

Works Approval

Works approval number	W6678/2022/1			
Works approval holder	proval holder Narnoo Mining Pty Ltd			
ACN	084 713 100			
	Level 1			
Registered business address	502 Hay Street SUBIACO WA 6008	3		
DWER file number	DER2022/000124			
Duration	14/12/2022 to	13/12/2025		
Date of issue	14 December 2022			
Premises details	Mulga Rocks Uranii	um Mine		
	Legal description –			
	Mining Tenements and L39/253	M39/1104, L39/219, L39/252		
	As shown in Sched	ule 1: Figure 1		
Prescribed premises category des Schedule 1, Environmental Protectior	cription Regulations 1987)	Assessed production / design capacity		

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed production / design capacity
Category 54: Sewage facility	400 m³/day
Category 89: Class II putrescible landfill site	650 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 14 December 2022, by:

MANAGER WASTE INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Works approval history

Date	Reference number	Summary of changes
14/12/2022	W6678/2022/1	Works approval granted.

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

- 1. The works approval holder must:
 - (a) construct and/or install the infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location;

as set out in Table 1.

Table 1: Design and construction / installation requirements

Infrastructure		Des requ	ign and construction / installation lirements	Infrastructure location
		(a)	The base of the landfill cell shall be separated from the highest level of any underlying aquifer by at least 3 m;	
		(b)	Stormwater diversion and drainage shall be constructed to divert runoff away from the landfill facility;	
		(c)	The landfill shall be fenced and locked to allow only authorised access;	
		(d)	The landfill fence shall be installed to prevent entry of vermin and fauna;	
	Class II Putrescible landfill	(e)	The landfill area shall consist of 9 cells and each cell is approximately 30 m (long) and 20 m (wide) and 2 m (deep);	Landfill cells
		(f)	Landfill height not to exceed 2 m above ground level height;	to be located within the 'Landfill site'
1.		(g)	Walls of each cell shall have a gradient of approximately 1:2.5;	as indicated by Figure 5
		(h)	The access ramp shall be approximately 5 m (wide) with a gradient of 1:8;	and Figure of Schedule 1
		(i)	A minimum 3 m firebreak shall be cleared around the fence of the landfill facility;	
		(j)	Signage at the entry to the landfill shall outline allowed and prohibited waste streams;	
		(k)	A logbook shall be maintained at the entry of the landfill to document waste types and volumes (tonnes);	
		(I)	Fire extinguishers shall be located within the facility;	
		(m)	Landfill shall be located at least 80 m away from surface water features;	

Infrastructure		Design and construction / installation requirements	Infrastructure location
		 (n) Earthen bunding shall be constructed surrounding the landfill trenches so as to prevent the ingress of stormwater; and (o) Water that has come into contact with waste is to be diverted into a sump on the site, or otherwise 	
		retained on the site.	
		WWTP as specified in Figure 6 of Schedule 1;	
		(b) The WWTP facility shall be located on a cement pad with drainage and bunding to prevent runoff or spills entering the surrounding environment;	
		 (c) All raw sewage shall be pumped to the inlet works of the wastewater treatment plant; 	
		 (d) A mechanical screen shall be installed to remove all the inorganic material from the sewage; 	
		(e) Infrastructure components are to include:	
		 Balance tank; Two Primary tanks; Anoxic treatment tank; Two Anerobic treatment tank; Clarifier tank; Chlorine contact tank; and Irrigation tanks; 	
2.	Accommodation Village WWTP	 (f) All sewage and storage treatment tanks, vessels transfer pipelines and conveyance infrastructure shall be impermeable and free of leaks or defects; 	Located as depicted in Figure 6 of Schedule 1
		 (g) Earthen bunding shall be constructed around the perimeter of the WWTP; 	
		 (h) Stormwater is prevented from entering the sewage treatment system and storage infrastructure; 	
		 (i) WWTP shall be able to treat sewage to the follow discharge limits: 	
		 BOD₅ < 20 mg/L; TSS < 30 mg/L; TDS < 1000 mg/L; TN < 40 mg/L; TP < 10 mg/L; pH range of 6.5 – 8.5; and <i>E. coli</i> < 1000 cfu /100 mL; (j) WWTP shall include pump pits to collect and convey sewage to the WWTP balance tanks, with pre-set level floats to activate the pumps within	1
		the pits;	

Inf	rastructure	Des requ	ign and construction / installation uirements	Infrastructure location
		(k)	Flowmeters shall be installed on the irrigation pump to monitor volumes discharged to the irrigation sprayfield;	
		(I)	Alarm system shall be installed to notify the operator of:	
			 Pump failure; and High tanks lovels; and 	
		(m)	Chemicals shall be stored separately with an above ground vessel/s located on a hardstand enclosed by bunds in accordance with AS 3780.	
		(a)	Irrigation field shall be fenced with safety signage to deter access;	
		(b)	Above ground sprinklers shall be installed uniformly over a 6 ha area;	
3.	Accommodation	(c)	Sprinklers shall be installed to ensure no ponding or pooling of water occurs;	Located as depicted in
0.	Sprayfield	(d)	The spray plume shall not have a diameter exceeding 3 m nor a plume height exceeding 600 mm above the finished surface level of the irrigation disposal area; and	Figure 6 of Schedule 1
		(e)	All pipework and fittings shall be polyethylene complying with AS 2698.	
		(a)	Self bunded, containerised and enclosed for each WWTP as specified in Figure 7 of Schedule 1;	
		(b)	The WWTP facility shall be located on a cement pad with drainage and bunding to prevent runoff or spills entering the surrounding environment;	
		(c)	All raw sewage shall be pumped to the inlet works of the wastewater treatment plant;	
		(d)	A mechanical screen shall be installed to remove all the inorganic material from the sewage and disposed of to landfill;	
4.	Mine Support	(e)	Infrastructure components are to include:	depicted in
	VVVVTP		 Balance tank; Two Primary tank: 	Schedule 1
			 Anoxic treatment tank; 	
			 Two Anerobic treatment tank; Clarifier tank: 	
			 Chlorine contact tank; and Irrigation tanks; 	
		(f)	All sewage and storage treatment tanks, vessels transfer pipelines and conveyance infrastructure shall be impermeable and free of leaks or defects;	

Infrastructure		Design and construction / installation requirements	Infrastructure location
		 (g) Earthen bunding shall be constructed around th perimeter of the WWTP; 	e
		 (h) Stormwater shall be prevented from entering th sewage treatment system and storage infrastructure; 	e
		 (i) WWTP shall be able to treat sewage to the following discharge limits: 	
		 BOD₅ < 20 mg/L; TSS < 30 mg/L; TDS < 1000 mg/L; TN < 40 mg/L; TP < 10 mg/L; pH range of 6.5 – 8.5; and <i>E. coli</i> < 1000 cfu /100 mL; 	
		forward sewage to the WWTP balance tanks, with pre-set level floats to activate the pumps within the pits;	
		 (k) Flowmeters shall be installed on the irrigation pump to monitor volumes discharged to the irrigation spray field; 	
		 (I) Alarm system shall be installed to notify the operator of: 	
		 Pump failure; and High tanks levels; 	
		 (m) Chemicals shall be stored separately with an above ground vessel/s located on a hardstand enclosed by bunds in accordance with AS 3780 	·.
		 (a) Irrigation field shall be fenced with safety signation to deter access; 	je
	Mine Support Irrigation Sprayfield	 (b) Above ground sprinklers shall be installed uniformly over a 6 ha area; 	
5		 (c) Sprinklers shall be installed to ensure no pondit or pooling of water occurs; 	ng Located as depicted in
5.		(d) The spray plume shall not have a diameter exceeding 3 m nor a plume height exceeding 6 mm above the finished surface level of the irrigation disposal area; and	Figure 7 of Schedule 1
		(e) All pipework and fittings shall be polyethylene complying with AS 2698.	
6.	Hydrocarbon storage	 (a) All chemicals and hydrocarbon storage shall be adequately bunded to comply with AS 1940, AS 1692 and the Code of Practice: Storage and Handling of Dangerous Goods; 	, N/A
		(b) Bunded areas shall drain to sumps with recove pumps or be pumped out by a licenced controll	y ed

Infrastructure	Design and construction / installation requirements	Infrastructure location
	waste carrier as necessary, in accordance with the Controlled Waste Regulations; and	
	(c) Any stormwater contaminated with hydrocarbons shall be directed to an oil-water separation system so that the water can be treated.	

Emissions

- 2. The works approval holder must manage dust generation at the premises by:
 - (a) wetting down unsealed roads and exposed areas;
 - (b) limiting all vehicle traffic within the premises boundary to speeds of less than 10 km/hr;
 - (c) ceasing dust-generating activities during strong wind conditions; and
 - (d) ensure a water cart is available at all times to wet down dust generating surfaces.
- **3.** The works approval holder must immediately recover, or remove and dispose of, spills of environmentally hazardous materials including fuel, oil, or other hydrocarbons, whether inside or outside an engineered containment system.
- 4. The works approval holder must ensure that all material used for the recovery, removal, and/or disposal of environmentally hazardous materials is stored in an impermeable container prior to disposal at an appropriately authorised facility.

Compliance reporting

- 5. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **6.** The Environmental Compliance Report required by condition 5, must include as a minimum the following:
 - (a) certification by a mechanical engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1;
 - (c) testing of pipelines, tanks and other containment infrastructure to ensure that the infrastructure is free from leaks and defects; and
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Environmental commissioning phase

Environmental commissioning requirements

- 7. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 8 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 5 and 6 of this works approval.
- 8. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
 - (a) in accordance with the corresponding commissioning requirements; and
 - (b) for the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

Infra	astructure	Commissioning requirements	Authorised commissioning duration
	Accommodation	 (a) Flow meters are maintained on the WWTP inlet and outlet to the irrigation discharge area; 	
1.	Village WWTP	 (b) Spills of wastewater or chemicals outside of a vessel / container are to be cleaned up immediately; 	
		 (c) Maintained and operated in accordance with the WWTP Operating Manual; 	
2.	Mine Support WWTP	(d) Sewage sludge to be stored in impervious cement sumps and dried prior to disposal to landfill; and	
۷.		(e) Operators are trained in the use and maintenance of WWTP.	
3.	Accommodation Village Irrigation Sprayfield	 (a) No more than 200 m³/day of treated effluent can be applied per day to each of the irrigation discharge areas as defined by Figure 6 and Figure 7 of Schedule 1; 	For a period not exceeding 90 calendar days in aggregate.
		 (b) Irrigation is managed to prevent ponding and pooling of effluent in the ground surface of the irrigation discharge area; 	
4.	Mine Support Irrigation Sprayfield	 (c) Irrigation system valves, pumps, pipelines, and other fittings must be maintained and inspected daily for ruptures or leaks when irrigating; 	
		 (d) All pipework to be buried at least 150 mm below the ground surface; and 	
		(e) Four sprinklers will operate at 40-minute intervals every 24 hours.	

- **9.** During commissioning, the works approval holder must only accept into the facilities listed in Table 3, waste of a type that:
 - (a) does not exceed the rate at which that waste is received; and
 - (b) meets the relevant acceptance specification,

as set out in Table 3.

Table 3: Waste acceptance criteria

Facility	Waste type	Rate at which waste is received	Acceptance specification
Accommodation Village WWTP	Domostio cowogo	Maximum 200 m³/day	Must be received via the
Mine Support WWTP	Domestic sewage	Maximum 200 m³/day	WWTP inlet works.

10. During environmental commissioning, the works approval holder must ensure that the emission specified in Table 4, is discharged only from the corresponding discharge points and only at the corresponding discharge point locations.

Table 4: Authorised discharge points during commissioning

Emission	Discharge point	Discharge point locations
Treated effluent	Sprinklers within the Accommodation Village Irrigation Sprayfield and Mine Support Irrigation Sprayfield	Irrigation spray field as shown in Figure 6 and Figure 7 of Schedule 1

Monitoring during environmental commissioning

11. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 5.

Table 5: Emissions and discharge monitoring during environmental commissioning

Discharge point	Monitoring location	Parameter	Frequency	Averaging Period	Unit	Method
	Irrigation pump flow meters	Volume	Continuous	Cumulative daily	kL/day	N/A
Sprinklers within	Accommodation Village WWTP and Mine Support WWTP irrigation tank outlets	E. coli	Weekly	Spot sample	cfu/ 100mL	
Accommodation Village Irrigation		BOD₅				
Sprayfield and Mine Support		TDS			mg/L	AS/NZS 5667.10
Irrigation Sprayfield		TSS				
		TN				
		TP				

Discharge point	Monitoring location	Parameter	Frequency	Averaging Period	Unit	Method
		Free Chlorine ¹	Continuous	N/A		
		pH ¹	Continuous	N/A	pH units	

Note 1: In-field non-NATA accredited analysis permitted.

Commissioning reporting

- **12.** The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 2.
- **13.** The works approval holder must ensure the Environmental Commissioning Report required by condition 12 includes the following:
 - (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of sewage processed;
 - (b) the discharge monitoring results recorded in accordance with condition 11;
 - a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at minimum includes records detailing the;
 - (i) a comparison of the treated effluent monitoring results in comparison to the discharge design limits specified in condition 1;
 - (ii) commissioning of the process control and telemetry system; and
 - (iii) assessment of the irrigation spray field performance against operational requirements in condition 8.
 - (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
 - (e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

Time limited operations phase

Commencement and duration

- **14.** The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1:
 - (a) where the item of infrastructure is not authorised to undertake environmental commissioning under condition 8, the Environmental Compliance Report as required by condition 4 has been submitted by the works approval holder for that item of infrastructure; and
 - (b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 8, the Environmental Commissioning Report for that item of infrastructure as required by condition 12 and 13 has been submitted by the works approval holder.

- **15.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 16:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 14 for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 15(a).

Time limited operations requirements and emission limits

16. During time limited operations, the works approval holder must ensure that the premises infrastructure listed in Table 6 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 6.

Table 6: Infrastructure requirements during time limited operations

Site infrastructure		Operational requirement	Infrastructure location	
1.	Class II Putrescible landfill	(a) No more than one cell is to be in operation at any one time;		
		(b) Waste must be covered at least monthly with dense, inert and incombustible material;		
		(c) No windblown waste escapes from the premises and any waste that has been washed or blown away from the tipping area must be collected and returned to the tipping area;	As shown in	
		 (d) Stormwater must be diverted away from the landfill cells; 	Figure 5 and Figure 9 of	
		(e) No burning of waste to occur;	Schedule 1	
		 (f) No radioactive waste is permitted to be buried or stored in this area; 		
		(g) The volumes and type of waste buried at the landfill must be recorded; and		
		(h) Waste accepted must be in accordance with condition 17.		
	2. Accommodation Village WWTP	 (a) Volumetric flow meters are maintained on each WWTP outlet to the corresponding irrigation field; 	As shown in	
2.		(b) Sludge is contained within sealed sludge tanks prior to drying and removal by a licensed waste carrier for disposal to a licensed disposal facility;	Schedule 1	
3. Mine Sup WWTP	Mine Support	 (c) Screenings are contained within a sealed bin prior to a licensed disposal facility; and 	As shown in	
	WWTP	(d) Spills of wastewater and chemicals are outside of a vessel/container are cleaned up immediately.	Schedule 1	
4.	Accommodation Village Irrigation Sprayfield	 (a) No more than 200 m³ per day of treated effluent is to be applied to each designated irrigation area; 	As shown in Figure 6 of Schedule 1	

Site infrastructure		Operational requirement	Infrastructure location
5.	5. Mine Support Sprayfield	 (b) Irrigation is managed to prevent ponding and pooling of effluent on the ground surface of the irrigation spray field; and 	As shown in Figure 7 of
		(c) No treated effluent is permitted to be discharged outside of the irrigation area identified in Schedule 1.	Schedule 1

- **17.** During time limited operations, the works approval holder must only accept into the facilities listed in Table 7, waste of a type that:
 - (a) does not exceed the rate at which that waste is received; and
 - (b) meets the relevant acceptance specification,

as set out in Table 7.

Table 7: Waste acceptance criteria

Facility	Waste type	Rate at which waste is received	Acceptance specification	
	Clean fill	Combined total of	Must meet the acceptance criteria for Class II landfills, as specified in the Landfill Definitions.	
Class II Putrescible landfill	Inert waste type 1	650 tonnes per		
	Putrescible waste	year		
Accommodation Village WWTP	Domostio covers	200 m ³ /day	Must be received via the WWTP inlet works.	
Mine Support WWTP	Domestic sewage	200 m ³ /day		

- **18.** Where waste does not meet the waste acceptance criteria set out in condition 17, the works approval holder must:
 - (a) reject the waste; and
 - (b) record the details of the:
 - (i) waste (type and description);
 - (ii) source of the waste load; and;
 - (iii) date that the waste load was rejected; and
 - (c) maintain accurate and auditable records of all waste loads rejected from the premises.
- **19.** The works approval holder must ensure that where waste does not meet the waste acceptance criteria set out in condition 17, it is removed from the premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility within 14 days.
- **20.** During time limited operations, the works approval holder must ensure that treated wastewater is only discharged via irrigation to the specified discharge points in accordance with the limits specified in Table 8.

Discharge point	Parameter	Concentration limit	Loading limit	
	BOD ₅	20 mg/L		
	TDS	DS 2000 mg/L		
	EC	3100 µS/cm	N1/A	
	TSS	30 mg/L	N/A	
Sprinklers within the	рН	6.5 to 8.5		
Accommodation	DO	4 mg/L		
Sprayfield and Mine Support Irrigation Sprayfield	TN	40 mg/L	240 kg/ha (over time limited operation period)	
	ТР	10 mg/L 60 kg/ha (over ti limited operation period)		
	E. coli	1000 cfu/100mL		
	Free chlorine	0.2 to 2.0 mg/L		

Table 8: Emission and discharge limits during time limited operations

21. The works approval holder must monitor emissions during time limited operations in accordance with Table 9.

Table 9: Emissions and discharge monitoring during time limited operations

Discharge point	Monitoring location	Parameter	Frequency	Averaging Period	Unit	Method
Sprinklers within the Accommodation Village Irrigation Sprayfield and Mine Support Irrigation Sprayfield	Irrigation pump flow meters	Volume	Continuous	Cumulative daily	kL/day	N/A
	Accommodation Village WWTP and Mine Support WWTP irrigation tank outlets	E. coli	Monthly	Spot sample	cfu/ 100mL	AS/NZS 5667.10
		BOD ₅			mg/L	
		TDS				
		TSS				
		TN				
		ТР				
		Free Chlorine ¹	Continuous	N/A		
		pH ¹		N/A	pH units	

Note 1: In-field non-NATA accredited analysis permitted.

Time limited operations reporting

- **22.** The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is sooner.
- **23.** The works approval holder must ensure the Time Limited Operations Report required by condition 22 of this works approval includes the following:
 - (a) a summary of the time limited operations, including timeframes and amount of waste processed;
 - (b) the emissions monitoring results recorded in accordance with condition 21;
 - (c) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at minimum includes records detailing:
 - (i) a comparison of the treated effluent monitoring results against discharge limits specified in condition 20;
 - (ii) assessment of the irrigation spray field performance against operational requirements in condition 16; and
 - (iii) assessment of the performance of operational management procedures at the putrescible landfill.
 - (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
 - (e) where they have not been met, measures proposed to meet the manufacturer's design specifications and/or the conditions of this works approval, together with timeframes for implementing the proposed measures.

General monitoring requirements

- 24. For the monitoring required by conditions 11 and 21, the works approval holder must:
 - (a) record the results;
 - (b) handle and preserve all water samples collected during the monitoring of the WWTP in accordance with AS 5667.1; and
 - (c) have analysis conducted by a laboratory with current NATA accreditation for the parameters specified.

Record-keeping

- **25.** The works approval holder must maintain accurate books including information, reports and data in relation to the works and the books must:
 - (a) be legible;
 - (b) if amended, be amended in such a ways that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) be retained for at least 3 years from the date the Books were made;
 - (d) be available to be produced to an Inspector or the CEO.
- **26.** The works approval holder must comply with a Department Request within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Definitions

In this works approval, the terms in Table 10 have the meanings defined.

Table 10: Definitions

Term	Definition
Accommodation Village Irrigation Sprayfield	means the Accommodation Village Irrigation Sprayfield listed in Table 1 of this works approval
Accommodation Village WWTP	means the Accommodation Village WWTP listed in Table 1 of this works approval
AS 1692	means Australian Standard AS 1692 – Steel tanks for flammable and combustible liquids
AS 1940	means Australian Standard AS 1940 – The storage and handling of flammable and combustible liquids
AS 2698	means Australian Standard AS 2968 – Plastics pipes and fittings for irrigation and rural applications
AS 3780	means Australian Standard AS 3780 – The storage and handling of corrosive substances
AS/NZS 5667.1	means Australian Standard AS/NZS 5667.1 – Water quality - Sampling - Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.10	means Australian Standard AS/NZS 5667.10 - Water quality - Sampling Guidance on sampling of waste waters
BOD₅	five-day biochemical oxygen demand
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the Environmental Protection Act 1986 Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
Class II Putrescible landfill	means the Class II Putrescible landfill listed in Table 1 of this works approval
cfu /100 mL	colony forming units per 100 millilitres
condition	means a condition to which this works approval is subject under s.62 of the EP Act
Controlled Waste Regulations	Environmental Protection (Controlled Waste) Regulations 2004

Term	Definition		
department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act		
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the works approval holder in writing and sent to the works approval's address for notifications, as described at the front of this works approval, in relation to:		
	(a) compliance with the EP Act or this works approval;		
	 (b) the Books or other sources of information maintained in accordance with this works approval; or 		
	(c) the Books or other sources of information relating to Emissions from the premises		
discharge	has the same meaning given to that term under the EP Act		
DO	dissolved oxygen		
DWER	Department of Water and Environmental Regulation		
EC	electrical conductivity at 25 degrees Celsius		
E. coli	Escherichia coli		
emission	has the same meaning given to that term under the EP Act		
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications		
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors		
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the conditions of the works approval		
EP Act	means the Environmental Protection Act 1986 (WA)		
EP Regulations	means the Environmental Protection Regulations 1987 (WA)		
ha	hectare		
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act		
Landfill Definitions	Landfill Waste Classification and Waste Definitions 1996		
m	metre		

Term	Definition
m ³	cubic metres
mg/L	milligrams per litre
Mine Support Irrigation Sprayfield	means the Mine Support Irrigation Sprayfield listed in Table 1 of this works approval
Mine Support WWTP	means the Mine Support WWTP listed in Table 1 of this works approval
mm	millimetres
ΝΑΤΑ	National Association of Testing Authorities, Australia
premises	refers to the premises to which this works approval applies, as specified at the front of this works approval and as shown on the map in Schedule 1 to this works approval
Prescribed Premises	has the same meaning given to that term under the EP Act
spot sample	a discrete sample representative at the time and place at which the sample is taken
TDS	total dissolved solids
time limited operations	means the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions
TN	total nitrogen
ТР	total phosphorus
TSS	total suspended solids
waste	has the same meaning given to that term under the EP Act
works	refers to the Works described in Schedule 2, at the locations shown in Schedule 1 of this Works Approval to be carried out at the Premises, subject to the Conditions
works approval	refers to this document, which evidences the grant of the works approval by the CEO under s.54 of the EP Act, subject to the Conditions
works approval holder	refers to the occupier of the Premises being the person to whom this Works Approval has been granted, as specified at the front of this Works Approval
WWTP	wastewater treatment plant

END OF CONDITIONS

Schedule 1: Maps

The boundary of the prescribed premises is shown in pink in the map below



Figure 1: Premises boundary



Figure 2: Map of the development envelope project boundaries

Ref: g2573_WA03_05_20201117_Village_WWTP ~ Date: November 2020



Figure 3: Location of WWTP Village Accommodation within the Mulga Rock Uranium





Figure 4: Location of WWTP Mining Support within the Mulga Rock Uranium



Figure 5: Putrescible Landfill cell design





Figure 6: Accommodation Village WWTP Irrigation Area





Figure 7: Mine Support WWTP Irrigation Area



Figure 8: Indicative layout of the WWTP

IR-T05 Works approval template (v5.0) (February 2020)



Figure 9: Location Putrescible Landfill (category 89)