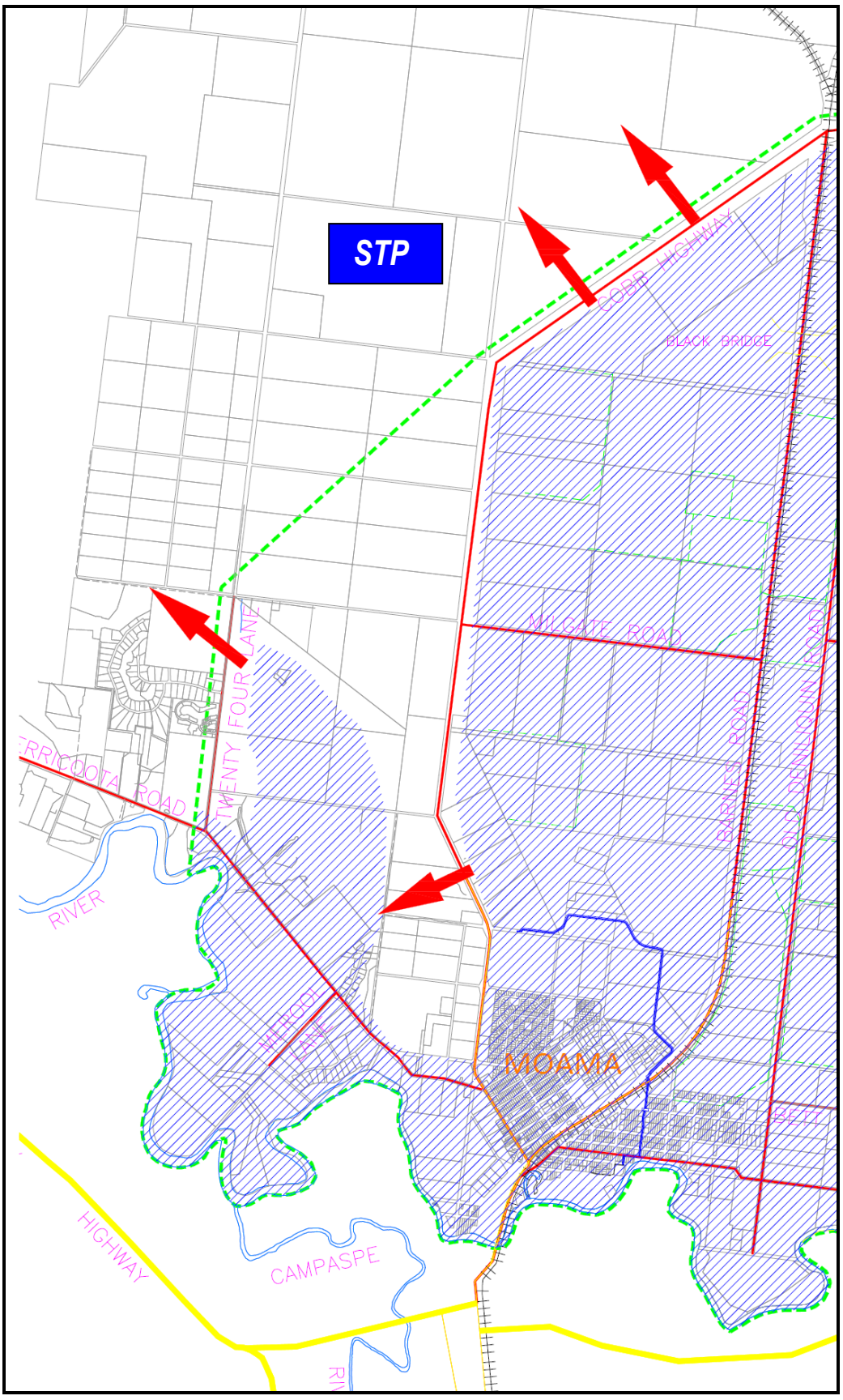

PS-0
PS-28
PS-11
PS-39
PS-9
KIELY ROAD
ABERDEEN WAY
SHETLAND DRIVE
OBAN CRT
FALKIRK CRT
SKYE AVENUE
GLENCOE BOULEVARD
MORTON CRT
DUMFRIES CRT
GREYTOWN COURT
AVIEMORE CRT
ARRAN STREET
ARGYLE CRT
STIRLING CRT
NICHOLAS DRIVE
MAXWELL DRIVE
MAYFLOWER DR
ROTHBURY CT
ANNIE CRT
McLAREN DRIVE
HILLVIEW AVENUE
LESLIE COURT
Sewer Gravity
Sewer Rising Mains
Pump Stations
N
MURRAY RIVER COUNCIL
Moama North
Sewer Infrastructure
murray river council


PS-31
PS-15
PS-27
PS-13
PS-29
PS-14
PS-9
PS-30
PS-12
PS-8
PS-36
PS-4
Sewer Gravity
Sewer Rising Mains
Pump Stations
N
MURRAY RIVER COUNCIL
Moama West (1)
Sewer Infrastructure
murray river council


PS-25
PS-20
PS-19
PS-17
PS-18
PS-22
PS-21
PS-37
PS-35
PS-33
PS-26
PS-16
PS-34
Sewer Gravity
Sewer Rising Mains
Pump Stations
N
MURRAY RIVER COUNCIL
Moama West (2)
Sewer Infrastructure
murray river council

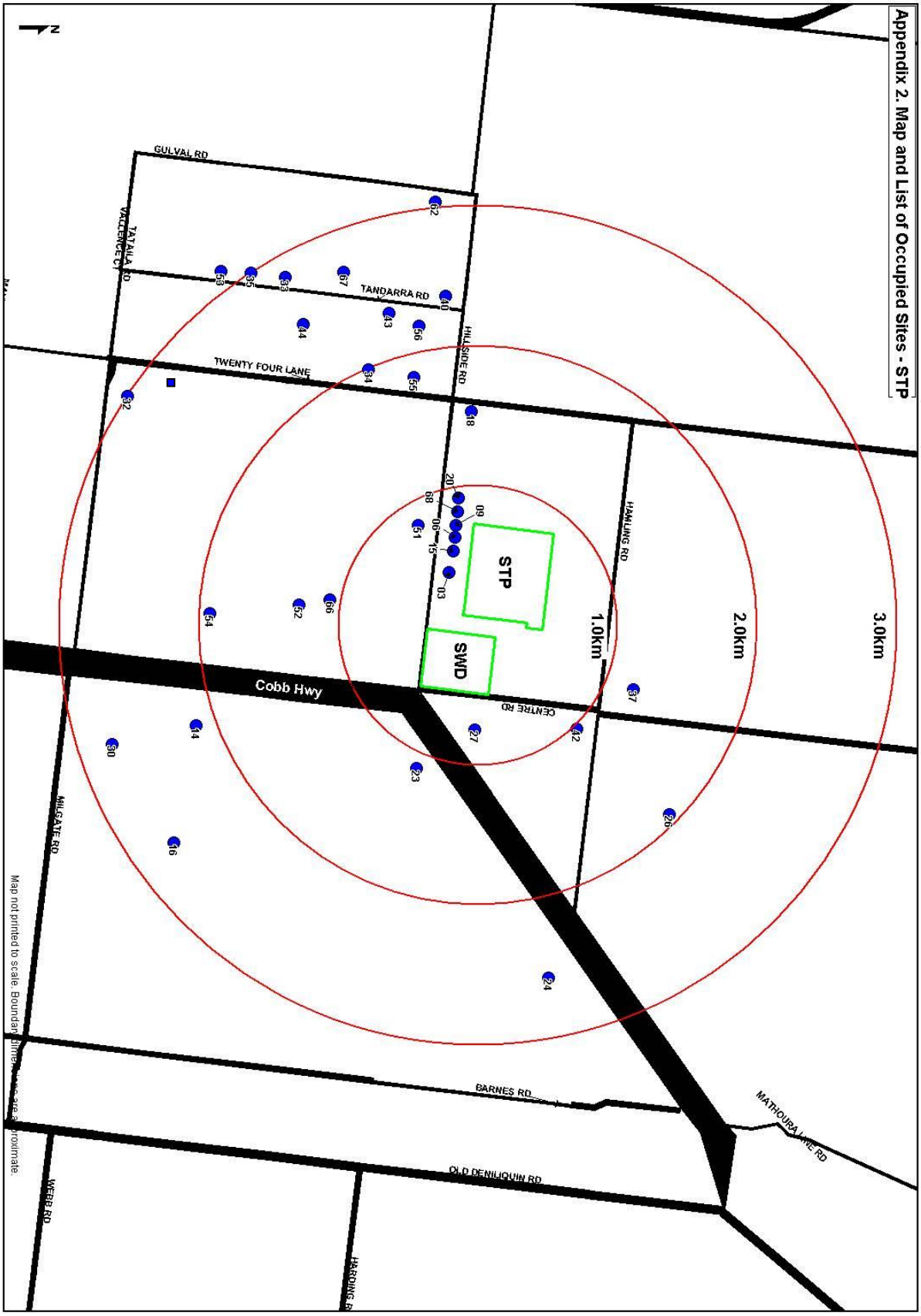


1:200 Year Flood Event



Extreme Flood Event

Appendix 2. Map and List of Occupied Sites - STP



List of Sites & Contact Names within a radius of the Sewer Treatment Plant

Number	Name	Address	Phone Number
1	ANGEL PARTNERS PTY LTD	Lot 1 Hiil side Road	?
2	BUILDING PANEL INDUSTRIES PTY LTD	Lot 2 Hillside Road	?
3	ELLIE-JACK PTY LTD	Lot 3 Hillside Road	?
4	ECHUCA MOAMA ELECTRICAL & WELD	55 Milgate Road	0418 103 285
5	MR A BROADHEAD	Lot 1 Hillside Road	03 5482 4882 ? Wrong Nuber
6	MR AJ & MRS MR KITCHIN	121 Milgate Road	0407 538 661? No answer
7	MR BG WEBB	Lot 6 Hillside Road	03 5432 6165? Not in service
8	MR BJ & MRS MB ATKINS	Lot 5 Hillside Road	03 5480 0142
9	MR CA & MRS SE JARDINE	894 Cobb Highway	0427 837 720?
10	MR CA & MRS SE JARDINE	894 Cobb Highway	0427 837 720?
11	MR D HEALEY	RMB 1150 Cobb Highway	0412 741 336
12	MR DW & MRS HM ROBERTS/HEARTLANDS RACEWAY	Lot 2002 Centre Road	0408 370 648
13	MR GW & MRS SE MILGATE	55 Milgate Lane	0418 103 285 / 0409 341 102
14	MR JF EDDY	62 Tatalia Road	03 5480 9203
15	MR JF & MRS G TURTON	117 Tandarra Road	03 5482 6680
16	MR JM & MRS LG WELDON	Lot 221 Twenty Four Lane	Number listed not in service
17	E S VAN DER ZYPP	91 Tandarra Road	03 5480 1456?
18	MR KJ CAIN	Lot 79 Centre Road	0427 341 522
19	MR NE & MRS JR VISCA	Lot 212 Hillside Road	03 5480 9889 / 03 5483 6189
20	MR NE & MRS JR VISCA	Lot 2022 Centre Road	03 5480 9889 / 03 5483 6189
21	MR NE & MRS JR VISCA	Lot 216 Tandarra Road	03 5480 9889 / 03 5483 6189
22	MR NWJ & LA ROLFE	RMB 70 Twenty Four Lane	0448 591 656
23	MR RE WILD	Lot 58 Hillside Road	03 5482 5686 not listed
24	MR RE WILD	RMB 1160 Cobb Highway	03 5482 5686 not listed
25	MR RJ & MRS SL MORGAN Morg's Pluming	Lot 230 Tandarra Road	0419 223 381
26	MR RM & MRS CL DUKE	Lot 53 Cobb Highway	03 5480 9783
27	MR SD & MRS LI SHIELS	Lot 220 Twenty Four Lane	03 5480 3860
28	MR SK DEMPSEY & MS DN ROBERTSON	206 Tandarra Road	0400 179 877
29	MS MJ STREET	Lot 60 Cobb Highway	0438 541 413
30	MG & NM BARLOW	Lot 218 Tandarra Road	03 5483 8247
31	MURRAY RIVER ENTERPRISES PTY	Lot 4 Hillside Road	
	Sleeper Haulage John Simpkin	108 Hillside Road	0438 294 343
	Kennaugh's Concrete Recycling	120 Hillside Road	0428 505 870

	Double B Metals	Hillside Road	0417 538 497 / 03 5480 6505
	Solid Waste Depot	91 Centre Road	03 5480 0414
	Don Healey	"Glencora" 236 Centre Road	0429 189 209
	Diane Smith	314 / 24 Lane	0438 988 446
	RF Wearne	905 / 24 Lane	03 5483 6287
	Closter's Compost Site	Hillside Road	0409 559 588

Appendix 3. Emergency Risk Management and Generator Supply

Southern Generators and Electrical	1300 350 706 (24 hrs) (03) 9558 3600 Mob 0452 389 303

Mathoura

Sewerage

Mathoura sewage effluent gravitates into seven pump stations. The sewer Network is deep enough to accommodate sewer effluent for at least 14 hours without any pumping.

Water Supply

Potable water from the filtration plant is pumped to the water tower. During summer the water tower will last for 3 – 4 hours without pumps running.

Power Supply

Essential Energy can supply electricity to Mathoura from either Deniliquin or Moama. When the main supply is lost to Mathoura either of the two lines can be used to re-supply the town. The switching will take a few hours to complete.

Moama

Sewerage

Moama sewage effluent gravitates into 38 pump stations. The maximum holding capacity of some pump stations is only 5 hours. In case of a power failure vacuum trucks are hired to pump the most critical located pump stations. These trucks are on site within an hour

Vacuum trucks will not be able to keep up with the sewer flow if a power failure occurs for more than 8 hours. To overcome this Council has started to install “Emergency Change over Switches” to connect generator supply. Generators are available from companies “Aggreko” and “Southern Generators and Electrical” in Melbourne. The availability of six generators has already been discussed with them.

Water Supply

The two most critical points are the filtration plant and the raw water pumps station. In case of a power failure there will be enough potable water to last for 5-6 hours. Emergency Generators (as explained earlier) will have to be ordered from Melbourne if a power failure occurs for longer than 5 hours.

Power Supply

Essential Energy can supply a total emergency load of 1.5MW to Moama. A new duplicate main line has been installed from Deniliquin to Moama so when the main supply is lost to Moama it can be supplied from Deniliquin.

Murray River Council Emergency Management : Generator Requirements		
Supply information on size of Generator for the following sites:		
MOAMA	**Required Generator Size**	**Power Usage**
	DL/ Soft	
Sewer Transfer Station	500/250kva	130kW
Filtration Plant :		
High Lift Pump	Soft Starter	22kW
Service Water pumps		1 x 1.5kW
Air-con		10.4kW
Compressor unit		5kW
Blower		15kW
Flocculation pumps		4 x 0.37kW
Lime mixers		2 x 0.55kW
Dosing pumps		2 x 0.75kW
Lime Feeders		2 x 0.22kW
Alum Pumps		2 x 0.37kW
PAC Pump		1 x 0.37kW
PAC Mixer		1 x 0.37kW
Sample Pumps		2 x 0.47kW
Return Pump		1 x 2.2kW
Lights etc		1.5kW
	125kva	
Raw Water Pump Station		150kW
(Draws about 500-600Amps when it starts and then settle to 200Amps)	550/300kva	
Supply information on size of generator and hire rates		
Plug-in connections and changeover switches will be installed provider.		
Pump Station 1 - Martin Street	100/50kva	17 kW
Pump Station 2 - Blair Street	50/25kva	6.72 kW
Pump Station 3 - Jacana Avenue	70/35kva	11 kW
Pump Station 7 - Barbers Court	70/35kva	11 kW
Pump Station 11 - Moira Park Esatate	50/25kva	7.4 kW
Pump Station 28 - Highlands Estate	50/25kva	7.2 kW
Pump Station 29 - Kirchhofer Road	70/35kva	11.3 kW
Pump Station 21 - Kingfisher Drive	50/25kva	7.5kW
Pump Station 16 - Martin Road	50/25kva	7.4kW
Pump Station 26 - Business Park	70/35kva	12kW
Pump Station 14 - Merool Road	35/20kva	5.9kW

MATHOURA	**Required Generator Size**	**Power Usage**

Filtration Plant :		
High Lift Pump	Soft Starter	55kW
Service Water pump		1 x 2.2kW
Dosing Pumps		2 x 0.75kW
Raw Water Pump		15kW
	125kva	

Appendix 4. Pollution Notification Form

To: EPA NSW	
	Facsimile: (02) 9995 5999
Attention: Regional Manager	Address: PO BOX A20,
	SYDNEY SOUTH, NSW 2640
Telephone notification 131 555	

DISCHARGE OF WASTE FROM:	Premises ☐	Vehicle ☐
Name of premises / vehicle:		Town / suburb:

Name of reporter:	
Job title:	
Contact number:	
Organisation:	
Date:	
Signature:	

The following notification and information is provided in accordance with EPO Act 1997	
Licence or Works or Approval Number	*Environmental Protection Act* Licence number
Relevant condition	(If this notification is a requirement under a Licence, Works Approval or Pollution Abatement Notice, type in the relevant condition or measure.)
Description of operation or equipment	(If any of the above two blocks were not filled, please type a brief description of your operation and/or the equipment that malfunctioned.)
Description of incident	(Describe the cause of waste discharge.)

Details of discharge of waste *:*	
Date of Incident: / / **Time:** am / pm	
Address / Location: (Attach a map of the premises to this notification showing the location of the discharge and the impacted area)	
Name of person responsible for discharge of waste	(Name of person operating the equipment that resulted in, or otherwise responsible for, the discharge of waste.)
Composition of Waste	
Quantity of waste Discharged	
Environmental Impact	(Did the discharge cause pollution? If so, describe the nature and extent of the pollution or environmental impact.) (Attach a map to this notification indicating discharge point and impacted area)
Remedial Action	(What action was taken to minimise the effect on the environment from the discharge of waste? Who coordinated this action?)
Waste Removal	(Was the waste involved removed, dispersed, destroyed, disposed of or otherwise dealt with? If so, in what manner and where to?)

Appendix 5. System for Assessing Risk Rating

Likelihood

IMPROBABLE - May occur only in exceptional circumstances

REMOTE - Could occur at some time

OCCASIONAL - Might occur at some time

FREQUENT - Will probably occur in most circumstances

CONTINUOUS - Is expected to occur in most circumstances

Refer also to Councils Hazards, Risks and Controls Guidelines

Consequences

INSIGNIFICANT - No injuries, minimal level of pollution, Employee grievances dealt with on site, Loss <5% of job cost, service, business failure resulting in delay < 1 week and costs, plant/equipment loss < $1,000

MINOR - First aid treatment, limited/localised impact, Employee grievances dealt with by senior management, loss 5-10% of job cost, business failure resulting in delay < 1 month and costs, plant/equipment loss < $10,000

MODERATE - Medical treatment & several days off work, significant pollution requiring outside assistance, Employee grievances taken to the union, loss 10-20% of job cost, non-compliance with legislation/Licence conditions, business failure resulting in delay < 3 months and costs, plant/equipment loss < $50,000

MAJOR - long term illness/serious injury, significant pollution requiring outside assistance & long term environ damage, threatened industrial action, loss 20-70% of job cost, loss of production capability, order placed on Council by Authorities, business failure resulting in delay < 6 months and costs, plant/equipment loss < $100,000

5. CATASTROPHIC - Death or permanent disability/illness, serious permanent environmental damage, Actual industrial action, loss >70% of job cost, potential prosecution by Authorities, business failure resulting in delay > 6 months and costs, plant/equipment loss > $100,000

Rating		Likelihood				
L = Low	Consequence	A	B	C	D	E
M = Medium	1	L	L	L	M	H
H = High	2	L	L	M	H	V
V = Very High	3	M	M	H	V	X
X = Extreme	4	H	H	V	X	X
	5	V	V	X	X	X