Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8199/2007/2
Licence holder	Chichester Metals Pty Ltd
ACN	109 264 262
Registered business address	Ground Floor 256 St Georges Terrace PERTH WA 6000
DWER file number	DWERVT15718 / INS-0001619
Duration	02/02/2012 to 03/02/2032
Date of amendment	12/12/2025
Premises details	Cloudbreak Iron Ore Mine Mining Tenements M45/1126, M46/401, M46/404, M46/405, M46/356, M46/402, M46/410, M46/411, M46/357, M46/453, M45/1128, M46/449, M46/452, M46/451, M46/454, M46/450, M45/1084, M45/1140, M45/1139, M45/1102, M45/1105, M45/1124, M45/1103, M45/1106, M45/1125, M45/1104, M45/1107, M45/1082, M45/1083, M45/1127, M45/1138, M45/1263, M45/1303, M46/403, M46/406, M46/407, M46/408, M46/409, M46/412, M46/413, M46/414, L46/46, L46/47, L46/48, L46/49, L46/51, L46/52, L46/57, L46/62, L46/64, L46/96, L46/99, L46/130, L45/152 and Exploration Leases E45/2498, E46/590, E46/612, E45/2499, E45/2652, E45/2497, E45/6960 MULGA DOWNS WA 6751 As depicted in Schedule 1, Figure 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	50,000,000 tonnes per annual period
Category 6: Mine dewatering	Maximum of 175,000,000 tonnes per annual period (reinjected)
Category 52: Electric power generation	50.6 megawatts
Category 54: Sewage facility	812 m^3/day
Category 57: Used tyre storage	2,000 tyres
Category 64: Class II putrescible landfill site	10,000 tonnes per annual period
Category 73: Bulk storage of chemicals, etc.	7,700.5 m^3
Category 77: Concrete batching or cement products manufacturing	55,000 tonnes per annum

This licence is granted to the Licence holder, subject to the attached conditions, on 12 December 2025, by:

Jarrod Abrahams Digitally signed by Jarrod Abrahams Date: 2025.12.12 11:26:06 +08'00'

MANAGER, RESOURCE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
02/02/2012	L8199/2007/2	Licence reissue.
09/08/2012	L8199/2007/2	Licence amendment to increase the capacity of category 6 from 25,000,000 tonnes per annum (tpa) to 48,000,000 tpa.
14/03/2013	L8199/2007/2	Licence amendment to increase the capacity of category 52, inclusion of category 73 and replacing category 89 with category 64.
18/07/2013	L8199/2007/2	Licence amendment to increase the capacity for category 6, 54 and 73 and removal of vegetation health monitoring requirements as regulated under Part IV of the Act.
28/11/2013	L8199/2007/2	Licence amendment to facilitate the construction and operation of additional mobile crushing and screening facilities, to include the monitoring of groundwater bores associated with the operation of the Brampton Phase 2 TSF and to lengthen the landfill tipping length.
16/04/2014	L8199/2007/2	Licence amendment to increase the capacity for category 6 from 85,000,000 tpa to 95,000,000 tpa for reinjection.
18/12/2014	L8199/2007/2	Licence amendment to increase category 6 from 95,000,000 tpa to 115,000,000 tpa for groundwater reinjection and increase category 73 from 6,132 m^3 to 7,700.5 m^3.
17/12/2015	L8199/2007/2	Licence amendment to modify the groundwater monitoring requirements for the bulk fuel facility, expand the prescribed premises boundary, update the landfill requirements, include two groundwater monitoring bores associated with the landfill, increase mine dewatering abstraction and reinjection from 115,000,000 tpa to 150,000,000 tpa and replace 18 of the power station gensets over the next 1 to 2 years and conversion to updated licence template.
29/04/2016	L8199/2007/2	Amendment to extend licence expiry date to 3 February 2032.
01/03/2017	L8199/2007/2	Licence amendment to include specific groundwater emission points and monitoring requirements, remove reference to the implementation of the *Cloudbreak Water Management Scheme*, changes to the landfill ambient groundwater monitoring, increase category 5 production capacity and removal of conditions that are not valid, enforceable or risk-based.
27/02/2018	L8199/2007/2	Amendment Notice 1 Licence amendment to include the construction and operation of the Norfolk and Kangaroo transfer ponds.
14/11/2018	L8199/2007/2	Licence amendment to construct and operate the Brampton Southern Strips In-Pit TSF, changes to the licence relating to category 52 and the premises boundary.
07/12/2018	L8199/2007/2	DWER initiated amendment to remove perchlorate ions from Table 3.6.1 for ambient groundwater monitoring at the TSF.
23/07/2019	L8199/2007/2	Licence amendment to allow the disposal of reverse osmosis reject water to be discharged to the existing Cloudbreak Camp irrigation area; and the inclusion of additional areas for the disposal of tyres and conveyor belts.

Date	Reference number	Summary of changes
3/06/2020	L8199/2007/2	Licence amendment to authorise new saline injection bores (Oakover aquifer), new groundwater monitoring bores, reduced TSF inspection frequency for Brampton Phase 3 TSF when not operational and to remove inactive monitoring bores.
16/12/2020	L8199/2007/2	Licence amendment for the following: • Construction of additional saline injection bores to assist with an anticipated increase in saline water injection from the dewatering of Bigge mining pits; • Revision of the saline injection pipeline sample point to allow for sufficient monitoring of the water quality of additional saline water is anticipated to be reinjected into the Oakover aquifer; • Construct a Bigge transfer and settlement pond to support the additional saline water abstracted from the Bigge mining pits; • Disposal of HDPE liner and piping into existing pits and waste dumps where tyres and conveyor belts are disposed of; • Updating the definitions of the Landfill Waste Classification and Waste Definitions 1996 as the definitions of 'Clean Fill' and a new definition of 'Uncontaminated Fill' have been included; • Changing the WWTP irrigation area to reflect the correct size the irrigation area; and • Removal of saline injection bores RP208, SRP209, SRP210, SRP211 and SRP212 as compliance documentation has been received.
01/04/2021	L8199/2007/2	Licence amendment for the following: • Construction and operation of an additional 81 reinjection bores; and • Extension to the saline pipeline. Licence reformatted into current Licence template with condition numbers modified.
21/07/2023	L8199/2007/2	Licence amendment for the following: • Rename the existing "Bigge Transfer Pond" to "Garden Transfer Pond 1"; • Include the existing CBCC Saline Transfer Pond that was constructed in 2014; • Include the installation of multiple additional spigots at Brampton TSF; • Include additional dewatering infrastructure to equip additional bores required at the existing saline infrastructure due to new point source emissions required to groundwater table; and • Additional 250 EP WWTP at the Cloudbreak West Village to support the accommodation of personnel adjacent to the Bigge Mining area.
26/08/2024	L8199/2007/2	Licence amendment for the following: • Increase Brampton in-pit TSF maximum tailings elevation deposition point from the existing 423 m RL to 426.7 m RL; • Increase the maximum groundwater reinjection limit from 150 gigalitres (GL) per annum to the 175 GL per annum; and • Addition of prescribed premises category 77 (concrete batching) to allow concrete batching/cement products manufacturing up to 55,000 tonnes per annum for use on projects both within and outside the prescribed premises.

Date	Reference number	Summary of changes
12/12/2025	L8199/2007/2	Licence amendment for the expansion of the saline reinjection network to include approximately 20 km of new reinjection pipeline and 81 new saline injection bores (SRP397 to SRP477).

Interpretation

In this licence:

(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 licence:

  (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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

Infrastructure and equipment

1. The Licence Holder must ensure that all pipelines or sections of pipelines containing tailings and high risk saline pipelines (as depicted in Schedule 1, Figure 2) are:

(a) either equipped with telemetry; or

(b) equipped with automatic cut-outs in the event of a pipe failure; or

(c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

2. The Licence Holder must ensure that waste material is only stored and/or treated within vessels or compounds listed in Table 1 and identified in Schedule 1, Figure 14 and Figure 15, in accordance with the requirements specified within Table 1.

Table 1: Containment infrastructure

Storage vessel or compound	Material	Requirements
TSFs	Tailings	• Maintain a minimum 0.5 m freeboard in addition to capacity to contain a 1 in 100 year storm event over 72 hours from the operational pond surface to lowest elevation of perimeter embankment; and • Visual markers installed at the deposition ramp for freeboard monitoring. <u>Brampton In-Pit TSF</u> • Maximum operating level of 418.1 m RL; and • Maximum tailings elevation at deposition point 426.7 m RL. **Tailings Deposition Pipeline** • Multiple disposal points; and • Deposition pipe extended at least 10-15 m away from the northern boundary wall. **Tailings Delivery Pipelines** • Constructed of HDPE and/or steel; • All pipeline routes to follow existing road networks and pipeline corridors, where possible; • Flow meters installed at the start and near the end of the deposition pipelines (or as close to the end as operationally possible); and • Pressure sensors installed along deposition pipelines.
Settlement ponds	Water	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200 mm.
Transfer ponds	Saline water	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200 mm.
Sumps at Bulk Fuel Facilities	Potentially hydrocarbon contaminated stormwater	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200 mm for structures which are over 1,000 mm in depth.

Storage vessel or compound	Material	Requirements
Heavy vehicle wash down facility treated oily water storage ponds	Potentially hydrocarbon contaminated treated wastewater from oily water separators	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200 mm.
Jacanas WWTP treatment tanks	Wastewater	• Minimum vertical freeboard of 300 mm.

3. The Licence Holder must:

(a) undertake inspections as detailed in Table 2;

(b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and

(c) maintain a record of all inspections undertaken.

Table 2: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Tailings delivery pipelines	Visual integrity	Daily whilst operational
Tailings decant water return pipelines	Visual integrity	Daily whilst operational
Tailings storage facility embankment freeboard	Visual to confirm required freeboard capacity is available	Daily whilst operational and within 24 hours of a significant rainfall event when access permits; OR Fortnightly whilst not operational and within 24 hours of a significant rainfall event when access permits.
Saline injection infrastructure (transfer ponds and pipelines)	Visual integrity	Daily
Bulk fuel facility	Leak detection system to identify potential leaks	Daily

4. The Licence Holder must undertake an annual water balance for the TSFs. The water balance shall as a minimum consider the following:

(a) site rainfall;

(b) evaporation;

(c) tailings return water recovery volumes;

(d) seepage recovery volumes; and

(e) volumes of tailings deposited.

5. The Licence Holder must ensure that where wastes produced on the premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 3.

Table 3: Management of waste[1, 2, 3]

Waste type	Management strategy	Requirements
Sewage	Biological, physical and chemical treatment	812 m^3/day cumulatively.
Inert Waste Type 1 Putrescible Waste Clean Fill Uncontaminated Fill	Receipt, handling and disposal of waste by landfilling Clean Fill and Uncontaminated Fill landfilling into waste rock materials or completed mining voids and/or waste rock dumps	<u>All waste types</u> • No more than 10,000 tonnes per year of all waste types cumulatively shall be disposed of by landfilling; • Disposal of waste by landfilling must only take place within the landfill area as shown in Schedule 1, Figure 3; and • Landfilling of Clean Fill and Uncontaminated Fill must only take place within waste rock materials or completed mining voids and/or waste rock dumps shown in Schedule 1, Figure 4.
Contaminated Solid Waste meeting the acceptance criteria for Class I or II landfills as detailed in the Landfill Definitions	Receipt, handling and disposal of waste by landfilling	• Disposal of steel, untreated timber and concrete in mining voids and waste rock facilities must only occur at the locations shown in Schedule 1, Figure 4; • Waste must be placed in a defined trench or within an area enclosed by earthen bunds; • The active tipping area must be restricted to a maximum linear length of 100 m; and • Construction, operation and decommissioning of landfill cells can occur within the defined landfill area providing there is no waste within: ➢ 50 m of any surface water body; and ➢ 3 m of the highest level of the water table aquifer.
Inert Waste Type 2 (HDPE liner, HDPE piping, used tyres and conveyor belts)	Storage	• Not more than 2,000 used tyres shall be stored at the premises at any one time; • Used tyre stacks must not exceed 500 tyres per stack and 5 m in height; • Used tyre stacks are to be stored no less than 6 m from any other tyre stacks; and • The waste tyre stockpiles must not exceed 1,000 m^3 in area.
	Burial in waste rock materials or completed mining voids and/or waste rock dumps	• Tyres must be placed in cells of less than 1,000 tyres; • Cover of at least 1 m of waste rock must be placed over each cell; • Landfilling of HDPE liner, HDPE piping, tyres and conveyor belts must only take place within the Pits and Waste Rock Dumps shown in Schedule 1, Figure 4; and • Cell locations where HDPE liner, HDPE piping, tyres and conveyor belts are to be buried must be surveyed and the latitude and longitude recorded.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations1987*.
Note 2: Additional requirements for the acceptance and landfilling of Controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.
Note 3: Clean Fill and Uncontaminated Fill can be used as cover for landfill capping.

6. The Licence Holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 4 and that sufficient stockpiles of cover are maintained on site at all times.

Table 4: Cover requirements[1]

Waste Type	Material	Depth	Timescales
Putrescible waste	Inert and incombustible material	300 mm	As soon as practicable, but at least weekly, after deposit
All waste		1,000 mm	Within three months of the final waste load in each trench

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

7. The Licence Holder must ensure that windblown waste is maintained within the landfill area and that windblown waste outside the landfill area is collected on at least a monthly basis and returned to the active tipping area.

8. The Licence Holder must construct and/or install the infrastructure listed in Table 5, in accordance with:

(a) the corresponding design and construction requirement / installation requirement; and

(b) at the corresponding infrastructure location,

as set out in Table 5.

Table 5: Design and construction/installation requirements

Infrastructure	Requirements (Design and construction)	Infrastructure location
Bigge saline injection bores SRP213, SRP217, SRP231, SRP232, SRP233, SRP234, SRP237 Bigge and Garden saline injection bores SRP248, SRP249, SRP250, SRP251, SRP252, SRP253, SRP254, SRP255, SRP256, SRP258, SRP259, SRP260, SRP261, SRP264, SRP265, SRP267, SRP268, SRP269, SRP270, SRP271, SRP272, SRP273, SRP274, SRP275, SRP276, SRP277, SRP278, SRP279, SRP280, SRP281, SRP282, SRP283, SRP284, SRP285, SRP286, SRP287, SRP288, SRP289, SRP290, SRP292, SRP294, SRP295, SRP297, SRP298, SRP300, SRP301, SRP302, SRP303, SRP304, SRP305, SRP306, SRP307, SRP308, SRP309, SRP310, SRP311, SRP312, SRP313, SRP314, SRP315, SRP316, SRP318, SRP320,	• Must be installed for the purpose of targeted reinjection of saline groundwater into the Oakover aquifer. • Downhole flow control valves, flow meters, pressure gauges must be installed. • Installation survey: The vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor. • Well network map: a well location map (using aerial image overlay) must be prepared and must include the location of all monitoring wells in the monitoring network and their respective identification numbers.	Within the Proposed Saline Injection Expansion Envelope as shown in Schedule 1, Figure 2

Infrastructure	Requirements (Design and construction)	Infrastructure location
SRP328, SRP337, SRP338, SRP339, SRP341, SRP347, SRP354, SRP355, SRP357, SRP358, SRP360, SRP361, SRP362, SRP363, SRP366 SRP369, SRP396, SRP397, SRP398, SRP399, SRP400, SRP401, SRP402, SRP403, SRP404, SRP405, SRP406, SRP407, SRP408, SRP409, SRP410, SRP411, SRP412, SRP413, SRP414, SRP415, SRP416, SRP417, SRP418, SRP419, SRP420, SRP421, SRP422, SRP423, SRP424, SRP425, SRP426, SRP427, SRP428, SRP429, SRP430, SRP431, SRP432, SRP433, SRP434, SRP435, SRP436, SRP437, SRP438, SRP439, SRP440, SRP441, SRP442, SRP443, SRP444, SRP445, SRP446, SRP447, SRP448, SRP449, SRP450, SRP451, SRP452, SRP453, SRP454, SRP455, SRP456, SRP457, SRP458, SRP459, SRP460, SRP461, SRP462, SRP463, SRP464, SRP465, SRP466, SRP467, SRP468, SRP469, SRP470, SRP471, SRP472, SRP473, SRP474, SRP475, SRP476, SRP477		
Garden Transfer Pond 2	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200 mm.	Schedule 1, Figure 15 and 18
Garden Mining Pits Pipelines Eastern and Central Cloudbreak Pipeline Extension Bigge Mining Pit Pipelines	• Either equipped with telemetry; or • Equipped with automatic cut-outs in the event of a pipe failure; or • Provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.	Schedule 1, **Error! Reference source not found.**
Cloudbreak West Village Camp WWTP	• Capacity 87.5 m^3/day, plus 30 m^3/day reverse osmosis reject water; • Influent Screening and Flow Balancing; • Anoxic tank; • Aeration/Decant (A/D) Tank; • Effluent Tank; • Reverse Osmosis Brine Tank; • Overflow piping is installed on the balance tank, anoxic tank, aeration/decant tank, and effluent tank with WWTP tank high-level alarm	Schedule 1, Figures 16 and 17

Infrastructure	Requirements (Design and construction)	Infrastructure location
	activated before overflow into the containment lagoon; • Overflow Lagoon with storage capacity of 200,000 L, equivalent to more than two days storage of influent sewage from a fully occupied village; • Waste sludge storage/thickening tank; • Design effluent quality criteria: ➢ pH 6.8 – 8.5 pH units; ➢ Biochemical Oxygen Demand <20 mg/L; ➢ Total Suspended Solids <30 mg/L; ➢ Total Nitrogen <30 mg/L; ➢ Total Phosphorus <10 mg/L; ➢ *E.coli* <1,000 cfu/100mL; and ➢ Free Chlorine 0.2 – 2.0 mg/L; • Main tanks have an overflow pipe installed and plumbed to a below-ground spill containment pond. The WWTP compound is surrounded by an earthen bund designed to contain any potential spills and direct it to the spill containment pond; and • Installed on the compact ground to control the unplanned release of wastewater.	
Cloudbreak West Village Camp WWTP Irrigation Area	• 3.0 hectares; • Fenced with warning signage preventing unauthorised entry fixated around the perimeter of the fence; • Maximum design Total Nitrogen and Total Phosphorus loading rates: ➢ Total Nitrogen 480 kg/ha/yr; and ➢ Total Phosphorus 120 kg/ha/yr; and • Stormwater diverted away from the irrigation area by diversion drains and bunding.	Schedule 1, Figure 18
Concrete batching plant	• Water cart used to manage dust during construction and operation, • Diversion structures including bunds, channels, and drains must be installed prior to commencement of construction activities to divert clean surface water flows around work areas and stockpiles; • Plant located a minimum 50 m away from major surface water bodies; • Fitted with a dedicated spray water system to aggregate storage areas, consisting of multiple sprinklers positioned and operated to ensure full coverage to minimise dust during	Schedule 1, Figure 19

Infrastructure	Requirements (Design and construction)	Infrastructure location
	operation; • Sediment basins installed to capture and manage stormwater in the work area; and • Storage areas for chemicals and hydrocarbons to be constructed with bunds and containment for spills.	

9. The Licence Holder must operate the infrastructure listed in condition 8 in accordance with the conditions of this Licence, once the design and construction requirements specified in condition 8 have been met[1].

Note 1: corresponding compliance reporting requirements are specified in condition 28.

Emissions and discharges

Authorised discharge points for emissions

10. The Licence Holder must ensure that where waste is emitted to air from the emission points in Table 6, it is done so in accordance with the conditions of this Licence.

Table 6: Emission points to air

Emission point reference as depicted in Schedule 1, Figure 10	Emission point	Emission point height (m)	Source, including any abatement
A1 – A23	23 x 2.2 MW diesel gensets	9.4	Diesel fired genset engine; low sulphur diesel fuel
A24 – A26	3 x 1.6 MW emergency back-up diesel gensets	5.2	

11. The Licence Holder must ensure that where waste is emitted to surface water from the nominated contingency discharge points in Table 7, it is done so in accordance with the conditions of this Licence.

Table 7: Point source emissions to surface water

Emission point reference as depicted in Schedule 1, Figure 11	Description	Source including abatement
DP02_West DP12_East DP13_OPF	Contingency discharge of mine dewater in the event that reuse, reinjection, in pit disposal and temporary storage are not available or have been exhausted.	Mine dewater

12. The Licence Holder must ensure that where waste is emitted to groundwater from the emission points in Table 8, it is done so in accordance with the conditions of this Licence.

Table 8: Point source emissions to groundwater

Emission point reference and location-	Description	Source including abatement
Brackish Injection Bores HSB36, HSB37, HSB38, HSB39, HSB40, HSB41, LHP01, LHP02, LHP03, LHP04, HSB01, HSB01R, HSB02BR, HSB02B, HSB34, HSB22, HSB05, HSB07, HSB04A, HSB09, HSB08A, HSB07R At the locations shown in Schedule 1, Figures 5 and 6	Direct injection below ground into the Marra Mamba formation. When connected to an active injection line, downhole flow control valves, flow meters, pressure gauges must be maintained.	Water from mine dewatering
Saline Injection Bores SRP203, SRP204, SRP205, SRP206, SRP207, SRP190, SRP191, SRP192, SRP193, SRP194, SRP195, SRP196, SRP201, SRP202, SRP187, SRP173, SRP174, SRP175, SRP176, SRP165, SRP166, SRP167, SRP168, SRP169, SRP170, SRP119, SRP120, SRP121, SRP67, SRP68, SRP69, SRP37R, SRP38R, SRP39R, SRP40R, SRP41R, SRP42R, SRP43R, SRP44R, SRP45R, SRP84, SRP85, SRP86, SRP87, SRP88, SRP89, SRP90, SRP91, SRP92, SRP93, SRP70, SRP71, SRP72, SRP73, SRP74, SRP75, SRP76, SRP77, SRP78, SRP79, SRP10, SRP11, SRP13, SRP15, SRP16, SRP17, SRP07R, SRP08R, INJ01, INJ01R, SRP83R, SRP46, SRP47, SRP48, SRP19, SRP20, SRP110, SRP111, SRP112, SRP113, SRP114, SRP115, SRP116, SRP101, SRP103, SRP104, SRP105, SRP106, SRP107, SRP108, SRP57r, SRP21R, SRP82, SRP81, SRP14R, SRP28R, SRP26R, SRP30R, SRP49, SRP50, SRP51, SRP52, SRP53, SRP54, SRP55, SRP56, SRP57, SRP58, SRP23R, SRP158, SRP32R, SRP145, SRP36, SRP147, SRP159, SRP160, SRP161, SRP162, SRP163, SRP34, SRP136, SRP137, SRP138, SRP151, SRP152, SRP153, SRP154, SRP155, SRP156, SRP59, SRP60, SRP61, SRP62, SRP63, SRP64, SRP96, SRP97, SRP98, SRP99, SRP208, SR209, SR210, SRP211, SRP212, SRP213, SRP214, SRP215R, SRP216, SRP217, SRP218, SRP219, SRP220, SRP221, SRP222, SRP223, SRP224, SRP225, SRP226, SRP227, SRP228, SRP229, SRP230, SRP231, SRP232, SRP233, SRP234, SRP235, SRP236, SRP237, SRP238, SRP239, SRP240, SRP241, SRP242, SRP243, SRP244, SRP245, SRP246, SRP247, SRP248, SRP249, SRP250, SRP251, SRP252, SRP253, SRP254, SRP255, SRP256, SRP257, SRP258, SRP259, SRP260, SRP261, SRP262, SRP263, SRP264, SRP265, SRP266, SRP267, SRP268, SRP269, SRP270, SRP271, SRP272, SRP273, SRP274, SRP275, SRP276, SRP277, SRP278, SRP279, SRP280, SRP281, SRP282, SRP283, SRP284, SRP285, SRP286, SRP287, SRP288, SRP289, SRP290, SRP291, SRP292, SRP293, SRP294, SRP295, SRP296, SRP297, SRP298, SRP299, SRP300, SRP301, SRP302, SRP303, SRP304,	Direct injection below ground into the Oakover aquifer. When connected to an active injection line, downhole flow control valves, flow meters, pressure gauges must be maintained.	Water from mine dewatering

Emission point reference and location-	Description	Source including abatement
SRP305, SRP306, SRP307, SRP308, SRP309, SRP310, SRP311, SRP312, SRP313, SRP314, SRP315, SRP316, SRP317, SRP 318, SRP319, SRP320, SRP321, SRP322, SRP323, SRP324, SRP325, SRP326, SRP327, SRP328, SRP329, SRP330, SRP331, SRP332, SRP333, SRP334, SRP335, SRP336, SRP337, SRP338, SRP339, SRP340, SRP341, SRP342, SRP343, SRP344, SRP345, SRP346, SRP347, SRP348, SRP349, SRP350, SRP351, SRP352R, SRP353, SRP354, SRP355, SRP356, SRP357, SRP358, SRP359, SRP360, SRP361, SRP362, SRP363, SRP364, SRP365, SRP366, SRP367, SRP368, SRP369, SRP370, SRP371, SRP372, SRP373, SRP374, SRP375, SRP376, SRP377, SRP378, SRP379, SRP380, SRP381, SRP382, SRP383, SRP384, SRP385, SRP386, SRP387R, SRP388, SRP389, SRP390, SRP391, SRP392, SRP393, SRP394, SRP395, SRP396, SRP397, SRP398, SRP399, SRP400, SRP401, SRP402, SRP403, SRP404, SRP405, SRP406, SRP407, SRP408, SRP409, SRP410, SRP411, SRP412, SRP413, SRP414, SRP415, SRP416, SRP417, SRP418, SRP419, SRP420, SRP421, SRP422, SRP423, SRP424, SRP425, SRP426, SRP427, SRP428, SRP429, SRP430, SRP431, SRP432, SRP433, SRP434, SRP435, SRP436, SRP437, SRP438, SRP439, SRP440, SRP441, SRP442, SRP443, SRP444, SRP445, SRP446, SRP447, SRP448, SRP449, SRP450, SRP451, SRP452, SRP453, SRP454, SRP455, SRP456, SRP457, SRP458, SRP459, SRP460, SRP461, SRP462, SRP463, SRP464, SRP465, SRP466, SRP467, SRP468, SRP469, SRP470, SRP471, SRP472, SRP473, SRP474, SRP475, SRP476, SRP477 At the locations shown in Schedule 1, Figures 5, 6, 7 and 8 OR Within the Proposed Saline Injection Expansion Envelope as shown in Schedule 1, Figure 2		

13. The Licence Holder must ensure that where waste is emitted to land from the emission points in Table 9, it is done so in accordance with the conditions of this Licence.

Table 9: Emissions to land

Emission point reference and location	Description	Source including abatement
L1 Cloudbreak Camp irrigation area As shown in Schedule 1, Figure 10	Pipe feeding irrigation area of 20.05 hectares	Treated wastewater from Cloudbreak Camp WWTP and reverse osmosis reject water.
L2 Cloudbreak West Village irrigation area As shown in Schedule 1, Figure 18	Pipe feeding irrigation area of 3 hectares	Treated wastewater from Cloudbreak West Village WWTP and reverse osmosis reject water.

Monitoring

General monitoring

14. The Licence Holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;

(c) all surface water sampling is conducted in accordance with AS/NZS 5667.6;

(d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

(e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

15. The Licence Holder must ensure that:

(a) monitoring is undertaken in each weekly period such that there are at least 4 days in between the days on which samples are taken in successive weeks;

(b) monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months;

(c) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters;

(d) monitoring is undertaken in each six-monthly period such that there are at least 5 months in between the days on which samples are taken in successive periods of six months; and

(e) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years.

16. The Licence Holder must ensure that all monitoring equipment is operated and calibrated in accordance with the manufacturer's specifications.

Discharge point monitoring

17. The Licence Holder must undertake the monitoring in Table 10 according to the specifications in that Table.

Table 10: Monitoring of point source emissions to surface water

Monitoring location	Parameter	Limit	Units	Frequency
DP02_West DP12_East DP13_OPF As shown in Schedule 1, Figure 11	Electrical Conductivity	15,000	µS/cm	1) 30 minutes following commencement of discharge; and 2) 24 hourly intervals thereafter during the duration of contingency discharge.
	Turbidity	100	NTU	
	Cumulative water meter readings	-	m^3	1) Prior to discharge event at the designated discharge point; and 2) 24 hourly intervals for the duration of the contingency discharge.

18. The Licence Holder must undertake the monitoring in Table 11 according to the specifications in that Table.

Table 11: Monitoring of point source emissions to groundwater

Monitoring location	Parameter	Units	Frequency
Each saline and brackish reinjection emission point referenced in Table 8	Volume	GL/a	Annually
Hillside West[2] SP0021_HSW_INJ Brampton Saline[3] SP0139_BRP_SINJ Long Saline[3] SP0023_LON_SINJ SP0024_LON_SINJ SP0025_LON_SINJ SP0026_LON_SINJ SP0126_LOO_SINJ SP0127_LOO_SINJ Kangaroo Saline[3] SP0029_KAN_SINJ SP0030_KAN_SINJ Norfolk Saline[3] SP0028_NOR_SINJ Bigge Saline[3] SP0032_BIG_SINJ SP0033_BIG_SINJ SP0034_BIG_SINJ Garden Saline[3] SP0035_GAR_SINJ	pH[1]	pH units	Six monthly
	Electrical Conductivity	µS/cm	
	Total Dissolved Solids	mg/L	
	Total Suspended Solids	mg/L	
	Major cations and anions Sodium Potassium Calcium Magnesium Chloride Alkalinity Sulfate Nitrate	mg/L	
	Metals, Metalloids and Non-metals Aluminium Antimony Arsenic Beryllium Boron Cadmium Chromium Cobalt Copper Iron Manganese Mercury Nickel		

Monitoring location	Parameter	Units	Frequency
As shown in Schedule 1, Figure 9	Lead Selenium Silver Zinc		

Note 1: In-field non-NATA accredited analysis permitted.
Note 2: Sampling at monitoring location SP0021_HSW_INJ only required when reinjection of brackish water occurring.
Note 3: Sampling at saline monitoring locations (Brampton, Long, Kangaroo, Norfolk, Garden and Bigge Saline) only required when reinjection of saline water occurring.

19. The Licence Holder must undertake the monitoring in Table 12 according to the specifications in that table.

Table 12: Monitoring of emissions to land

Monitoring location	Parameter	Units	Frequency
L1 Cloudbreak Camp WWTP final effluent tank	Volumetric flow rate of effluent discharged to irrigation	m^3/day	Monthly
	Volumetric flow rate of effluent discharged to dust suppression	m^3/day	
	Biochemical Oxygen Demand	mg/L	Quarterly
	Total Suspended Solids	mg/L	
	Total Dissolved Solids	mg/L	
	pH[1]	pH units	
	Total Nitrogen	mg/L	
	Total Phosphorus	mg/L	
	E. coli	cfu/100mL	
L2 Cloudbreak West Village WWTP final effluent tank	Volumetric flow rate of effluent discharged to irrigation	m^3/day	Monthly
	Volumetric flow rate of reverse osmosis reject water discharged to irrigation	m^3/day	
	Biochemical Oxygen Demand	mg/L	Quarterly
	Total Suspended Solids	mg/L	
	Total Dissolved Solids	mg/L	
	pH[1]	pH units	
	Total Nitrogen	mg/L	
	Total Phosphorus	mg/L	
	E. coli	cfu/100 mL	

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

Process monitoring

20. The Licence Holder must undertake the monitoring in Table 13 according to the specifications in that table.

Table 13: Process monitoring

Emission point reference	Monitoring point location	Parameter	Limit	Units	Frequency
Heavy vehicle washdown facility oily water treatment ponds	Final treated wastewater pond prior to reuse for dust suppression	Volumetric flow rate	-	m^3/day	Monthly
		Total Recoverable Hydrocarbons	15	mg/L	
		Total Dissolved Solids	-	mg/L	

Ambient monitoring

21. The Licence Holder must undertake the monitoring in Table 14 according to the specifications in that table.

Table 14: Monitoring of ambient groundwater quality

Monitoring point reference and location[2]	Parameter	Units	Limit	Averaging period	Frequency
Landfill monitoring bores					
Existing: MW02 MW03 MW04 MW16 MW17 To be constructed[3]: MW5 MW6 MW7 MW8 As shown in Schedule 1, Figure 3	Standing Water Level	mbgl	-	Spot sample	Six monthly
	pH[1]	pH units	-		
	Electrical Conductivity[1]	µS/cm	-		
	Total Recoverable Hydrocarbons	mg/L	-		
	Metals, Metalloids and Non- metals Arsenic Cadmium Chromium Copper Mercury Lead Nickel Zinc Nitrate Phosphate		-		
Brampton In-Pit TSF monitoring bores					
MDMW01 HSMB10A_S LNP02 LNP03 LNP04 BRM21 BRM39	Standing Water Level	mbgl	4	Spot sample	Six monthly
	pH[1]	pH units	-		
	Electrical Conductivity[1]	µS/cm	-		
	Total Dissolved Solids	mg/L	-		
	Major cations and anions Sodium Potassium Calcium	mg/L	-		

Monitoring point reference and location[2]	Parameter	Units	Limit	Averaging period	Frequency
As shown in Schedule 1, Figure 12	Magnesium Chloride Alkalinity Sulfate Nitrate Ammonia				
	Metals, Metalloids and Non-metals Aluminium Arsenic Antimony Beryllium Boron Cadmium Chromium Cobalt Copper Iron Lead Manganese Mercury Nickel Selenium Silver Thallium Zinc	mg/L	-		
Mine dewater reinjection					
HSMB20_D SRM22 SRM25 SRM43_D SRM48_D As shown in Schedule 1, Figure 13	Standing Water Level	mbgl	-	Spot sample	Six monthly
	pH[1]	pH units	-		
	Electrical Conductivity[1]	µS/cm	-		
	Total Dissolved Solids	mg/L	-		
	Major cations and anions Sodium Potassium Calcium Magnesium Chloride Alkalinity Sulfate Nitrate		-		
	Metals, Metalloids and Non-metals				

Monitoring point reference and location[2]	Parameter	Units	Limit	Averaging period	Frequency
	Aluminium Antimony Arsenic Beryllium Boron Cadmium Chromium Cobalt Copper Iron Manganese Mercury Nickel Lead Selenium Silver Zinc				

Note 1: In-field non-NATA accredited analysis permitted.
Note 2: No sample required if bore is dry.'
Note 3: To be monitored, once constructed.

Records and reporting

22. The Licence Holder must maintain accurate and auditable books that include the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) the works conducted in accordance with condition 8 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 8 of this licence;

(d) monitoring programmes undertaken in accordance with condition 17, condition 18, condition 19, condition 20 and condition 21 of this licence; and

(e) complaints received under condition 24 of this licence.

23. The books specified under condition 22 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 Licence Holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

24. The Licence Holder must record the following information in relation to complaints received by the Licence Holder (whether received directly from a complainant or forwarded to them by the Department of 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 Licence Holder to investigate or respond to any complaint.

25. The Licence Holder must:

(a) prepare an Environmental Report that provides information in accordance with Table 15 for the preceding annual period; and

(b) submit that Environmental Report to the CEO by 31 March each year.

Table 15: Environmental reporting requirements

Condition or table (if relevant)	Requirement	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 4	Annual water balance	None specified
Condition 5, Table 3	Location of HPDE liner, HDPE piping, tyre and conveyor belt disposal areas	Map and grid coordinates
Condition 10, Table 6	Average percentage sulphur content of diesel fuel used	None specified
Condition 13, Table 9	L1 Cloudbreak Camp irrigation area – representative photographs of the irrigation area, summary of vegetation health and weed management implemented during reporting period L2 Cloudbreak West Village irrigation area – representative photographs of the irrigation area, summary of vegetation health and weed management implemented during reporting period	None specified
Condition 17, Table 11	Contingency discharge monitoring	None specified
Condition 18, Table 11	Groundwater reinjection monitoring and a comparison of results against background water quality and/or established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to deviations from background water quality and/or trigger exceedances	None specified
Condition 19, Table 12	Monitoring of emissions to land and interpretation of results against plant design specifications	None specified

Condition or table (if relevant)	Requirement	Format or form
Condition 20, Table 13	Process monitoring results and interpretation of results	None specified
Condition 21, Table 14	Ambient groundwater monitoring and a comparison of results against background water quality and established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to deviations from background water quality and/or trigger exceedances	None specified
Condition 24	Complaints summary	None specified

26. The Licence Holder must ensure that the Environmental Report also contains:

(a) an assessment of the information contained within the report against previous monitoring results and Licence limits; and

(b) a list of any original monitoring reports submitted to the Licence Holder from third parties for the annual period and make these reports available on request.

27. The Licence Holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO an Annual Audit Compliance Report for that period in the approved form by 31 March each year.

28. The Licence Holder must ensure that the conditions listed in Table 16 are notified to the CEO in accordance with the notification requirements of the table.

Table 16: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
Condition 5, Table 3 Condition 17, Table 10 Condition 20, Table 13	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable.	N1
Condition 8	The Licence Holder must submit a compliance document to the CEO, following the construction and/or installation of an item of infrastructure or equipment required by condition 8, Table 5. The compliance document/s must: (a) be certified by a suitably qualified engineer and certify that the works were constructed in accordance with the construction requirements specified in condition 8, Table 5;	Submitted quarterly, by the last day of the following month.	None specified

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
	(b) include plans for each item of infrastructure or component(s) thereof (as constructed) specified in condition 8; and (c) be signed by a person authorised to represent the Licence Holder and contain the printed name and position of that person within the company		
Condition 11, Table 7	Contingency discharge	Within 3 days of cessation of the discharge; and including results from the monitoring required under condition 17 Table 10	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act
Note 2: Forms are in Schedule 2

Definitions

In this licence, the terms in Table 17 have the meanings defined.

Table 17: Definitions

Term	Definition
ACN	Australian Company Number.
AHD	Australian Height Datum.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 January to 31 December in the same year.
AS/NZS 5667.1'	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 Water Quality – Sampling – Guidance on sampling of rivers and streams.
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
cfu/100 mL	means colony-forming units per 100 millilitres.
Clean Fill	has the meaning defined in the Landfill Definitions.
controlled waste	has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
DWER	means Department of Water and Environmental Regulation.
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.

Term	Definition
GL/a	means gigalitres per annum.
HDPE	means high density polyethylene.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
Landfill Definitions	means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
mbgl	means metres below ground level.
MW	means megawatts.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
NTU	means Nephelometric Turbidity Units.
premises	refers to 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 licence.
prescribed premises	has the same meaning given to that term under the EP Act.
putrescible waste	has the meaning defined in the Landfill Definitions.
quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December.
RL	means Reduced Level.
RTU	means Remote Telemetry Units.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
six monthly	means the 2 inclusive periods from 1 January to 30 June and 1 July to 31 December.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TSFs	means Tailings Storage Facilities.
Uncontaminated Fill	has the meaning defined in the Landfill Definitions.
µS/cm	means microsiemens per centimetre.
waste	has the same meaning given to that term under the EP Act.
WWTP	means wastewater treatment plant.

END OF CONDITIONS

Schedule 1: Maps

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

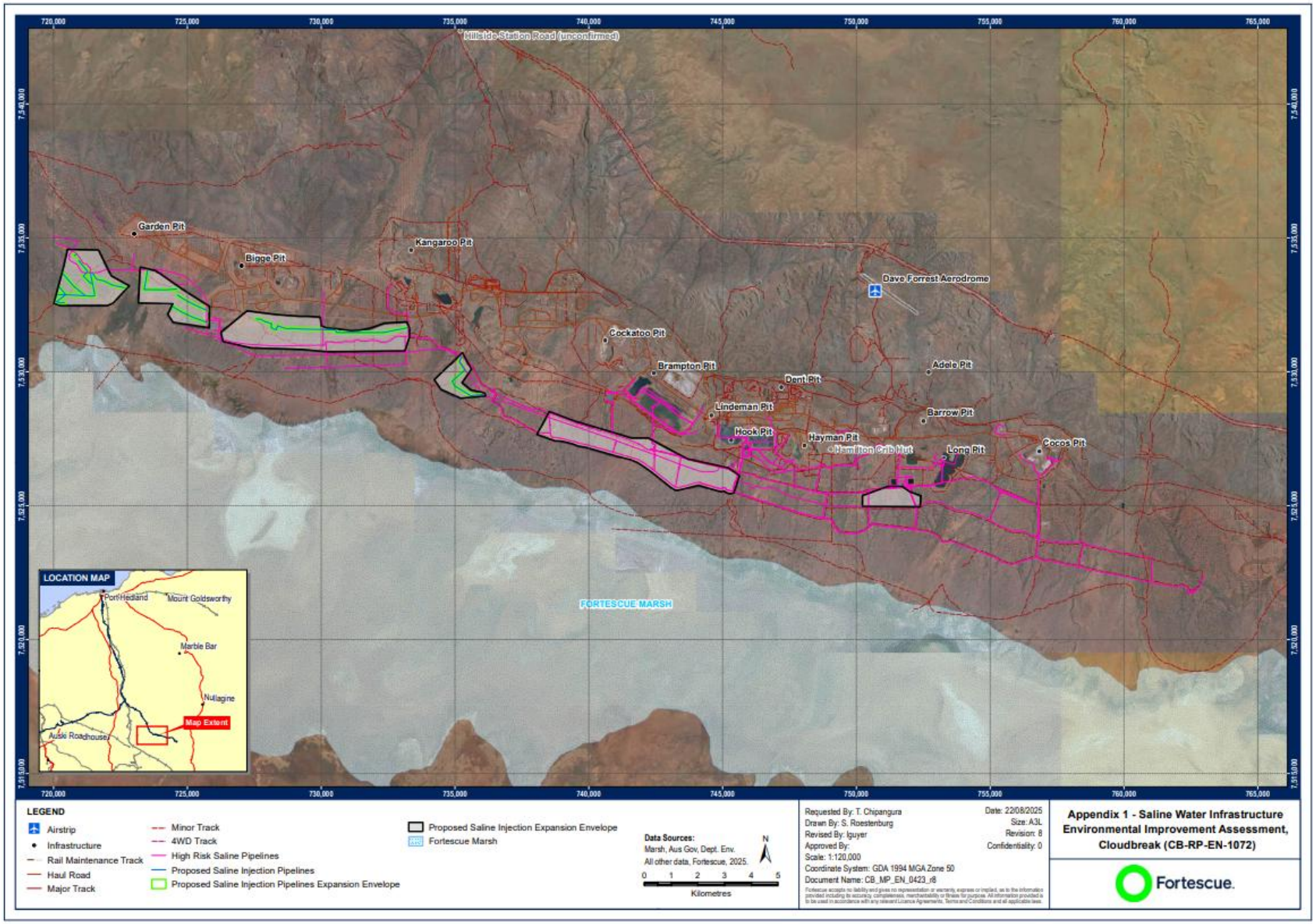

Figure 2: Location of saline water infrastructure and proposed saline injection expansion envelope

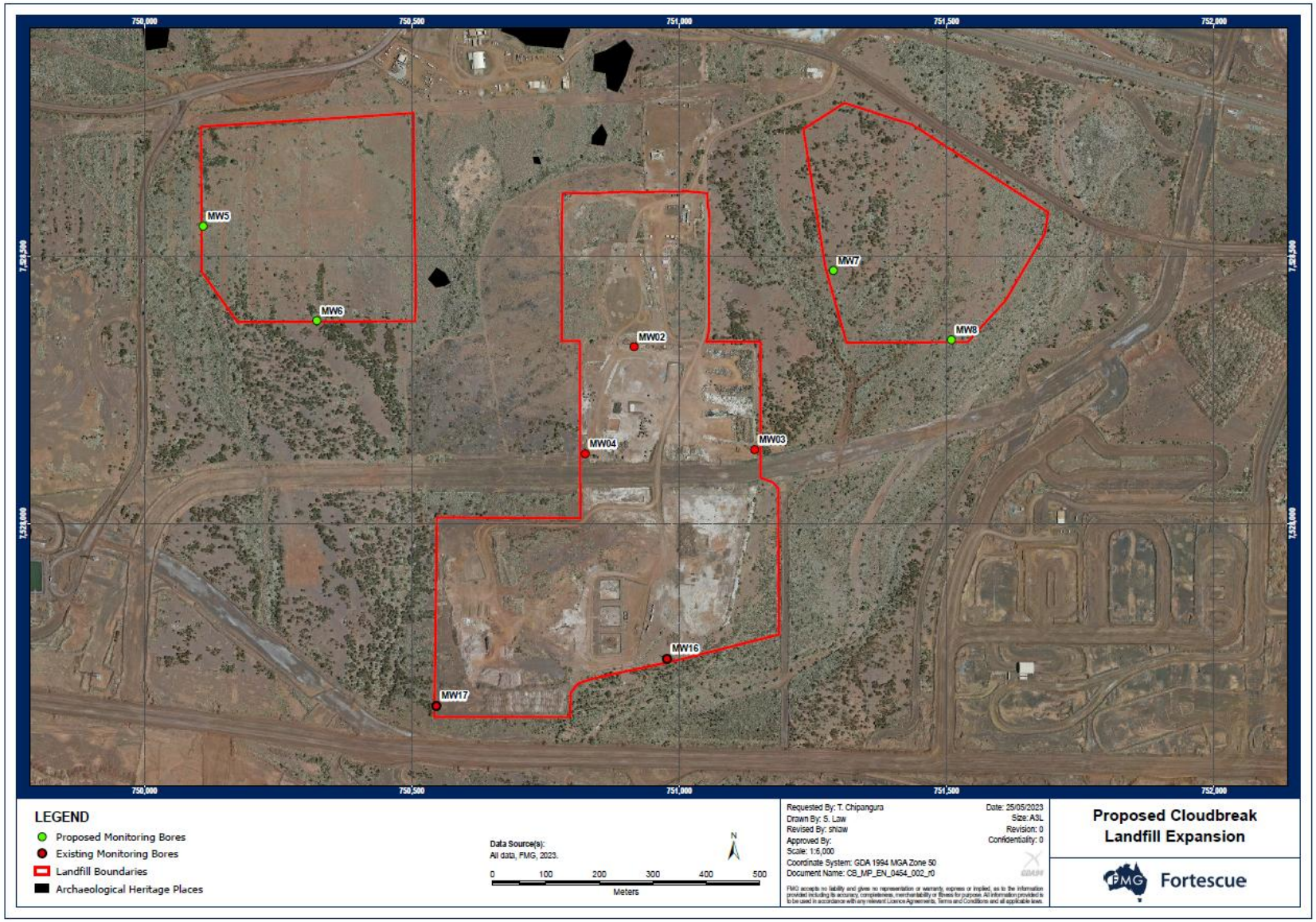

Figure 3: Location of the landfill and the landfill groundwater monitoring bores

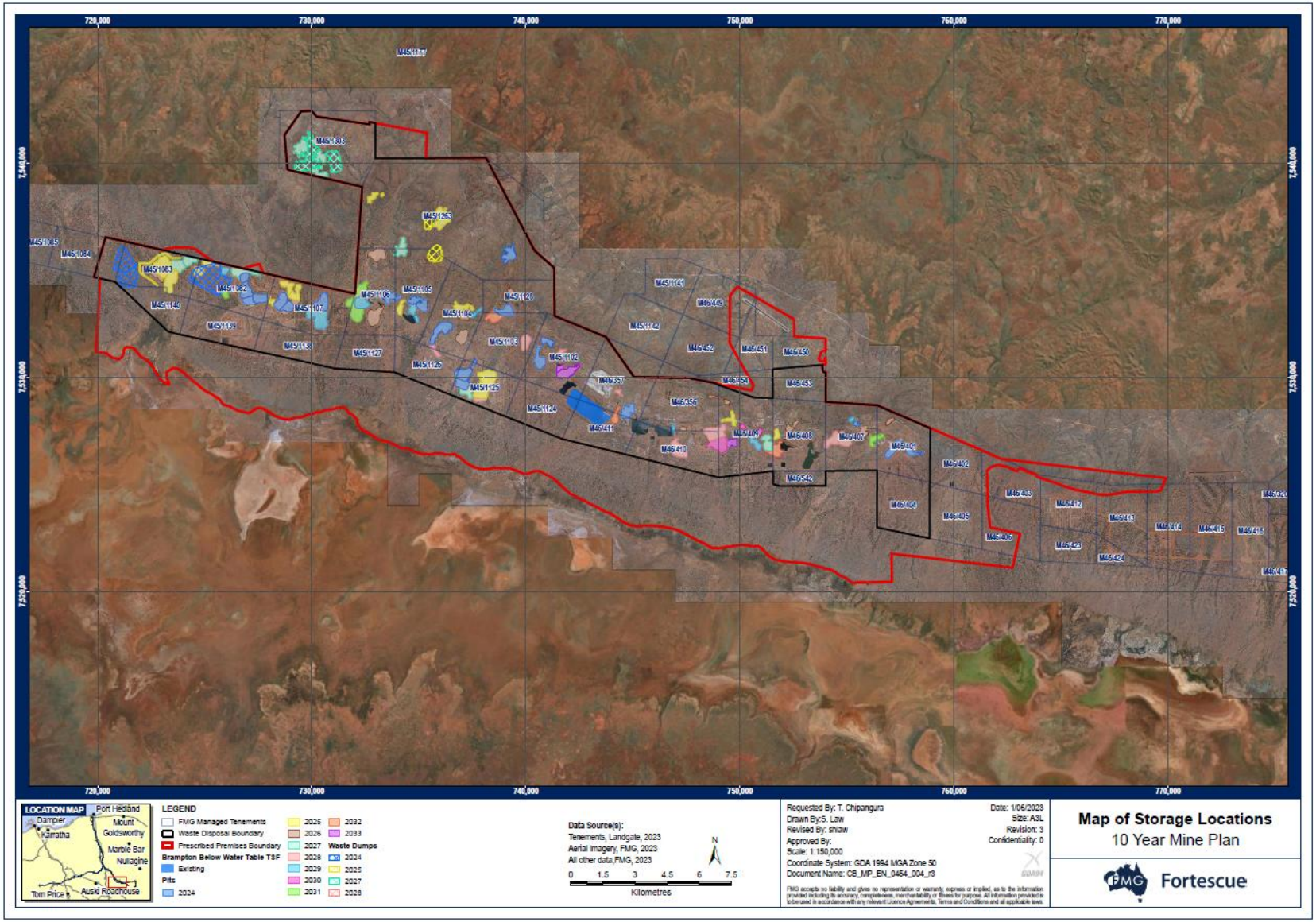

Figure 4: Disposal locations for tyres, conveyor belts, untreated timber, disused pipelines and concrete, HDPE liner and HDPE piping

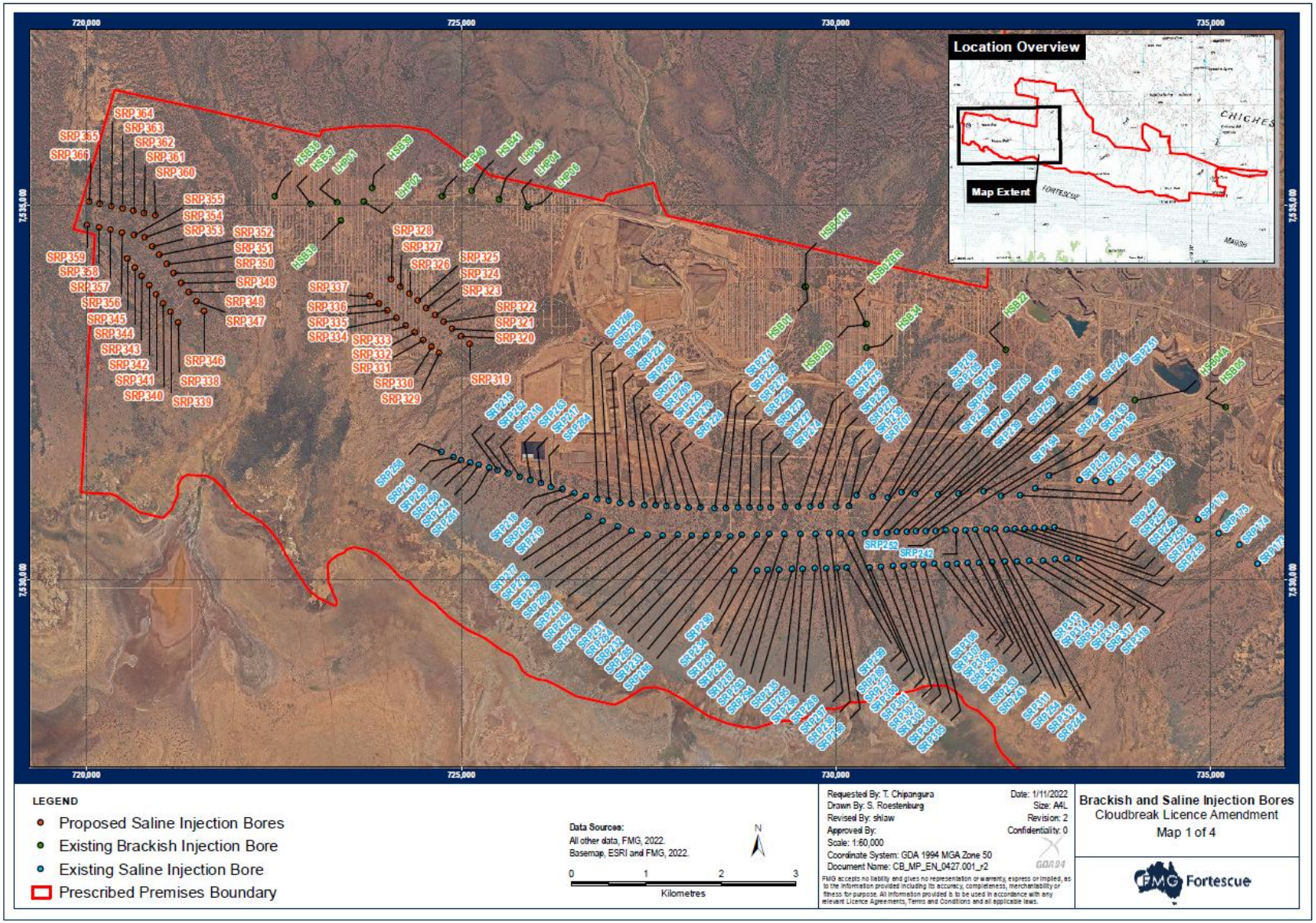

Figure 5: Locations of the brackish and saline water emission points to groundwater

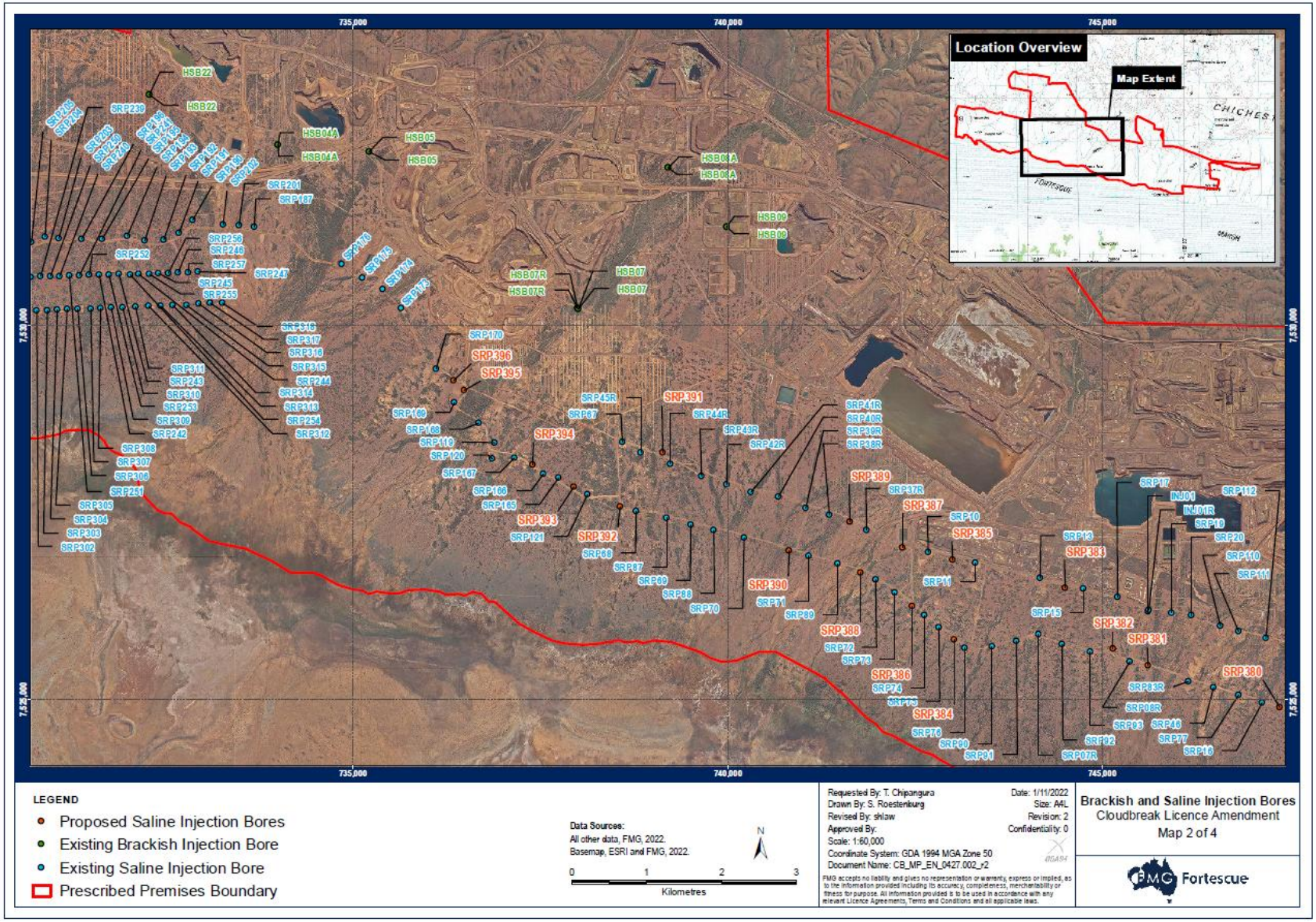

Figure 6: Locations of the brackish and saline water emission points to groundwater

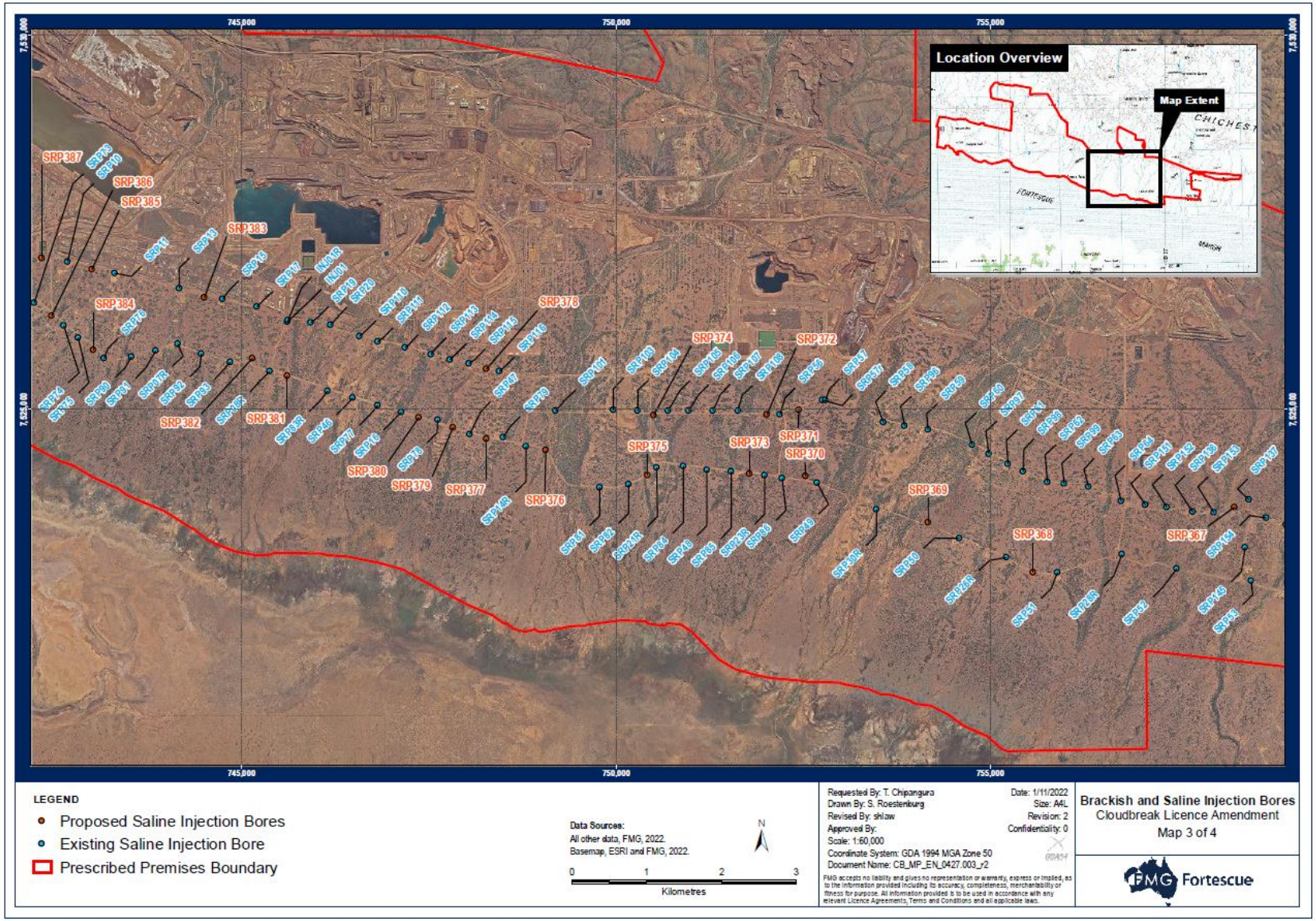

Figure 7: Locations of the brackish and saline water emission points to groundwater

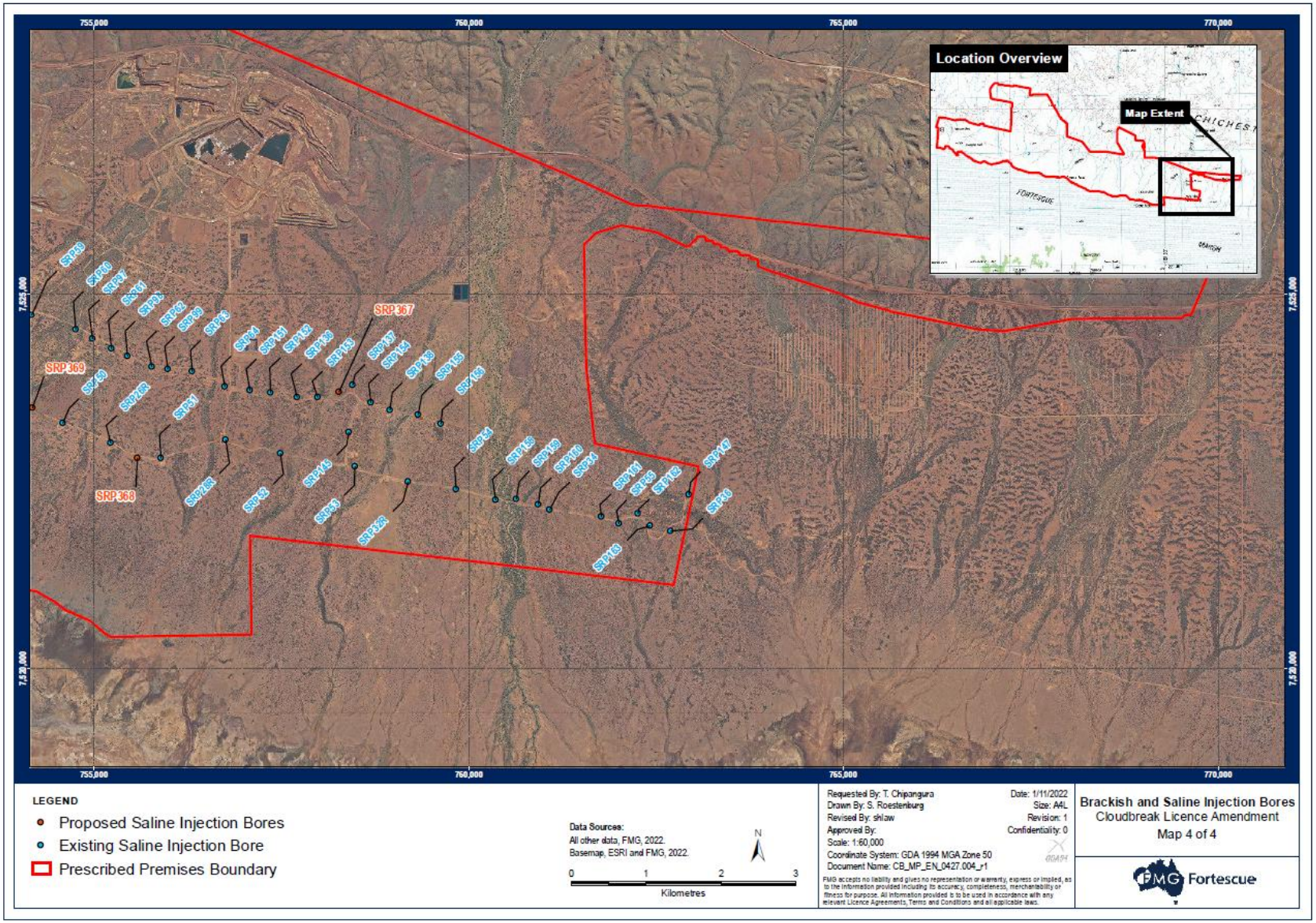

Figure 8: Locations of the brackish and saline water emission points to groundwater

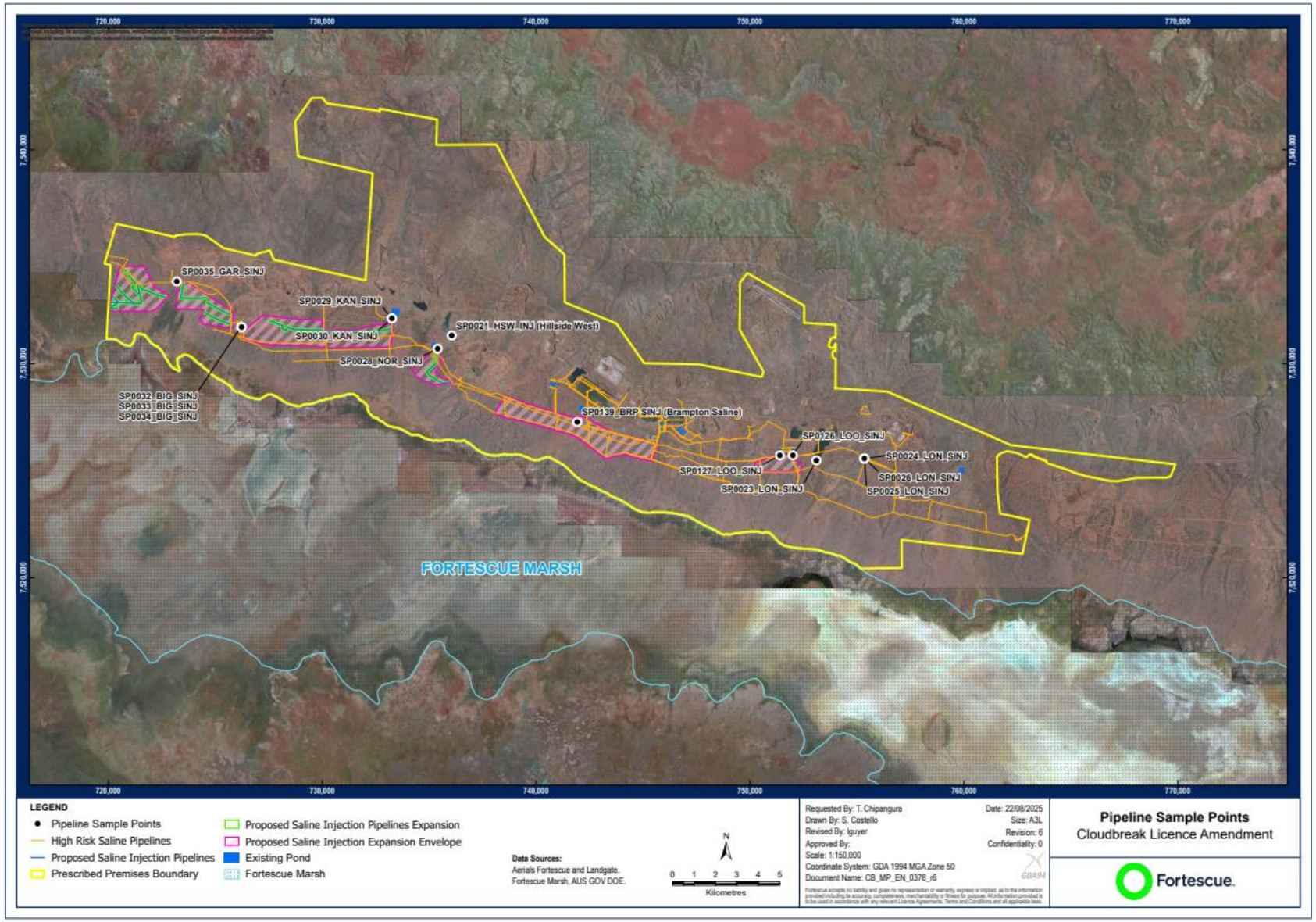

Figure 9: Point source emissions to groundwater monitoring locations

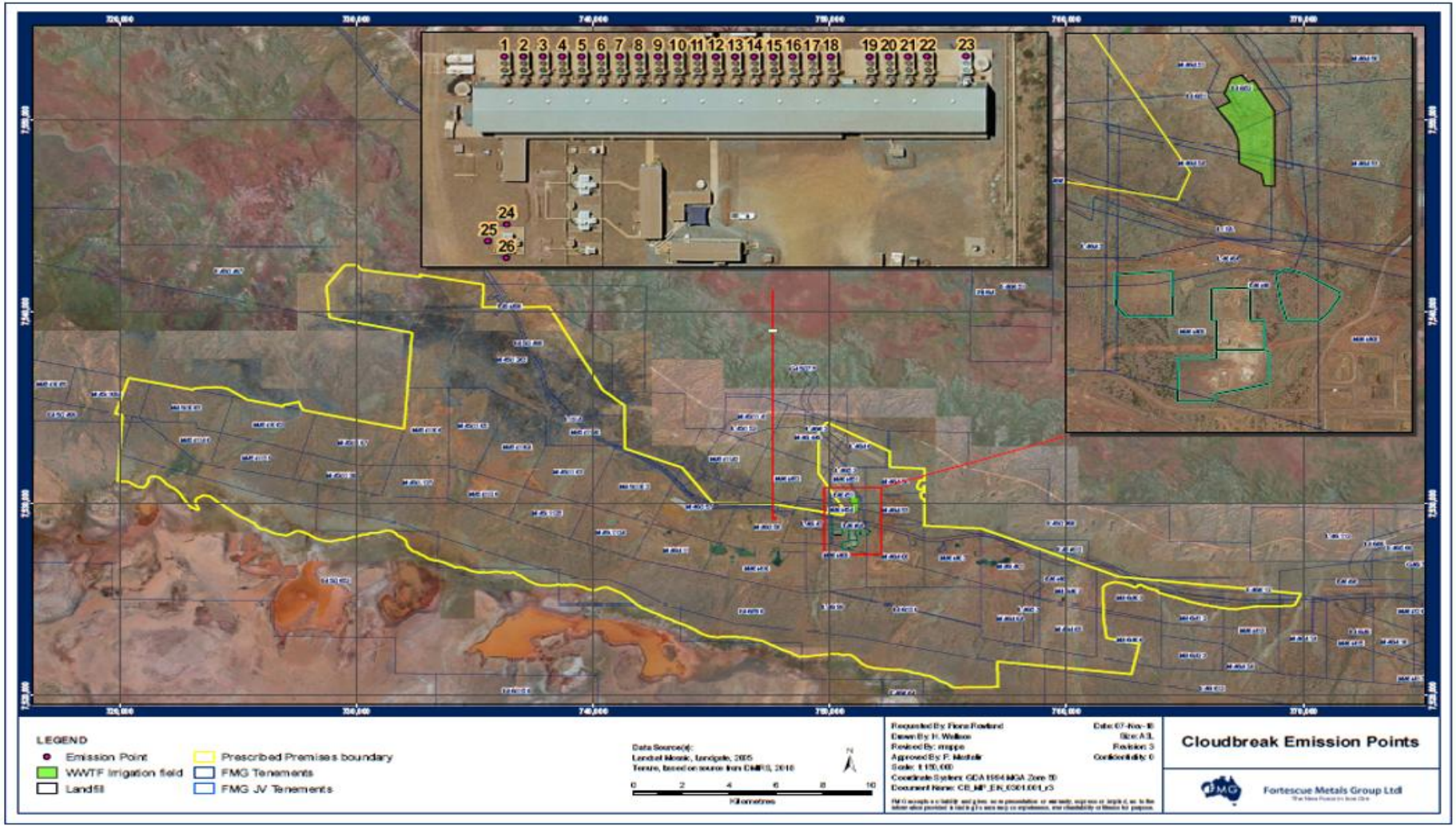

Figure 10: Point source emissions to air monitoring locations and Cloudbreak irrigation area

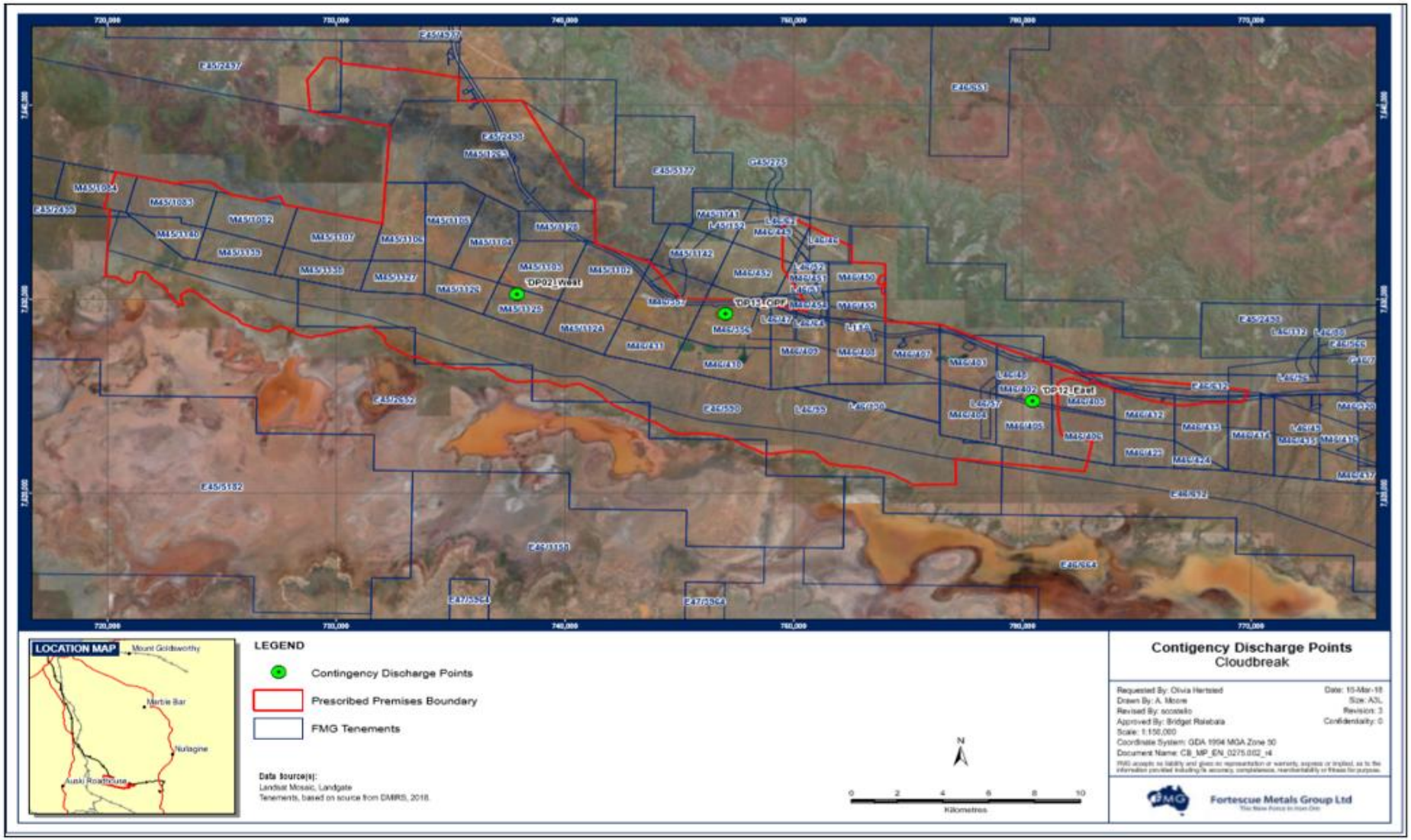

Figure 11: Location of the contingency discharge emission and monitoring points

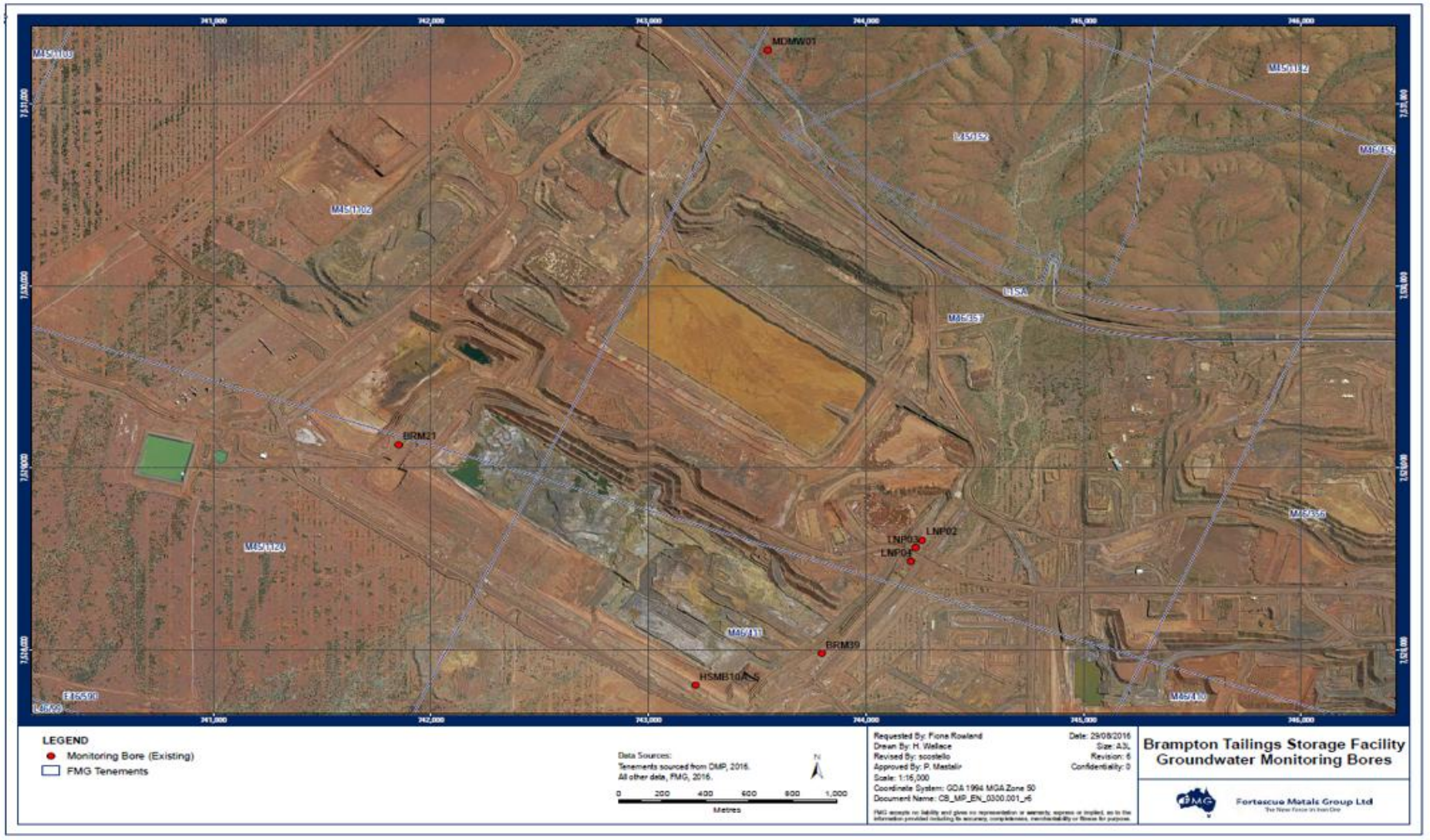

Figure 12: Location of the Brampton In-Pit TSF monitoring bores

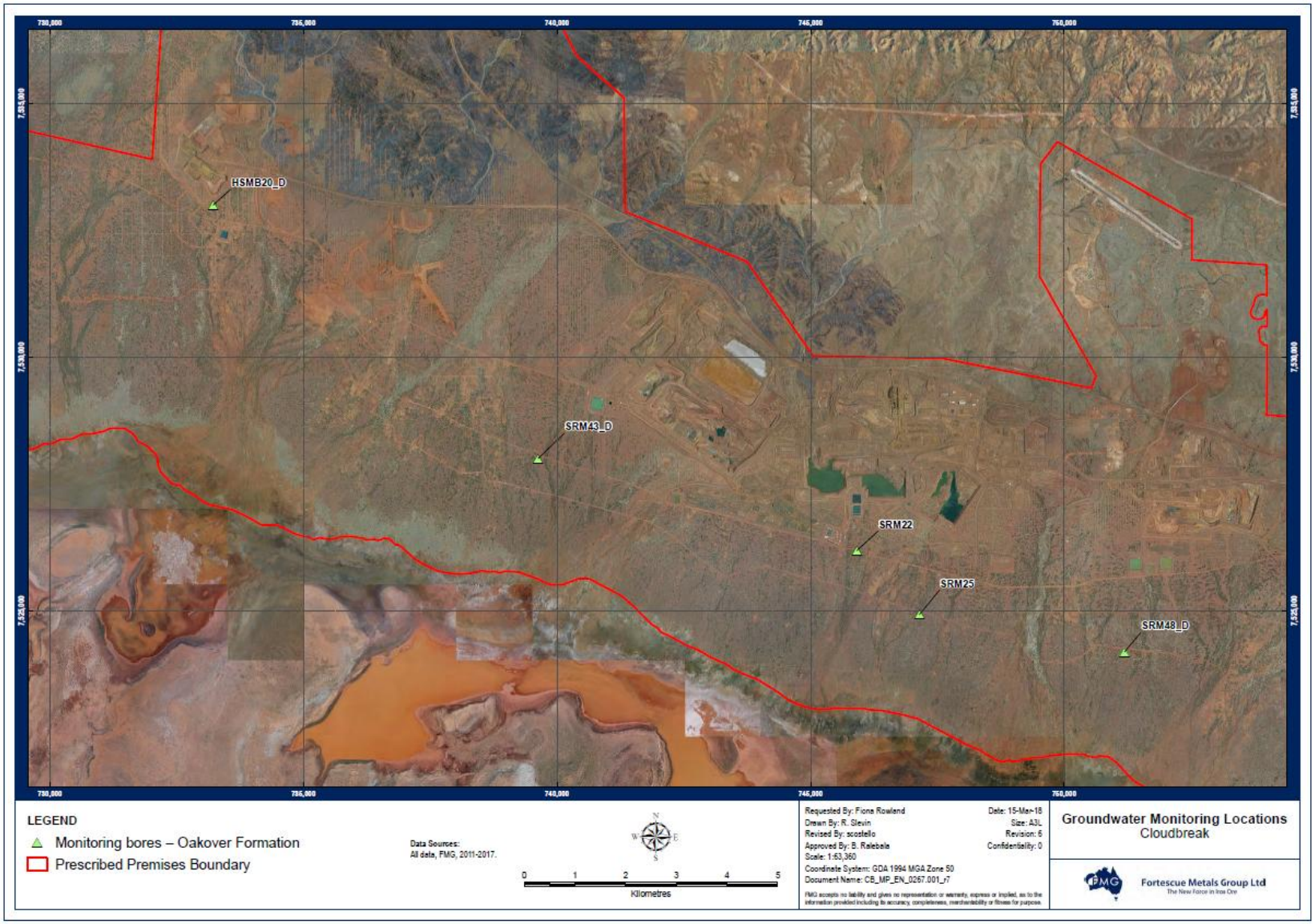

Figure 13: Location of the mine dewater reinjection monitoring bores

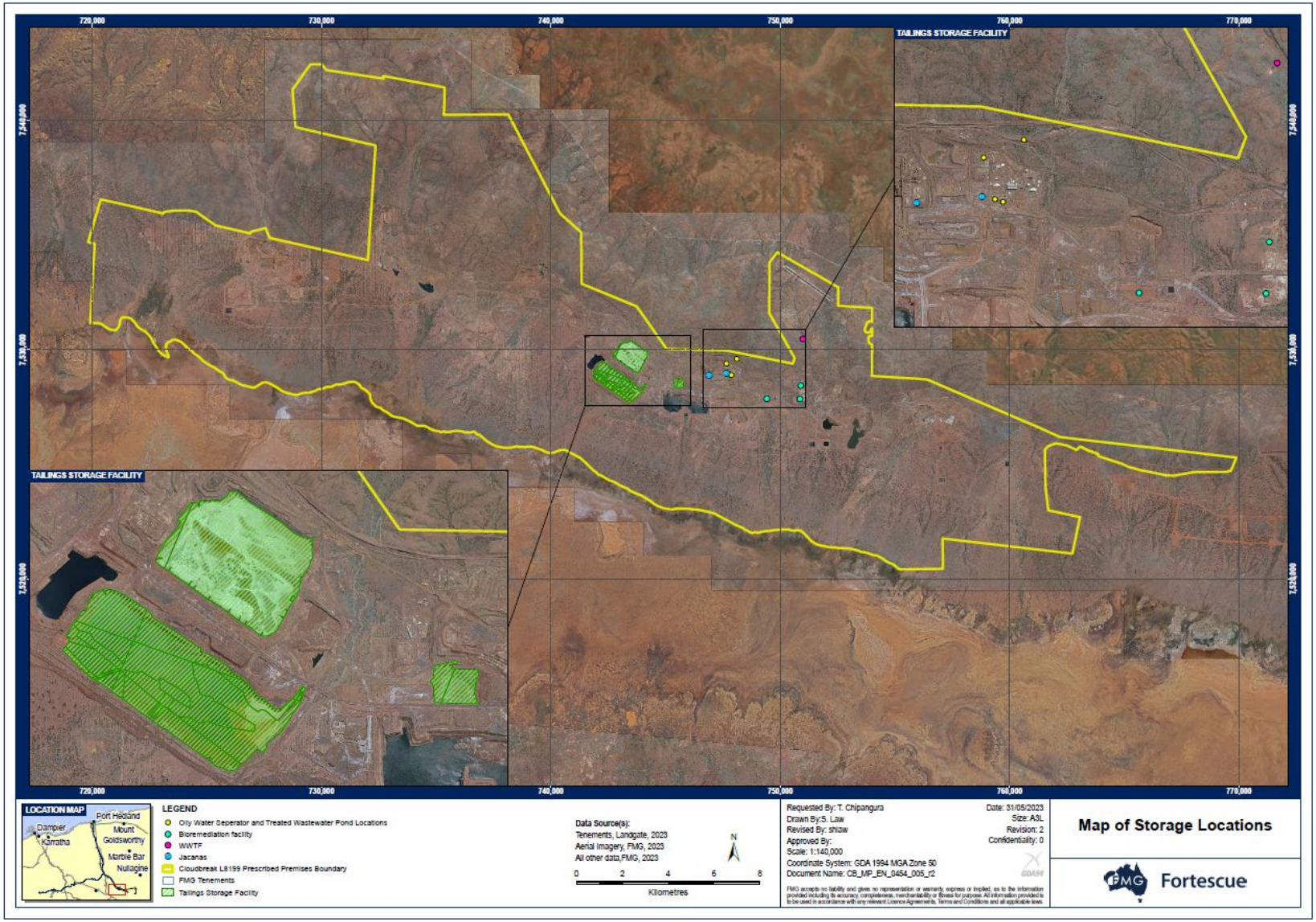

Figure 14: Location of the containment infrastructure and Process Monitoring locations

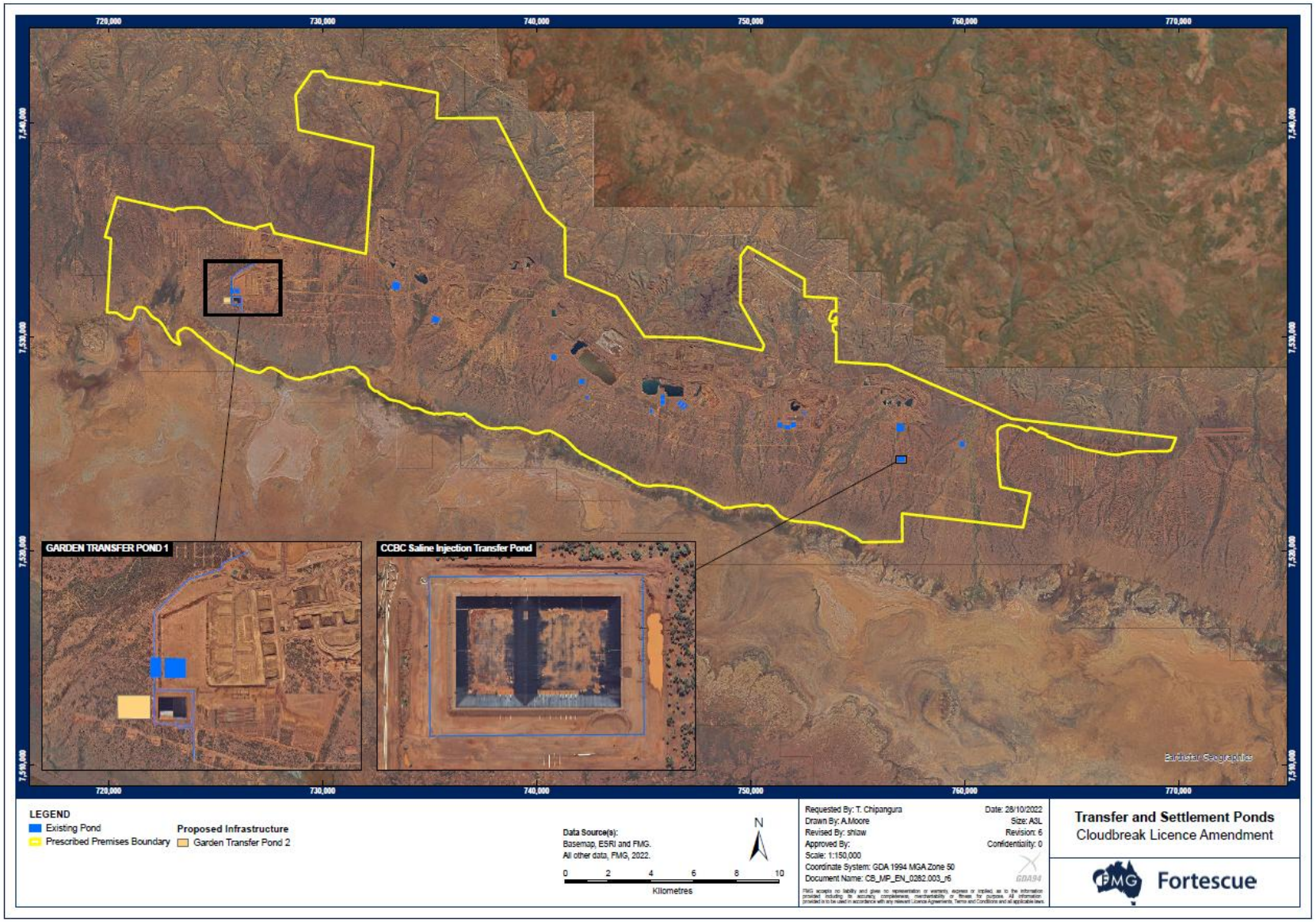

Figure 15: Location of the Transfer and Settlement Ponds

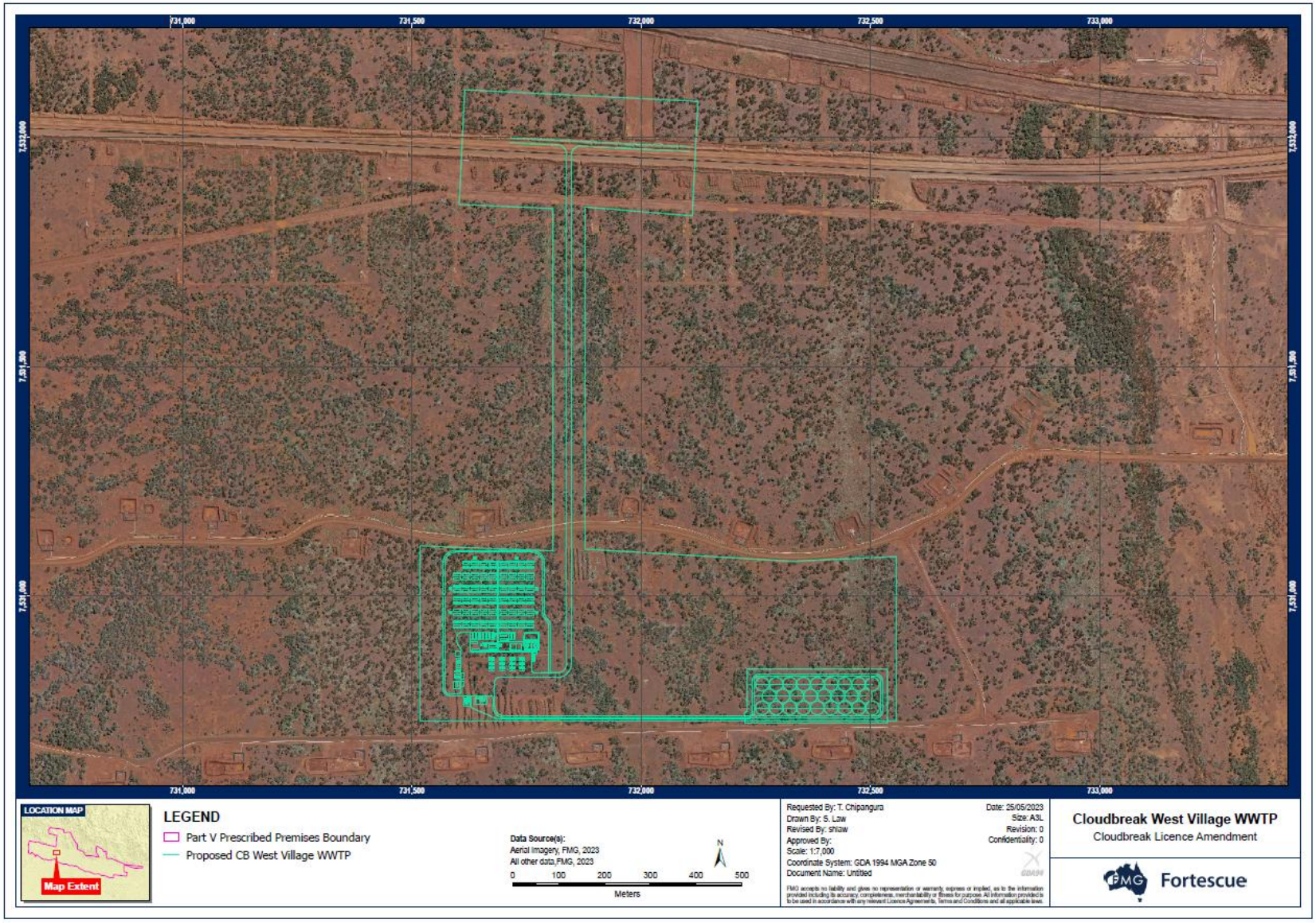

Figure 16: Cloudbreak West Village WWTP

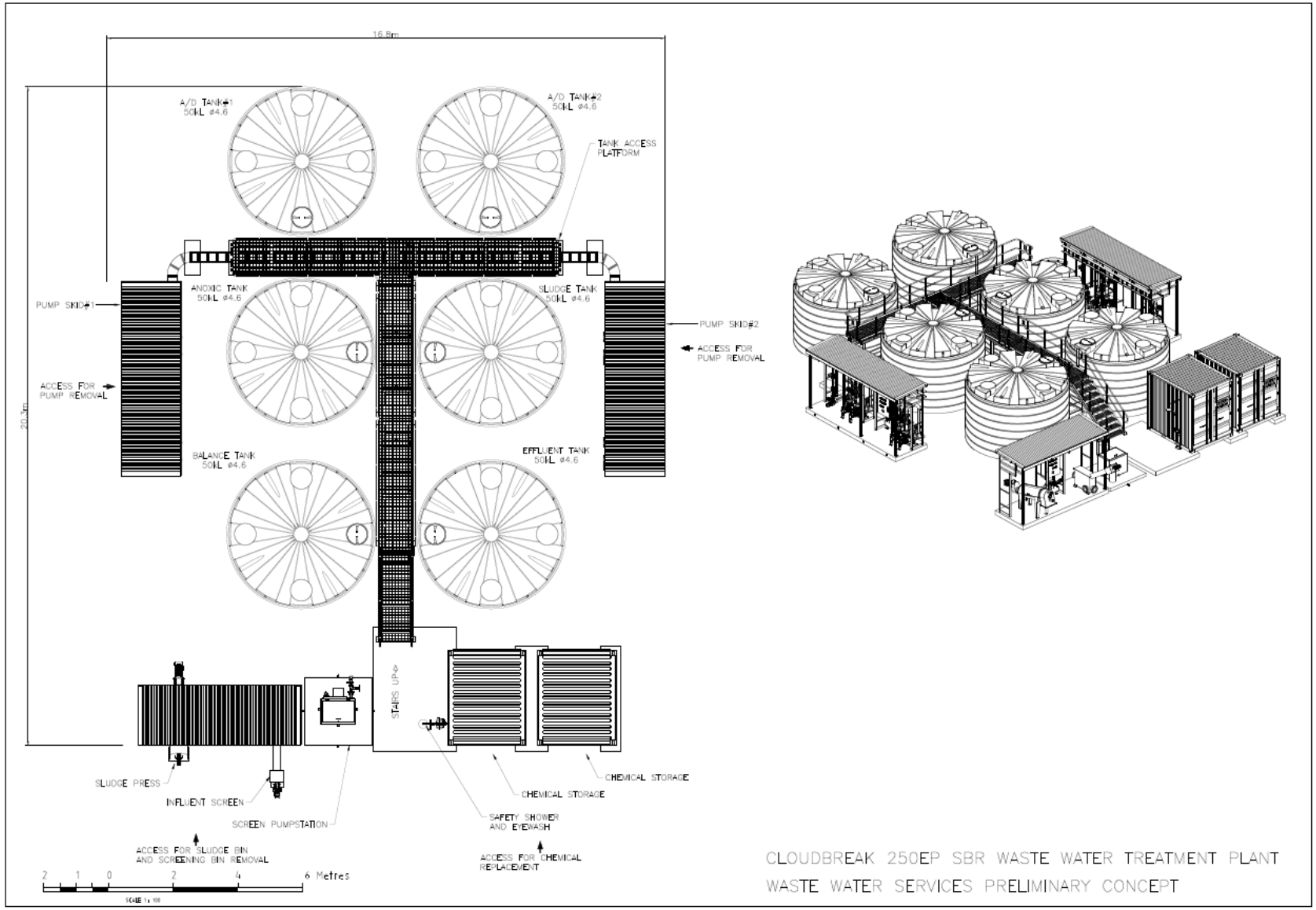

Figure 17: Cloudbreak 250EP SBR Wastewater Treatment Plant Wastewater Services Preliminary Concept

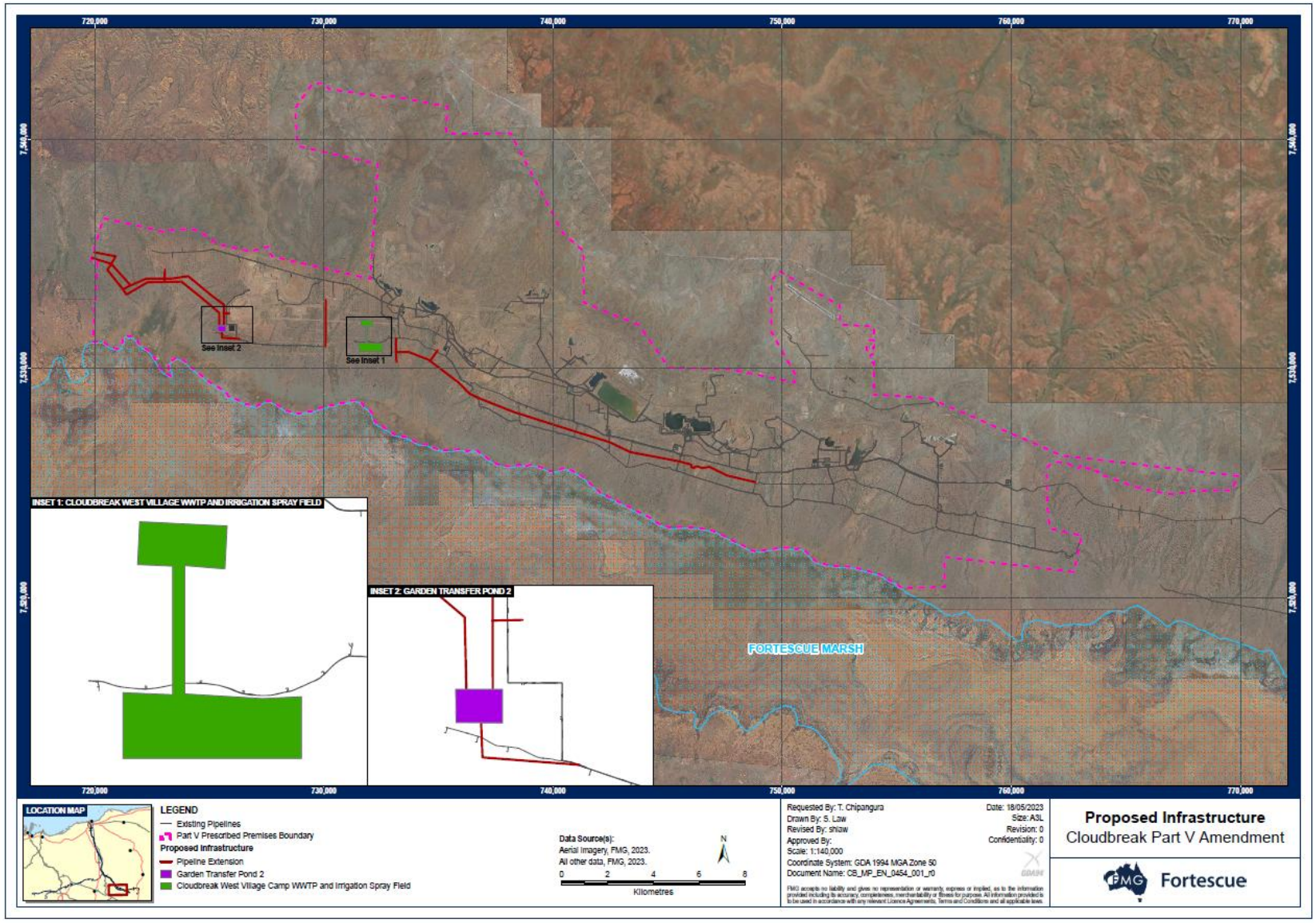

Figure 18: Pipeline Extension, Garden Transfer Pond 3 and Cloudbreak West Village Camp WWTP and Irrigation Spray Field

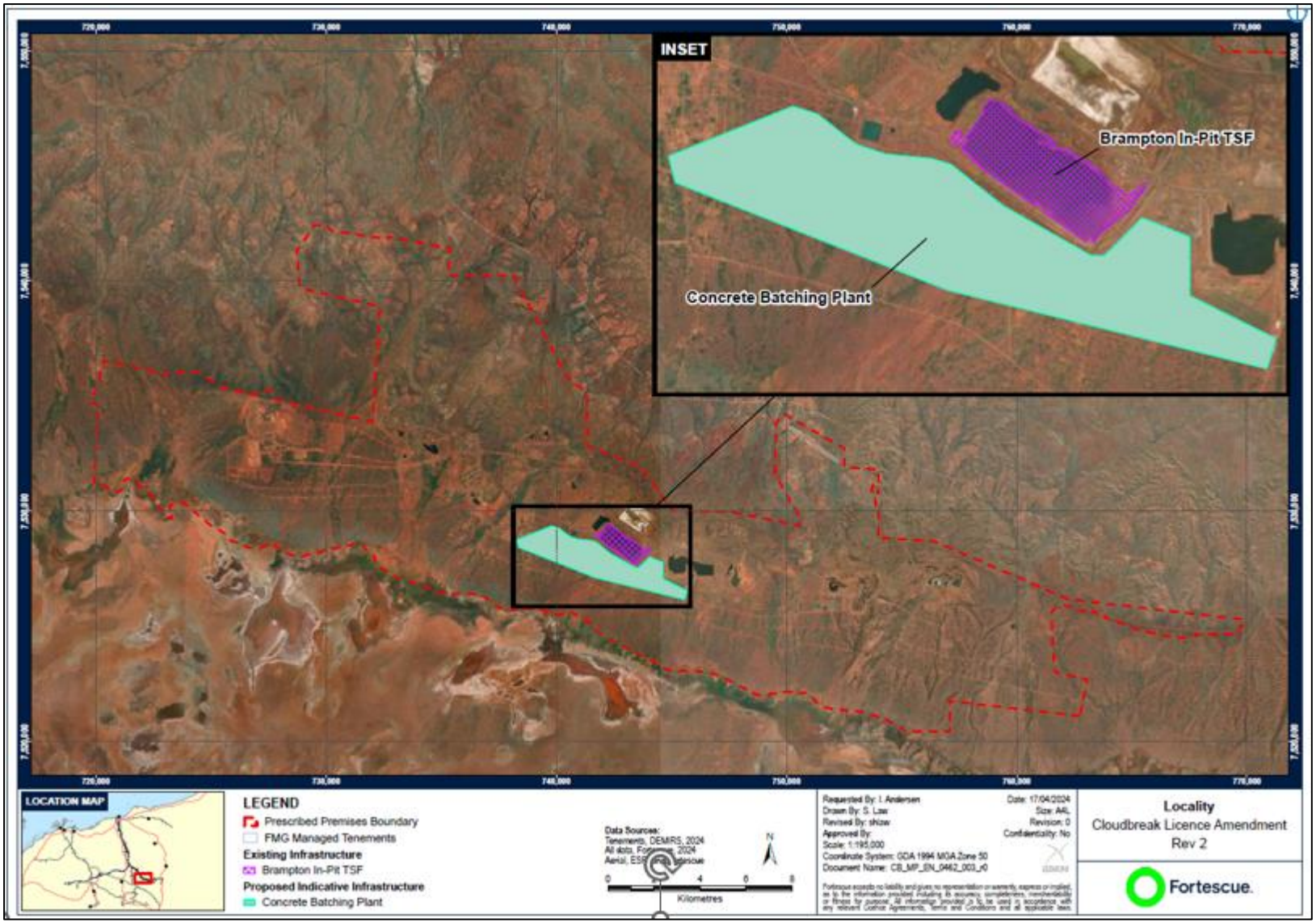

Figure 19: Concrete batching plant location

Schedule 2: Reporting & notification forms

Licence:	Licence holder:
Form: N1	Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of licence holder	
Date	