Greater Hume Council

Pollution Incident Response Management Plan

Holbrook Sewage Treatment Plant

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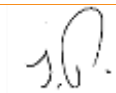
2 - Revised	T. Plunkett	22/09/16	T. Plunkett			29/09/16

Executive Summary

This Pollution Incident Response Management Plan (PIRMP) has been prepared in accordance with *the Protection of the Environment Legislation Amendment Act 2011 (POELA Act)* and reflects the requirements specified in the Environment Protection Authority's (EPA's) *Guidelines: Preparation of Pollution Incident Response Management Plans, March 2012.*

It identifies the hazards to the environment associated with the Holbrook Sewage Treatment Plant and its operations; provides pre-emptive measures to reduce such hazards, details the essential contact and communication mechanisms in the case of an incident.

The PIRMP also details:

- Procedures for notifying a pollution incident to relevant persons;
- Actions to be taken to reduce and/or control pollution; and
- Procedures for co-ordinating those notified and any action taken in combating the pollution.

Maps and information about the training of staff and testing of the plan are also included.

The structure of the plan is in accordance with the requirements set out in part 5.7A of the POEO Act and the Protection of the Environment (General) Amendment (Pollution Incident Response Management Plans).

This plan will also be utilised by Greater Hume Council as an effective review and planning tool in managing Council's licence obligations and to enhance Council's environmental management.

It will complement Council's Environmental Management Plans and Emergency Response Plans.

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1.0 Introduction

1.1 Purpose of Report

Changes to the Protection of the Environment Operations Act 1997 (POEO Act) came into force on 29 February 2012.The changes effectively require licence holders to develop, implement and formally test Pollution Incident Response Management Plans (PIRMPs) for each of their licensed activities.

The requirements are set out in part 5.7A of the POEO Act and details are contained in the Protection of the Environment (General) Amendment (Pollution Incident Response Management Plans). This PIRMP has been prepared in accordance with those requirements.

Greater Hume Council intends not only to implement this PIRMP for Holbrook Sewage Treatment Plant (Holbrook STP), but also to use it as an effective review and planning tool in managing Council's licence obligations and to enhance Council's environmental management.

It will complement Council's Environmental Management Plans and Emergency Response Plans.

1.2 Definition of a Pollution Incident

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 1997:

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."*

1.3 Holbrook STP's EPA Licence

The Holbrook Sewage Treatment Plant operates under EPA Licence No. 1804. The licence authorises Council, as the operator and licence holder, to discharge up to 500 kl/day of treated effluent.

The treatment plant provides secondary treatment via a Trickling Filter Plant and effluent is reused at the Holbrook Racecourse Track.

1.4 Treatment Plant Details

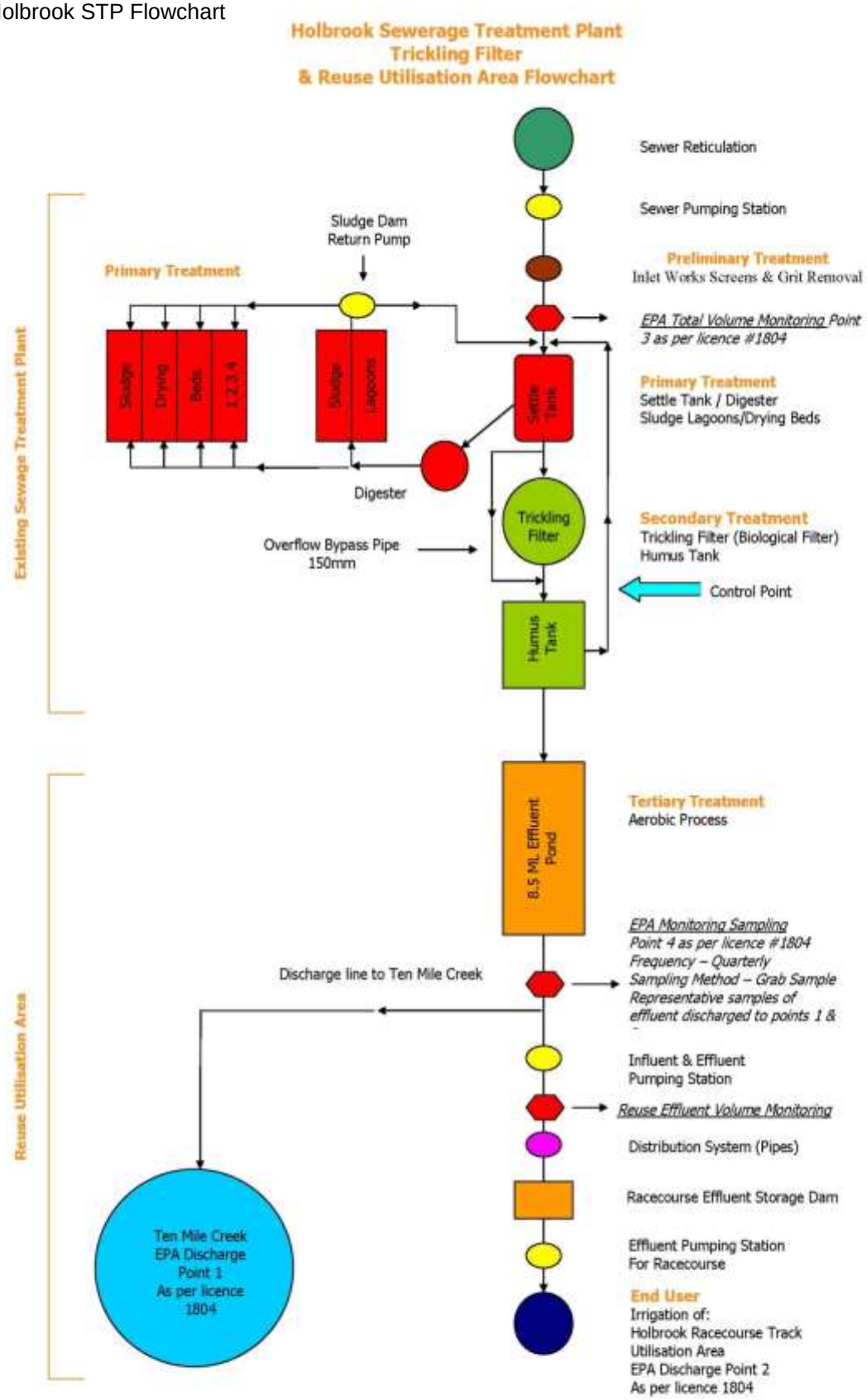
Holbrook Sewerage Scheme was constructed in 1969. It services 625 residential assessments, 159 non-residential assessments and covers an area of 330ha within the Holbrook urban area. The sewerage scheme comprises approximately 1.5km of rising mains, 21.4km of reticulation pipelines and four sewage pump stations and the Holbrook Sewage Treatment Plant.

The Holbrook STP is a traditional trickling filter plant designed to treat 1500 equivalent population (EP). It consists of an inlet structure with grit arrester and screenings bagging equipment, a primary sedimentation tank, sludge digester with a mixer, a stone media filter bed which treats the effluent followed by humus tank which polishes effluent before it reaches the final effluent pond system.

Sludge is pumped from the digester to two sludge lagoons for more primary treatment. Effluent is currently held in a 30 day effluent pond which provides tertiary treatment (Aerobic process) sunlight (UV) disinfection and further settlement of solids. Effluent is discharged under licence to Ten Mile Creek via a pipeline, with a small amount reused in summer at the Holbrook race track for watering.

A schematic of the Holbrook STP treatment system is shown in Figure 1 on Page 3.

Figure 1: Holbrook STP Flowchart



2.0 Descriptions of Hazards to Human Health or the Environment and Likelihood of Occurrence

2.1 Potential Pollution Incidents

The potential main hazards to human health or the environment – i.e. 'Pollution Incidents' - associated with the activities undertaken at this site include the following:

- Wet weather overflow from the reticulation system **during wet weather**;
- Dry weather overflow from the reticulation system **during dry weather**;
- Wet weather bypass at the Holbrook STP which may occur when untreated sewage bypasses the sewage treatment process and discharges to the environment **during wet weather**;
- Dry weather bypass at the Holbrook STP which may when untreated sewage bypasses the sewage treatment process and discharges to the environment **during dry weather**;
- Pond failure at the Holbrook STP;
- Mechanical failure at the Holbrook STP resulting in discharge of untreated sewage;
- Mechanical failure at the Holbrook STP resulting in offensive odour from the premises;
- Inadequate chemical storage and/or chemical handling;
- Acts of vandalism or target of terrorist activity at the Holbrook STP;
- Discharge pipeline breakage;
- Exceed EPA discharge limits; or
- Significant adverse environmental impact resulting from irrigation in utilisation areas.

Other potential hazards include:

- Inappropriate sludge handling and/or disposal
- Structural failure of treatment units resulting in release of untreated or partially treated sewage
- Failure of pump(s) resulting in release of sewage or effluent to the environment
- Uncontrolled release of gases or odours
- Flooding of process units or storage ponds resulting in release of pollutants to the environment
- Illegal dumping of pollutants into the sewerage system
- Staff coming into contact with raw sewage or partially treated sewage
- Public coming into contact with raw sewage or treated effluent

2.2 Likelihood of Occurrence

Each of the hazards is listed in Table 1 on page 5 and their likelihood of occurrence defined. The Risk Assessment Matrix used to derive the likelihood of occurrence is appended in *Appendix A.*

Table 1: Pollution Incident Classification, Risk Assessment and Contributing Factors

Risk	Description	Consequence	Likelihood	Contributing factors	Overall Risk Rating
Overflows and Bypasses					
	Wet weather overflow from the reticulation system during wet weather.	Moderate	Rare	Prolonged periods of heavy rain, heavy infiltration of stormwater into the sewer network.	Low
	Dry weather overflow from the reticulation system during dry weather.	Moderate	Rare	Mechanical failure of plant and equipment. Infrastructure failure.	Low
	Wet weather bypass at the Holbrook STP - untreated sewage bypasses the sewage treatment process and discharges to the environment during wet weather.	Moderate	Unlikely	Prolonged periods of heavy rain, lack of maintenance and/or a mechanical failure of plant and equipment.	Medium
	Dry weather bypass at the Holbrook STP when untreated sewage bypasses the sewage treatment process and discharges to the environment during dry weather.	Moderate	Rare	Lack of infrastructure maintenance and/or a mechanical failure of plant and equipment.	Low
	Pond failure at the Holbrook STP.	Minor	Rare	Prolonged periods of heavy rain, lack of pond and site maintenance and/or a mechanical failure of plant and equipment.	Low
	Mechanical failure at the Holbrook STP results in discharge of untreated sewage.	Major	Rare	Fire damage or poor maintenance of plant and equipment. Prolonged periods of heavy rain.	Medium
	Flooding of process units or storage ponds resulting in release of pollutants to the environment.	Major	Rare	Prolonged periods of heavy rain, lack of pond and site maintenance and/or a mechanical failure of plant and equipment.	Medium

Risk	Description	Consequence	Likelihood	Contributing factors	Overall Risk Rating

Risk	Description	Consequence	Likelihood	Contributing factors	Overall Risk Rating
Odours					
	Mechanical failure at the Holbrook STP results in offensive odour from the premises.	Moderate	Unlikely	Fire damage or poor maintenance of plant and equipment.	Medium
	Uncontrolled release of gases or odours.	Moderate	Unlikely	Poor maintenance; process and/or equipment failure.	Medium
Chemicals					
	Inadequate chemical storage.	Moderate	Rare	Human error. Chemical fire accelerated by high winds, dry weather, prolonged periods of high temperatures and low humidity.	Low
Vandalism					
	Acts of vandalism or terrorist activity at the Holbrook STP.	Major	Rare	Increased risk during hours of closure.	Medium
Pipe failure					
	Discharge pipeline breakage.	Moderate	Rare	Poor maintenance of plant and equipment. Flows exceeding pipe and pump capacity.	Low
Structural failure					
	Structural failure of treatment units resulting in release of untreated or partially treated sewage.	Major	Rare	Poor maintenance or design; overloading of plant; vandalism or other attack on the plant..	Low
	Failure of pump(s) resulting in release of sewage or effluent to the environment.	Moderate	Unlikely	Poor maintenance, electrical failure.	Medium

Risk	Description	Consequence	Likelihood	Contributing factors	Overall Risk Rating
Licence Exeedence					
	Exceed Environment Protection Licence (EPL) discharge limits to the environment.	Minor	Unlikely	Prolonged periods of heavy rain overloading of plant; mechanical failure of plant and equipment; treatment process failure.	Low
Irrigation Activities					
	Significant adverse environmental impact from irrigation in utilisation areas.	Moderate	Unlikely	Human error. Lack of control and/or monitoring. Prolonged periods of heavy rain.	Medium
Sludge Handling					
	Inappropriate sludge handling and/or disposal.	Minor	Unlikely	Human error. Prolonged periods of heavy rain.	Low
Trade Waste					
	Illegal dumping of pollutants into the sewerage system.	Major	Rare	Poor implementation of Trade Waste Policy.	Medium
Staff Contact With Pollutants					
	Staff coming into contact with raw sewage or partially treated sewage.	Moderate	Rare	Inappropriate work practices and carelessness.	Low
Public Contact With Pollutants					
	Public coming into contact with raw sewage or treated effluent.	Moderate	Unlikely	Poor site management and supervision.	Medium

3.0 Pre-Emptive Actions to Minimise Risk to Human Health or the Environment

Council undertakes a number of pre-emptive actions to minimise risk to human health and the environment. These are described below:

1. Effluent and Sewage Overflows

Wet weather and dry weather overflows from the sewerage reticulation system are low risk events as determined in the Risk Assessment (Table 1 above).

Staff maintain the system on a daily basis and all blockages in the system are cleared promptly.

In times of high wet weather flows, there is the potential for the capacity of the treatment plant to be exceeded, resulting in overflows. This is considered unlikely, with a medium overall risk rating (refer Table 1 above). Influent can be diverted directly to the storage lagoons in the event of extreme wet weather events.

Pond failure is an extremely unlikely event. The storages are regularly inspected to ensure there are no leaks and staff maintain all facilities at the Holbrook STP on a daily basis.

Mechanical failure at the Holbrook STP has been assessed as a medium overall risk (refer Table 1 above). Independent assessment of the plant is carried out every five years as part of the mandatory asset valuation process. Any structural issues can be actioned at that time. Plant operators are fully trained and they inspect and monitor the plant daily.

Flooding of the process units or storage ponds is a medium risk hazard. The State Emergency Service has Emergency Management Plans in place to warn of any impending flood. The dilution level of any overflow during an extreme event will significantly reduce the impact of any pollutants released.

2. Odours

The risk of odours resulting from mechanical failure of plant and equipment or uncontrolled release of gases have been assessed as medium risk events. Council staff maintain all plant and equipment at the Holbrook STP on a continuous basis and any faulty equipment is either repaired or replaced.

Process failures are mitigated by the on-going monitoring of the plant by Council's trained operators.

3. Storage of Chemicals

The only chemical used at the Holbrook STP is soda ash. The Site Plan included as Appendix E shows where this chemical is stored on site. Material Data Safety Sheets and Safe Work Method Statements are kept on site for handling this chemical. Only appropriately trained carters are employed by Council to transport the chemicals to site.

4. Vandalism

The Holbrook STP is securely fenced and is patrolled by Council staff.

5. Pipe and Structural Failures

Independent assessment of Council's assets is carried out every five years as part of the mandatory asset valuation process. Any issues with pipes, pump stations and other infrastructure can be actioned at that time. Council's maintenance staff are fully trained and they regularly inspect all sewerage infrastructure.

6. Licence Exceedence

On-going monitoring of the treatment processes and sampling and testing of effluent mitigate the risks associated with licence exceedence. If any testing indicates an exceedence, irrigation of effluent would cease until the problem with the treatment plant was corrected.

7. Irrigation Activities

On-going monitoring of the treatment processes and sampling and testing of effluent mitigate the risks associated with reuse of effluent at the nominated irrigation site (the Holbrook Racecourse Track). If any testing indicates an exceedence, irrigation of effluent would cease until the problem with the treatment process was corrected.

8. Sludge Handling

All sewage sludge is stored and disposed of on site, thus minimising the risk of contaminants moving off site.

9. Trade Waste

Council has a Trade Waste Policy in place which prevents the discharge of;

- organochlorine weedicides, fungicides, pesticides, herbicides and substances of a similar nature
- organophosphorus pesticides and/or waste arising from the preparation of these substances
- any substances liable to produce noxious or poisonous vapours in the sewerage system
- radioactive substances
- organic solvents and mineral oil
- any flammable or explosive substance
- chromate from cooling towers
- natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions
- rain, surface, seepage or subsoil water
- solid matter
- any substance assessed as not suitable to be discharged into the sewerage system
- waste that contains pollutants at concentrations which inhibit the sewage treatment process.

10. Personnel coming into contact with raw sewage

Council has in place Work Place Health and Safety documentation at the Holbrook STP and staff are trained in all aspects of workplace health and safety.

Treatment plant operators are required to have designated inoculations to protect them.

There is no public access to the Holbrook STP.

Site visitors are given the appropriate induction before proceeding on a tour of the plant and care is taken by staff to ensure that they are not exposed to any risk of contact with the raw sewage or treated effluent

11. Public contact with raw sewage or treated effluent

Treated effluent is utilised at the Holbrook Racecourse for track watering.

Irrigation of the effluent is controlled by the Council's Site Management Plan which restricts access to the sites during irrigation and for a period after irrigation ceases.

4.0 Inventory of Pollutants and Details of Storage Locations

1. Chemicals

The only chemical used at the Holbrook STP is Soda Ash, which is stored in a secure shed on site, as shown on the Drawing in Appendix E.

2. Sewage Effluent

Treated effluent is stored at the Holbrook Racecourse Effluent Storage Dam.

Raw sewage passes through the treatment process with minimum storage time.

5.0 Description of Safety Equipment or Other Devices Used to Minimise Risk and To Control a Pollution Incident

The Holbrook STP building is protected from fire by fire extinguishers.

Personal Protective Equipment (PPE) is provided for on-site staff which consists of overalls, rubber boots, chemical goggles, face shields, safety shoes, elbow-length impervious gloves, splash aprons and air supplied respirators.

6.0 Contact Details

6.1 Definition of Pollution Incident

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 1997:

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, 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."*

6.2 Notification of Pollution Incident

Notification Speed of Response

The requirement for notification of a pollution incident has changed from 'as soon as practicable' to 'immediately'. In short, 'immediately' means 'promptly without delay', but it does not mean undertaking notification ahead of doing what is necessary to make safe.

Notification of Relevant Authorities

If the pollution incident is a wet weather overflow, dry weather overflow, wet weather bypass or dry weather bypass procedures need to be followed in Council's *PRP 101 Incident Notification Protocol, August 2012.*

In all other pollution incident cases and where the pollution incident causes or threatens material harm to the environment or human health, all the following authorities must be notified by the Site Supervisor:

Relevant Authorities to be Notified

1. Emergency Call Services
    - Emergency Hotline Number (24 hours) 000*

***The Site Supervisor should call 000 if the incident presents an immediate threat to human health and/or property and a combat agency is required (i.e. NSW Fire and Rescue, NSW Ambulance Service, NSW Police Force) and then notify all other parties below including NSW Fire and Rescue via a local telephone number.**

2. Greater Hume Council
    - Greater Hume Council Water and Sewerage 0408 691 637
3. The Environment Protection Authority (EPA)
    - Albury Regional Office 02 6022 0600
    - Emergency Hotline Number (24 hours) 131 555
4. NSW Ministry of Health (via Public Health Units)
    - Albury Regional Office 02 6841 5569
    - Public Health Officer on Call (24 hours) 0418 866 397
5. WorkCover NSW
    - Hotline Number 131 050
6. Fire and Rescue NSW
    - Holbrook Fire Brigade 02 6029 8202
    - Rural Fire Service Control Centre 02 6051 1511
7. SES Holbrook 02 6029 8866

If there is no immediate threat to human health and/or property i.e. a combat agency is not required, then the Site Supervisor is still required to contact the above except for dialling 000.

Key Council staff contact details are listed in Table 2 on page 15.

Table 2: Key Council Staff Contact Details

Name	Job Title	Contact No.	Qualification/Competencies
Thomas Plunkett	Manager Water and Waste Water	02 6029 8588 0427 480 915	1A – Trickling Filters and Oxidation Ponds (PWD) 1B – Activated Sludge and Aerated Lagoons (PWD) Confined Space Entry.
Paul Day	Water and Waste Water Overseer	0458 058 389	Part 1. Waste Water Treatment Operations (OOW) In training Part 2. Advanced Treatment (OOW) In training Confined Space Entry.
Jeremy Head	Water and Waste Water Operator	0407 018 572	Part 1. Waste Water Treatment Operations (OOW) Part 2. Advanced Treatment (OOW) In training Confined Space Entry Chemical Handling.
Trent Brown	Water and Waste Water Operator	0417 487 899	Part 1. Waste Water Treatment Operations (OOW) In training Part 2. Advanced Treatment (OOW) In training Confined Space Entry Chemical Handling.
Mark Nichols	Water and Waste Water Operator	0417 487 899	Part 1. Waste Water Treatment Operations (OOW) Part 2. Advanced Treatment (OOW) Confined Space Entry Chemical Handling.
Colin Summers	Water and Waste Water Operator	0429 076 196	Certificate 111 in Waste Water Operations(NRT) Part 2. Advanced Treatment (OOW) Confined Space Entry Chemical Handling.
Emergency On Call Phone	Water and Waste Water Operators	0408 691 637	N/A.

6.3 List of Those Authorised To Notify Relevant Authorities Under Section 148 Of POEO Act

Name	Position	Mobile No. (1st point of contact)	Landline 2nd point of contact
Greg Blackie	Director Engineering	0419 249 357	02 6029 8588
Thomas Plunkett	Manager Water and Waste Water	0427 480 915	02 6029 8588

7.0 Communication with Neighbours and Local Community

Figure 2 Location of Holbrook STP and Proximity to Residences on Page 18

Shows the location of surrounding and adjacent residents and their proximity to the Sewage Treatment Plant *(nearest properties are identified by a house symbol)*.

The procedure for providing early warnings and regular updates to the owners and occupiers of premises which may be affected by an incident is:

STEP 1:

Once the EPA is notified, it is then for the EPA to determine whether commercial, industrial and residential neighbours of the site need to be contacted by Council and informed of the circumstances of the incident and what action is being taken in response to it. If deemed necessary, the EPA then has powers to formally direct Council to notify the neighbours of the site.

Irrespective of whether the EPA directs Council to notify neighbours and depending on the circumstances of the particular pollution incident, Council may at their own discretion voluntarily choose to notify neighbours.

STEP 2:

The first step in contacting neighbours is to telephone or doorknock any area that may be impacted by an incident. In the case of a plant failure, the impacted area would include all downstream users of the water source.

In the case of an odour issue, the affected area would include all adjacent and surrounding properties.

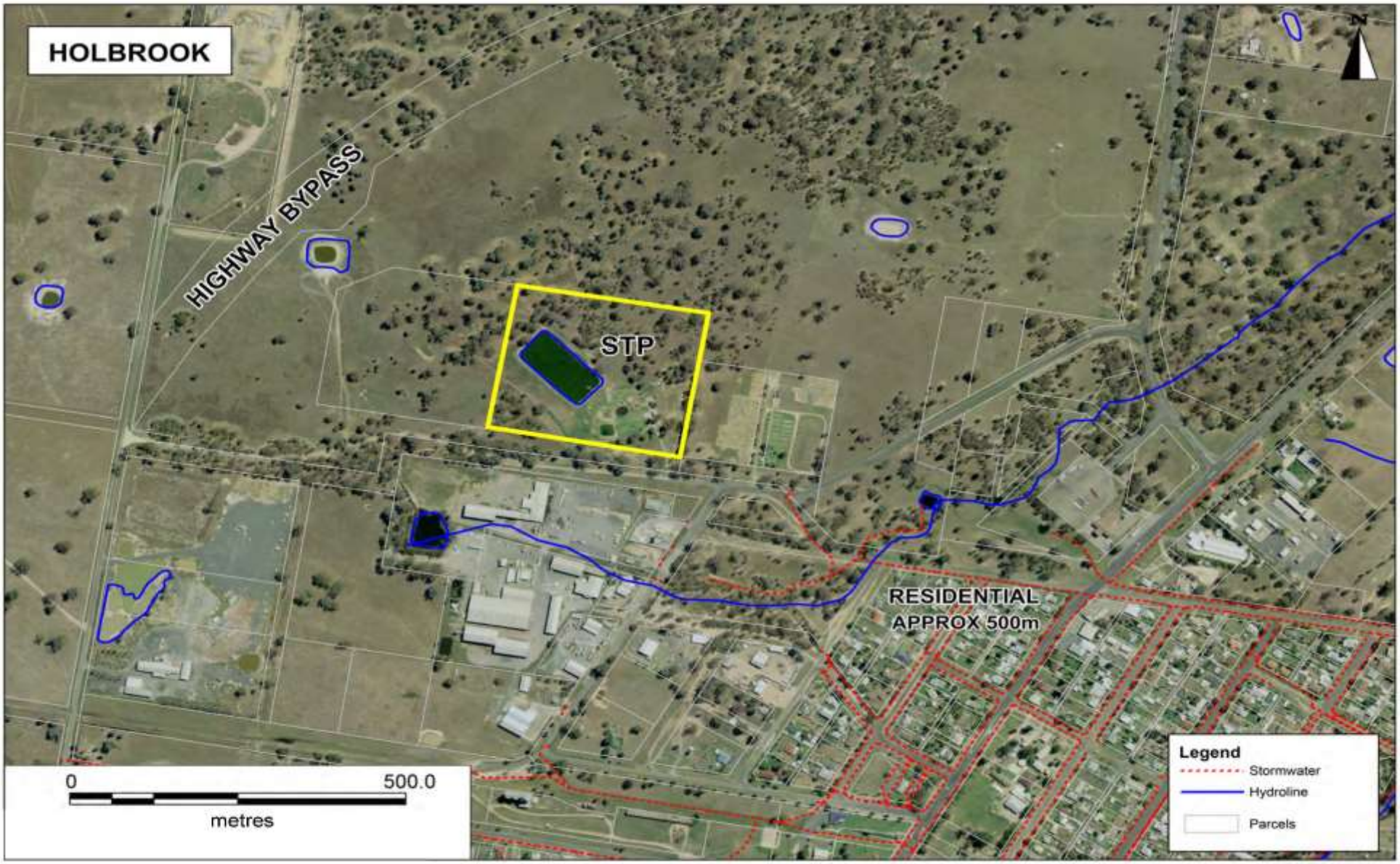
STEP 3:

If wider communication is required with the local community, this will be achieve through local radio stations (ACE Radio 2AY, Star FM The River, ABC Goulburn Murray) and Council's website (www.greaterhume.nsw.gov.au).

Nearest Property to Holbrook STP

Location of the Holbrook STP and proximity to residents is shown in Figure 2 on page 18

Figure 2: Location of Holbrook STP and Proximity to Residences



8.0 Arrangements to Minimise Risk of Harm to Persons on the Premises Should an Incident Occur

In the event of a pollution incident occurring, all site contractors and other Council staff will be mustered by Council site staff to the Emergency Assembly Point adjacent to the site entrance, after which they will be safely evacuated from site where appropriate. It is a condition of entry that in the event of an emergency, both site contractors and staff must adhere to directions given by the Site Supervisor.

Figure 3: Photos of Signage to Warn the Public of Hazards

9.0 Actions to be Taken During or Immediately After a Pollution Incident, Including Early Warnings, Updates and Actions to be Undertaken by the Media

Actions to be taken during or immediately after a pollution incident include:

I. Isolate the source of pollution, wherever possible.

II. In the event of an overflow situation, effluent can be diverted directly from the inlet works to the Effluent Reuse Storage Dam and/or the Wetlands. The effluent would be highly diluted, thereby minimising risks.

III. Notify the manager Water and Waste Water.

IV. Continue to isolate the pollution wherever possible.

V. Notify the relevant Statutory Authorities listed under Section 6.2 above.

VI. Communicate with affected neighbours and the community, as required, in accordance with Section 7 above.

VII. Implement remedial action, as appropriate and as required by the EPA.

VIII. Complete and submit Incident Reporting Form (as included in Appendix B).

10.0 Staff Training

All Holbrook STP operators are skilled and fully trained.

Qualifications are all current and staff training records are maintained by Council's Human Resources Officer and are available in the corporate data base.

All existing Holbrook STP will be required to read and to sign to the effect that they have read and understand this PIRMP.

New members of Holbrook STP staff at the facility should be inducted. This induction must cover the purpose, requirements and responsibilities detailed in this PIRMP.

All Holbrook STP staff should receive sufficient training to enable them to carry out their assigned duties in a competent and safe manner.

In particular:

- staff must be capable of using the fire-fighting equipment;
- staff must be capable of identifying potential pollution incidents; and
- staff must be familiar with the requirements and procedures contained within this PIRMP.

Staff competency will be monitored through audits, public complaints and pollution incident reports.

At least once every year staff should undertake a simulated pollution incident response exercise, including with emergency services, to familiarise site personnel with the requirements of this management plan. A register of staff training can be found in Appendix D which must be kept on site and updated regularly.

Regular site briefings and toolbox meetings should be held when considered appropriate to draw attention to potential pollution incidents and identify improvements to on-site safety procedures.

11.0 Making Plans Available

A copy of this PIRMP will be available at the Holbrook STP and will be available on Council's website:

www.greaterhume.nsw.gov.au/councilservices/watersewerage/tabid/128/default.aspx

12.0 Testing Plans Once Every 12 Months

The PIRMP is a living document required to be reviewed and updated at least once every 12 months to ensure accuracy and effectiveness. A review must also be undertaken within one month of any pollution incident occurring.

For these reasons, document control is an important part of the environmental management system. It is critical that PIRMP storage locations are made known to all relevant staff members and that only the latest version is in use. Details of the version and date of issue are recorded on each page of the PIRMP in the bottom left hand corner.

Revised and updated versions of the PIRMP will always be issued with a covering memo summarising the changes. When a new PIRMP is received, the old version will be replaced in its entirety. A register for updating and testing the PIRMP can be found in Appendix C and must be kept on site and updated regularly.

Copies of the revised PIRMP will be distributed to all relevant staff.

Testing of the PIRMP will be implemented by Council, involving a desktop test of the plan involving all Holbrook STP staff.

13.0 Appendices

13.1 Appendix A: Risk Assessment Matrix

Risk Assessment and Management - Methodology

Risk Assessment has been carried out using the following Framework and Matrix

Table 1: Determination of Risk Likelihood

Rating	Descriptor	Description
1	Rare	The event may occur only in exceptional circumstances – for example 1 in 100 years or greater
2	Unlikely	The event could occur at some time but is not usually experienced – for example 1 in 30 years
3	Possible	The event might occur at some time over a 4-10 year period
4	Likely	The event will probably occur at least once every 1-3 years
5	Almost Certain	The event is expected to occur in most circumstances or at least once a year

Table 2: Determination of Risk Consequence

Rating	Classification	Operations		Stakeholders		Environment
		Health and Safety	Operations	Service Delivery	Stakeholder and Legal	Environmental impact
1	Insignificant	No injuries (includes minor scratches and abrasions and bruises) or impact on public health.	Consequences are dealt with by routine operations, corrective action.	Negligible impact on service delivery.	Stakeholder indifference. No legal significance.	Insignificant impact on the environment (no lasting effect, limited damage to minimum area of low significance).
2	Minor	Minor injuries requiring first aid or public health impacts.	Consequences could threaten the efficiency or effectiveness of some aspects of operations. No loss of production or services.	Minor corrective action required to restore service delivery for local customers.	Stakeholder aware of issue. Minor legal and non-compliance issues remedied by prompt attention.	Minimal impact on environment (contained on site and or minor short/medium term damage to small area of small significance).
3	Moderate	Medical treatment required (workforce) or minor public health impact.	Consequences would lead to a review and changed ways of operating. Significant loss of production or service.	Service restored after major intervention but within performance indicator levels.	Stakeholder actively expressing dissatisfaction Moderate breach of policy or regulation leading to low level investigation or penalties.	Off-site environmental impacts or community interest in impacts. Moderate short/medium term widespread impacts.
4	Major	Extensive injuries, sickness or alarm for public health.	Consequences would lead to a significant review and changed ways of operating. Serious loss of production or services.	Service delivery interrupted failing performance indicators. Could be recurring in nature.	Stakeholder alarm or grave concern. Serious breach of policy or regulation and exposure to court imposed penalties.	Environmental damage with legal action likely. Serious widespread medium/long term impacts.
5	Catastrophic	Major injury or death of worker or public.	Consequences would result in a significant review and changed ways of operating. Major loss of production or services.	Major failure to service delivery and considerable time to restore. Could be ongoing in nature.	Enraged stakeholder or external intervention ordered by government. Serious litigation with prosecution and serious penalties.	Extreme environmental event with prosecution certain. Very serious long term effects on a significant environment.

Table 3: Determination of Overall Inherent Risk Rating Using Risk Matrix

	Consequence				
Likelihood	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost Certain 5	High	High	Extreme	Extreme	Extreme
Likely 4	Medium	High	High	Extreme	Extreme
Possible 3	Low	Medium	High	High	Extreme
Unlikely 2	Low	Low	Medium	High	High
Rare 1	Low	Low	Low	Medium	High

1	Low
2	Low
3	Low
4	Low
5	Medium
6	High
7	High
8	Extreme
9	Extreme
10	Extreme

14.0 Appendix B: Pollution Incident Reporting Form

Pollution Incident Reporting Form			
Incident No:		**Time:**	
Date:		**Duration of Incident:**	

Nature of Incident:

Weather Conditions:

The Location of the Place Where Pollution is Occurring or is Likely to Occur:

The Nature, the Estimated Quantity or Volume and the Concentration of any Pollutants Involved (if known):

The Circumstances in Which the Incident Occurred, Including the Cause of the Incident (if known):

Pollution Incident Reporting Form
The Corrective Action Taken or Proposed to be Taken to Deal with the Incident and Any Resulting Pollution or Threatened Pollution (if known):

Has Council Been Notified?	Yes	No
Has Environment Protection Authority (EPA) Been Notified	Yes	No
Has NSW Ministry of Health (via Public Health Units) Been Notified?	Yes	No
Has WorkCover NSW Been Notified?	Yes	No
Has Local Fire and Rescue NSW Been Notified?	Yes	No
Has EPA Directed Council to Notify Neighbours?	Yes	No
If Not, Has Council Voluntarily Notified Neighbours?	Yes	No

Signature…… **Date**……..

Site Supervisor, Greater Hume Council

Signature…… **Date**……..

Water Operations Engineer, Greater Hume Council

14.2 Appendix C: PIRMP Testing and Update Register

PIRMP Testing and Update Register				
Date	**Routine testing**	**Routine Update**	**Post incident Updates**	**New Copies Distributed to:**
29/10/2013	Completed	N/A	N/A	N/A
30/10/2014	Completed	N/A	N/A	N/A
11/05/2015	Completed	N/A	N/A	N/A
18/07/2016	Completed	N/A	N/A	N/A
4/01/2017	N/A	Yes. Update Key Council Staff Contacts	N/A	To Key Council Staff & Premises
17/01/2017	Completed	N/A	N/A	N/A
14/08/2017	Completed	N/A	N/A	N/A
19/09/2018	Completed	N/A	N/A	N/A
1/12/2018	N/A	Updated to reflect New Council Branding and Position Titles	N/A	To Key Council Staff & Premises
18/9/2019	Completed	N/A	N/A	N/A
16/3/2020	Completed	N/A	N/A	N/A

14.3 Appendix D: Staff Training Register

Staff Training Register		
Date	**Staff Member**	**Brief Description Of Training Task**
4/05/2015	Colin Summers	Wastewater – Update Seminar
12/08/2015	Jeremy Head	Confined Space Training
10/09/2015	Colin Summers	Confined Space Training
10/09/2015	Mark Nichols	Confined Space Training
12/11/2015	Tom Plunkett	Confined Space Training
14/03/2016	Jeremy Head	Wastewater Course Part 1
25/07/2016	Paul Day	Confined Space Training
17/10/2016	Trent Brown	Confined Space Training
5/10/2017	Mark Nichols	Confined Space Training
5/10/2018	Colin Summers	Confined Space Training
30/8/2018	Paul Day	Confined Space Training
31/8/2018	Jeremy Head	Confined Space Training
27/9/2018	Trent Brown	Confined Space Training
11/7/2019	Jeremy Head	Confined Space Training
11/7/2019	Paul Day	Confined Space Training
8/8/2019	Trent Brown	Confined Space Training
8/8/2019	Mark Nichols	Confined Space Training
8/8/2019	Colin Summers	Confined Space Training

14.4 Appendix E: Site Plan

Greater Hume Council

Pollution Incident Response Management Plan

Holbrook Sewage Treatment Plant

greaterhume.nsw.gov.au