Works Approval

Works approval number W6728/2022/1

Works approval holder Kimberley Cotton Company Limited

ACN 649 678 197

Registered business address

UHY HAINES NORTON PERTH

Level 2, 35-37 Havelock Street,

WEST PERTH, WA 6005

DWER file number DER2022/000388

Duration 19/07/2023 to 18/07/2028

Date of issue 19 July 2023

Kimberley Cotton Gin

Premises details Kimberley Cotton Gin

Lot 510 Mulligans Lagoon Road, Kununurra WA,

6743

Legal description -

Lot 510 on Deposited Plan 421305

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 26: Textile operations: premises on which – (a) carpet or yarn is manufactured; or (b) cotton ginning or milling occurs; or (c) textiles are bleached, dyed, or finished	Not more than 100 000 tonnes of raw cotton per year.

This works approval is granted to the works approval holder, subject to the attached conditions, on 19 July 2023, by:

Amine Fisher

A/MANAGER, PROCESS INDUSTRIES

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

Works approval history

Date	Reference number	Summary of changes
19/07/2023	W6728/2022/1	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;
 - (c) at the corresponding infrastructure location; and
 - (d) by the corresponding timeframe.

as set out in Table 1.

Table 1: Design and construction/installation requirements

	Infrastructure		sign and construction/installation uirements	Infrastructure location
Stag	e 1			
1.	Cotton gin comprising: Cotton gin building	(a)	The cotton gin building must be constructed to be fully enclosed with a concrete reinforced pad.	As shown in Schedule 1, Figure 2 as
	3 x cotton gin stands with an individual plate speed of 18	(b)	The cotton gin building must have the following sound attenuation installed:	Gin, Bale bagging
	bales/hour and associated equipment		 i. Walls must be S50 Ortech Durra Panels 	room.
	with a combined design capacity of 54 bales/hour.		ii. 300 mm I-Beam with 50/25 Soundsorb internal perforated profile metal cassette	
	Seed conveyor		iii. 75mm Anticon to the underside of roof	
	Bale bagging room		iv. Rated sheet at Rw 51dB and radiating at Sound Power Level (SWL) 48 dB(A) per m ²	
			v. All personnel access doors must be double-skin steel outer with a solid core, in a well-fitted frame with acoustic seals.	
			vi. All vision panels must be a minimum of 10 mm toughened safety glass.	
			vii. Acacia Strand HC 1000 roof ventilator must be installed along the ridge cap.	
		(c)	All cotton gin stands and associated equipment must be installed within the cotton gin building on anti-vibration mounts between the plant and skid.	
		(d)	The seed conveyor must be installed within an enclosed concrete pit within the	

	Infrastructure	Design and construction/installation requirements	Infrastructure location
		cotton gin building floor.	
		(e) All external lights must be downward-facing LED lights.	
2.	Module feeder bay • Module feeder pit • Roller feed deck • Burner • Intake screens	(a) The module feeder bay must be roofed.(b) The module feeder bay must have a concrete hardstand.	As shown in Schedule 1, Figure 2 as Module feeder bay
3.	Dust management system including: • Extraction fans • Cyclones	(a) Must install a minimum of 11 fans that direct air flow via enclosed pipes to the dust house or a cyclone.(b) Must install a minimum of 4 cyclones that	As shown in Schedule 1, Figure 2 as Gin building fan
	Rotary drum filtersStripper fans	direct collected particulate matter to the cotton trash hopper bin and exhaust air to the dust house.	bay Cyclones Dust house
	Dust house	(c) All cyclone exhausts must be capped with 2 mm thick steel capping.	D1
		(c) Cyclones must be installed in a cyclone rack located on the north side of the cotton gin building.	
		(d) Must install a minimum of 4 rotary drum filters capable of reducing particulate emissions to 5 mg/m³ or less within the dust house.	
		(e) Must install an exhaust stack on the dust house which discharges at a minimum height of 4.5 magl.	
		(f) The exhaust stack must be fitted with a sampling port that is compliant with requirements of AS 4323.1:2021 to allow periodic emission monitoring.	
4.	1x 425 m ³ cotton seed hopper bin	(a) The bin must be fully enclosed.(b) An enclosed pipe/s or conveyor/s must be installed for transfer of seed from the cotton gin building to the bin.	As shown in Schedule 1, Figure 2 as Seed bin
		(c) The bin must be installed on a concrete or bitumen hardstand.	
		(d) The hardstand must be graded to drain towards the stormwater drains.	
		(e) All lighting must be downward-facing LED lights.	
5.	1x 65 m³ cotton trash hopper bin	(a) The bin must be fully enclosed.(b) The bin must be fitted with doors that are	As shown in Schedule 1, Figure

	Infrastructure	Design and construction/installation requirements	Infrastructure location
		capable of closing in front and behind loading vehicles that can contain dust. (c) An enclosed pipe/s or conveyor/s must be installed for transfer of cotton trash from the cotton gin building to the bin. (d) The bin must be installed on a compacted gravel, bitumen or concrete hardstand. (e) The hardstand must be graded to drain towards the stormwater drains. (f) All lighting must be downward-facing LED	2 as Trash bin
6.	Bale storage area	lights. (a) The bale storage area must be roofed. (b) The bale storage area must have a concrete or bitumen hardstand. (c) The hardstand must be graded to drain towards the stormwater drains. (d) All external lighting must be downward-facing LED lights.	As shown in Schedule 1, Figure 2 as Bale pad slab
7.	Cotton trash yard	 (a) The hardstand area for the cotton trash yard must be compacted gravel. (b) The hardstand must be graded to drain towards the stormwater drains. (c) All lighting must be downward-facing LED lights. 	Schedule 1 Figure 3 as Temporary storage cotton trash yard
8.	Module storage area	 (a) The hardstand area for the module storage area must be compacted gravel. (b) The hardstand must be graded to drain towards the stormwater drains. (c) All external lighting must be downward-facing LED lights. 	As shown in Schedule 1 Figure 3 as Just in time laydown area
9.	Weighbridge and internal roads	 (a) Internal roads and the weighbridge hardstand area must be compacted gravel or bitumen. (b) Internal roads and weighbridge hardstand area must be graded to drain towards the stormwater drains. (c) All external lighting must be downwardfacing LED lights. 	As shown in Schedule 1 Figure 3 as Weighbridge
10.	Conveyors and pipes	(a) All conveyors and transfer pipes inside and outside of buildings must be fully enclosed.	N/A
11.	Hydrocarbon and chemical storage	(a) All hydrocarbon and chemical storage tanks must have integral secondary	N/A

	Infrastructure	Design and construction/installation requirements	Infrastructure location
		containment that complies with the requirements of section 5.9 of AS 1940 or must be established within a concrete bunded area with capacity to contain not less than 110% of the volume of the storage tank. (b) A concrete bunded area must be constructed for the purpose of storage of chemical and hydrocarbon storage containers/vessels.	
12.	Stormwater management system • Stormwater drains • Detention dam	 (a) Stormwater drains must be constructed to convey runoff into the detention dam. (b) Stormwater drains that will have a velocity greater than 0.5 m/s must have rock or gravel armoring for erosion protection. (c) A detention dam must be constructed with: i. a minimum capacity of 16.42 megalitres; ii. a minimum length of 400 m and width of 50 m; iiii. embankments not less than 3H:1V; and iv. an earthen channel with control structures that regulate discharge from the detention dam. 	As shown in Schedule 1 Figure 3 as Detention dam Open stormwater spoon drains
Stag	e 2		
13.	Cotton gin 2 x cotton gin stands with an individual plate speed of 18 bales/hour and associated equipment with a combined design capacity of 36 bales/hour.	(a) Two cotton gin stands and associated equipment must be installed inside the cotton gin building on anti-vibration mounts between the plant and skid.	As shown in Schedule 1 Figure 2 as Gin
14.	Dust management system including: • Extraction fans • Cyclones • Rotary drum filters • Stripper fan	 (a) Must install a minimum of 7 fans that direct air flow via enclosed pipes to the dust house or a cyclone. (b) Must install a minimum of 3 cyclones that direct collected particulate matter to the cotton trash hopper bin and exhaust air to the dust house. (c) All cyclone exhausts must be capped with 2 mm thick steel capping. 	As shown in Schedule 1, Figure 2 as Gin building fan bay Cyclones Dust house

Infrastructure	Design and construction/installation requirements	Infrastructure location
	(d) Cyclones must be installed in a cyclone rack located on the north side of the cotton gin building.	
	(e) Must install a minimum of 2 rotary drum filters capable of reducing particulate emissions to 5 mg/m³ or less within the dust house.	

Fugitive dust - construction

2. The works approval holder must undertake the minimum requirements specified in Table 2 for the works to minimise the generation of airborne dust from the premises.

Table 2: Fugitive dust management requirements during construction

Dust control	Requirements
Water carts	Operate when visible dust is generated from external ground surface areas on the premises.
	Operate proactively subject to weather forecasting over a 24 hour period.
	Operate when visible dust is reported by site personnel.

Stormwater - construction

3. The works approval holder must undertake the minimum requirements specified in Table 2 for the works to minimise the generation of sediment laden stormwater and erosion from the premises.

Table 3: Stormwater management requirements during construction

Stormwater control	Requirements
Engineered sediment control structures	Install sediment control structures within existing drainage systems capable of slowing surface water flow when rainfall/storms are expected.
	Operate and maintain sediment control structures proactively subject to weather forecasting.

Compliance reporting

- 4. The works approval holder within 30 calendar days of all items of infrastructure or equipment required by condition 1 in a stage of works being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1 for the stage of works; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that stage of works compliance.
- 5. The Environmental Compliance Reports required by condition 4, must include as a minimum the following:

- (a) certification by a qualified engineer that the infrastructure or components 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; and
- (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time-limited operations phase

Commencement and duration

- 6. The works approval holder may only commence time-limited operations for each of Stage 1 and Stage 2 infrastructure identified in condition 1, where:
 - (a) the respective Environmental Compliance Report as required by condition 4 has been submitted by the works approval holder for the infrastructure in that stage; and
 - (b) that infrastructure has been certified in accordance with requirements of condition 5.
- 7. The works approval holder may conduct time-limited operations of the infrastructure specified in condition 1:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 6 for that stage; or
 - (b) until such time as a licence for the infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*,

whichever is sooner.

Time-limited operations requirements

8. During time-limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 4 and located at the corresponding infrastructure location are maintained and operated in accordance with the corresponding requirement set out in Table 4.

Table 4: Time-limited operational requirements

	Site infrastructure and equipment	Operational requirements	Infrastructure location
1.	Cotton gin: Cotton gin stands and associated equipment. Bale bagging room.	(a) Cotton gin building must be swept inside daily.(b) Cotton gin building external doors and other apertures must remain shut when the cotton gin is operating.	As shown with Schedule 1, Figure 2, labeled as Gin Bale bagging room.
2.	Dust management system • Extraction fans • Cyclones	(a) All fans, cyclones, and rotary drum filters must be in operation when the cotton gin is operating and must be maintained in a fit-for-purpose condition.	As shown in Schedule 1, Figure 2 as Gin building fan bay

	Site infrastructure and equipment	Operational requirements	Infrastructure location
	Rotary drum filters Dust house	 (b) Exhaust air from the cyclones and fans must be directed to the rotary drum filters. (c) Collected particulate matter from the cyclones must be directed to the cotton trash hopper bin via an enclosed conveyor or pipe. (d) Damaged or blocked rotary drum filters must be replaced when identified and filters must also be replaced in accordance with manufacturers specifications. 	Cyclones Dust house D1
3.	Cotton seed hopper bin	(a) Cotton seed must be stored within the hopper bin prior to collection.(b) The cotton seed hopper bin must remain closed unless a truck is being loaded.	As shown in Schedule 1, Figure 2 as Seed bin
4.	Cotton trash hopper bin	 (a) Cotton trash must be stored within the hopper bin prior to collection for transfer to the cotton trash yard. (b) Cotton trash hopper bin must remain closed unless a truck is being loaded. (c) Doors on the cotton trash hopper bin must be maintained in working condition. (d) The cotton trash hopper bin doors must be operated to enclose in-front of and behind the truck trailer during loading. 	As shown in Schedule 1, Figure 2 as Trash bin
5.	Bale storage area	(a) Cotton bales must be stored in the bale storage area.	As shown in Schedule 1, Figure 2 as Bale pad slab
6.	Cotton trash yard	 (a) Cotton trash must be stored within windrows within the cotton trash yard. (b) Cotton trash windows must be kept sufficiently moist to prevent dust lift off. (c) All cotton trash must be removed from the cotton trash yard by 31 December each year. 	As shown in Schedule 1 Figure 3 as Temporary storage cotton trash yard
7.	Module storage area	 (a) Cotton modules must be stored within the cotton module storage area. (b) Module storage area must be maintained to prevent accumulation of litter (plastic bale wraps and packaging). 	As shown in Schedule 1 Figure 3 as Just in time laydown area
8.	Internal roads and hardstands	(a) Water cart must be available and operational to effectively wet down dust generating roads and hardstands to prevent visible dust.	N/A

	Site infrastructure and equipment	Operational requirements	Infrastructure location
9.	Chemical and hydrocarbon storage	(a) Chemical and hydrocarbon spills must recovered or removed and disposed whether inside or outside of a containment system.	N/A
		(b) All drums of hydrocarbons and chemicals must be stored within a containment bund.	
		(c) Containment bunds must be maintained	
		 in a fit-for-purpose condition for containing liquids and free of cracks or damage; and 	
		ii. with capacity to contain not less than 110% of the volume of the largest storage vessel or 25% of the total storage volume if multiple storage vessels occur within the bund.	
10.	Stormwater management system	(a) Stormwater drains must be maintained to ensure runoff can flow freely to the detention dam.	As shown in Schedule 1 Figure 3 as
	Stormwater drains Detention dam	(b) Earthen drain and release control	Detention dam
		structures must be maintained to ensure discharged water can flow freely to the drain.	Open stormwater spoon drains

Time-limited operations – authorised emission points

9. During time-limited operations, the works approval holder must ensure that the emissions specified in Table 5 are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 5: Authorised discharge points during time-limited operation

	Emission	Discharge point	Discharge point height (magl)	Discharge point location
1.	Particulate matter	Dust house exhaust stack	4.5	As shown in Schedule 1: Figure 3 as D1
2.	Stormwater	Detention dam	n/a	As shown in Schedule 1: Figure 3 as W1

Monitoring during time-limited operations - general

- 10. The works approval holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this works approval is calibrated in accordance with the manufacturer's specifications.
- 11. The works approval holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO with a report comprising details of any modifications to the methods.

12. The works approval holder must record the results of all monitoring activity required by condition 13 and 15.

Monitoring of discharges to air

13. The works approval holder must monitor emissions to air during time limited operations in accordance with Table 6.

Table 6: Monitoring of discharges to air

Discharge point and monitoring location	Parameter	Unit ^{1,}	Frequency	Averaging period	Method of sampling and analysis ²
Dust house	PM ₁₀	µg/m³ and g/s m³/s	Two separate sample events separated by at least one month within the first three months of emissions through the discharge point.	60 minutes	USEPA Method 201A
exhaust stack As shown in	PM _{2.5}				
Schedule 1: Figure 3 as D1	Particulates				USEPA Method 5
	Volumetric flow rate				USEPA Method 2
	Exit velocity	m/s			

- Note 1: All units are referenced to STP dry.
- Note 2: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as referral to AS 4323.1
- 14. The works approval holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 13 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding relevant parameter.

Monitoring of discharges to surface water

15. The works approval holder must monitor emissions to surface water during time limited operations in accordance with Table 7

Table 7: Monitoring of discharges to surface water

Monitoring location	Parameter	Unit	Frequency	Sampling methods	Analytical method
Detention dam	Total nitrogen	mg/L	Once within 12	AS/NZS	NATA
As shown in Schedule 1: Figure 3 as	Total phosphorus		hours of overflow to ORIA scheme	5667.1 and AS/NZS 5667.10	accredited for the parameters specified
W1	Total suspended solids				
	Total dissolved solids				

Compliance reporting

16. 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

- for each stage or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
- 17. The works approval holder must ensure the report required by condition 16 includes the following:
 - (a) a summary of the time-limited operations, including timeframes and amount of cotton bales processed in tonnes, and the amount of cotton lint produced in bales and tonnes.
 - (b) results of monitoring undertaken as required in conditions 13 and 15, including an appraisal of the results;
 - (c) a summary of complaints recorded as required by condition 18;
 - (d) a review of performance and compliance against the conditions of the works approval; and
 - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

- 18. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised: and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- 19. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
 - (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed while complying with condition 8:
 - (c) monitoring programme undertaken in accordance with conditions 13 and 15:
 - (d) complaints received under condition 18.
- 20. The books specified under condition 19 must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 8 have the meanings defined.

Table 8: Definitions

Term	Definition
AS1940:2017	means Australian Standard 1940:2017 Storage and handling of flammable and combustible liquids
AS4323.1:2021	means Australian Standard AS 4323.1:2021 Stationary source emissions: selection of sampling positions.
AS/NZS 5667.1	means Australian Standard AS/NZS 5667.1 Water quality—Sampling Part 1: 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
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer.
	CEO for the purposes of notification means:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
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 works approval.
EP Act	Environmental Protection Act 1986 (WA).
EP Regulations	Environmental Protection Regulations 1987 (WA).
PM ₁₀	means particulate matter that is smaller than 10 microns (µm) in diameter
mabgl	metres above ground level
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this works approval

Term	Definition
prescribed premises	has the same meaning given to that term under the EP Act.
qualified engineer	means a person who:
	(a) holds an engineering tertiary qualification, and
	(b) has a minimum of at least three years of experience working in civil construction.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
USEPA Method 2	means USEPA Method 2 Determination of Gas Velocity and Volumetric Flow Rate (Type S Pitol Tube)
USEPA Method 5	means USEPA Method 5 Determination of Particulate Matter Emissions from Stationary sources
USEPA Method 201A	means USEPA Method 5 Determination of PM ₁₀ and PM _{2.5} Emissions from Stationary Sources (Constant Sampling Rate Procedure)
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 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.

END OF CONDITIONS

Schedule 1: Map

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

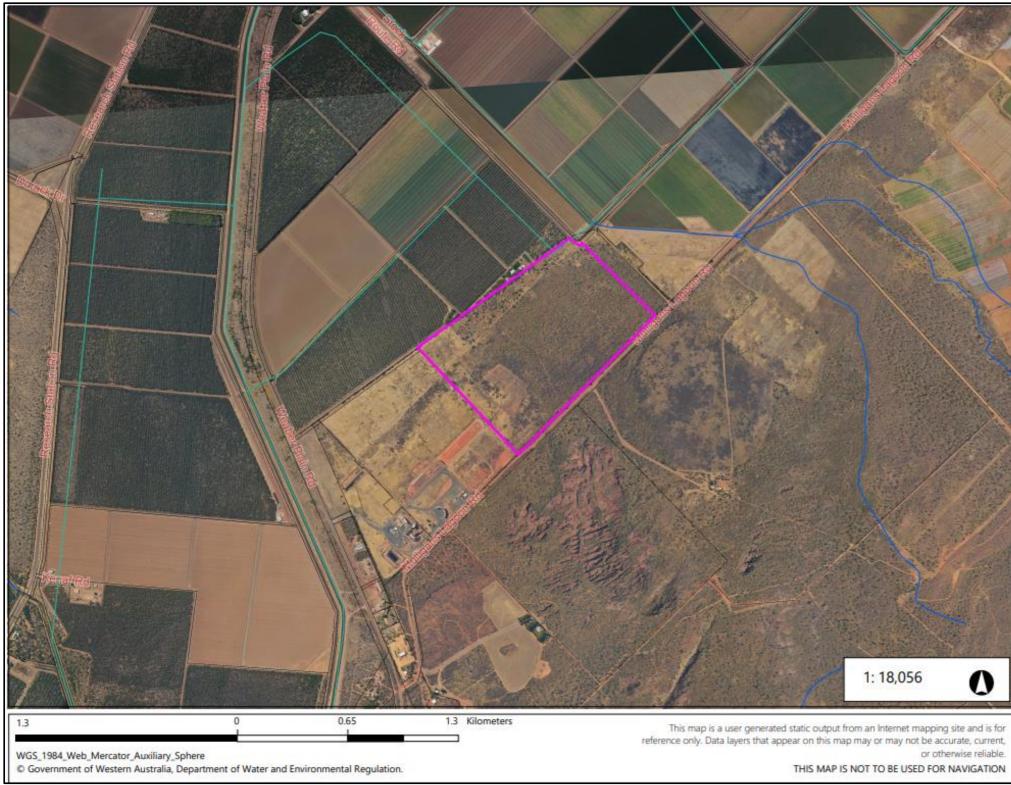


Figure 1: Map of the boundary of the prescribed premises outlined in pink

Gin building layout map

The gin building layout within the prescribed premises is shown in the map below (Figure 2).

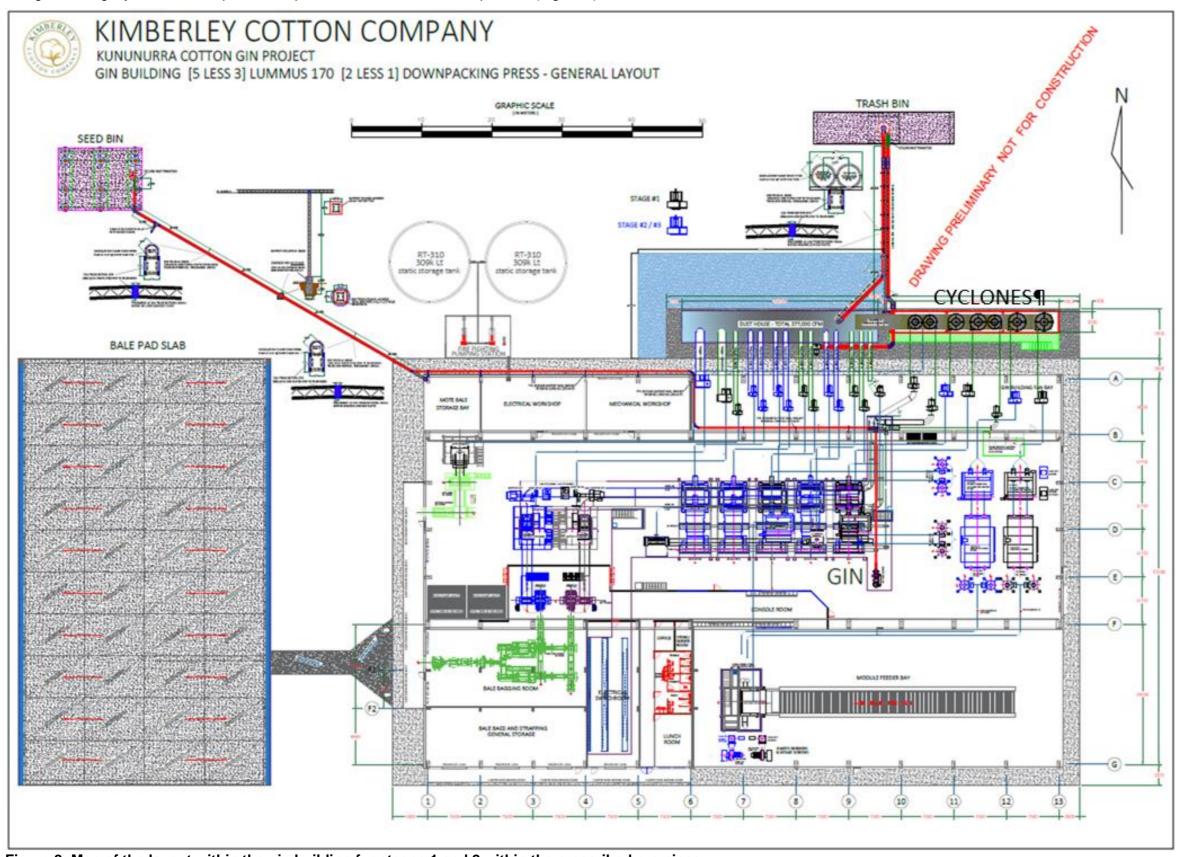


Figure 2: Map of the layout within the gin building for stages 1 and 2 within the prescribed premises

Site Layout map

The site layout of the prescribed premises is shown in the map below (Figure 3).

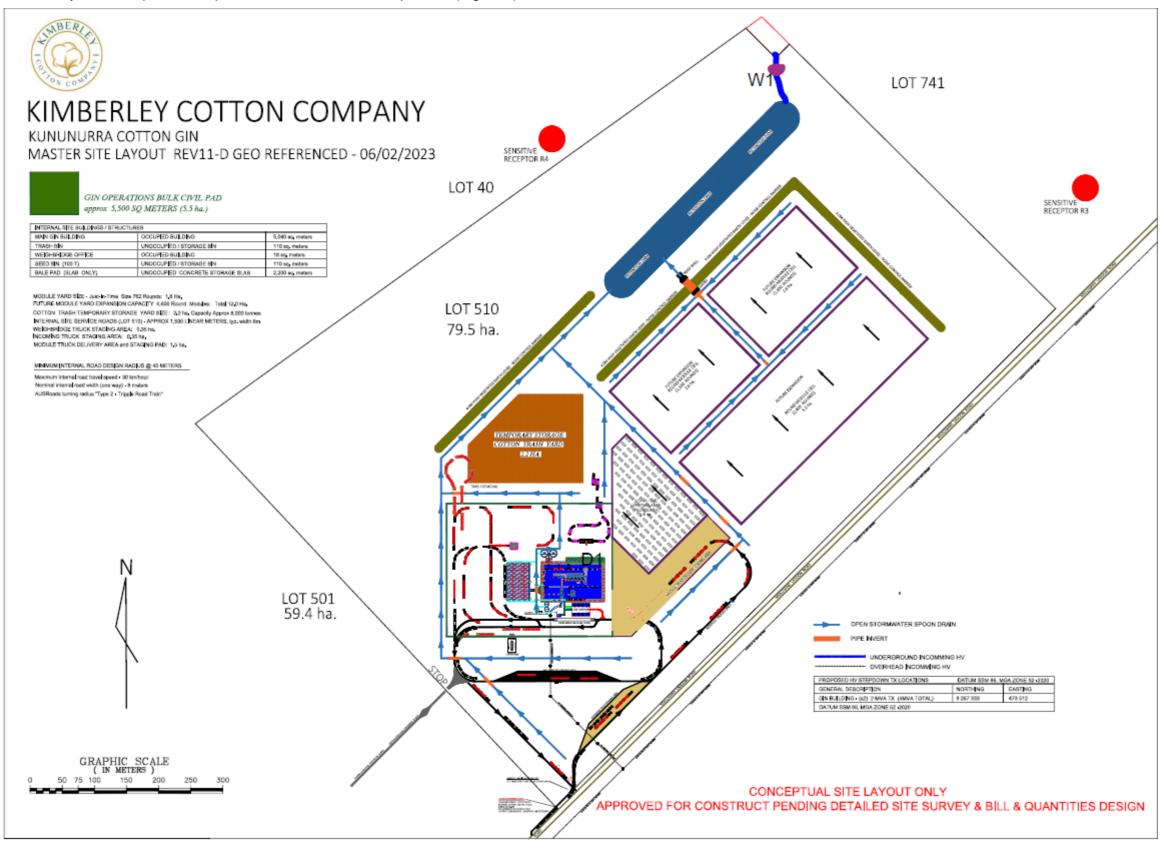


Figure 3: Map of the site layout, emission points and monitoring points within the prescribed premises