Licence

Licence number	L8199/2007/2
Licence holder	Chichester Metals Pty Ltd
ACN (if applicable)	109 264 262
Registered business address	87 Adelaide Terrace EAST PERTH WA 6872
DWER file number	DER2013/001073-2
Duration	02/02/2012 to 03/02/2032
Date of amendment	01/04/2021
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, M46/409, M46/453, M45/1128, M46/449, M46/452, M46/451, M46/454, M46/450, M45/1084, 45/1140, M45/1139, M45/1102, M45/1105, M45/1124, M45/1103, M45/1106, M45/1125, M45/1104, M45/1107, L46/48, L46/49, M45/1082, 45/1083, M45/1127, M45/1138, M45/1263, M46/403, M46/406, M46/407, M46/408, M46/409, M46/412, M46/413, M46/414, L46/52, L46/99, L46/46, L46/96, L46/64, L45/152, L46/47, L46/48, L46/51, L46/57, L46/62, L46/130 and Exploration Leases E45/2498, E46/590, E46/612, E45/2499, E45/2652, E45/2497 MULGA DOWNS WA 6751 As defined in Schedule 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 150,000,000 tonnes per Annual Period (reinjected)
Category 52: Electric power generation	50.6 megawatts
Category 54: Sewage facility	694.5 cubic metres per 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 cubic metres

This licence is granted to the Licence holder, subject to the attached conditions, on 1 April 2021, by:

Alana Kidd
Digitally signed by Alana Kidd
Date: 2021.04.01 12:06:09 +08'00'

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

Licence history

Date	Reference number	Summary of changes
31/01/2008	L8199/2007/1	New Licence
14/01/2010	L8199/2007/1	Licence amendment
16/09/2010	W4765/2010/1	Saline reinjection trial
09/12/2010	W4737/2010/1	Tailings storage facility
30/12/2010	L8199/2007/1	Licence amendment
27/01/2011	W4801/2010/1	Cloudbreak Camp Wastewater Treatment Plant Upgrade
22/09/2011	W4995/2011/1	New desand plant
05/01/2012	L8199/2007/1	Licence amendment
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 mtpa to 48 mtpa
22/11/2012	W5275/2012/1	Increase dewatering water reinjection to 85 GLpa
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
04/07/2013	W5381/2013/1	Brampton tailings storage facility
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 mtpa to 95 mtpa for reinjection
22/05/2014	W5642/2014/1	Magnetic separator
18/12/2014	L8199/2007/2	Licence amendment to increase category 6 from 95 mtpa to 115 mtpa for groundwater reinjection and increase category 73 from 6,132 m^3 to 7,700.5 m^3
04/06/2015	W5815/2015/1	Brampton above ground tailings storage facility
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 mtpa to 150 mtpa 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
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.

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

General

1 The Licence Holder shall ensure the limits specified in Table 1 are not exceeded.

Table 1: Production or design capacity limits

Category[1]	Category description[1]	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	50,000,000 tonnes per Annual Period
6	Mine dewatering	150,000,000 tonnes per Annual Period (reinjected)
52	Electric power generation	50.6 MW
73	Bulk storage of chemicals, etc.	7,700.5 cubic metres in aggregate

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

Infrastructure and equipment

2 The Licence Holder shall ensure that all pipelines or sections of pipelines containing tailings and high risk saline pipelines (as identified on the map of environmentally sensitive areas depicted in Schedule 1) 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.

3 The Licence Holder shall ensure that waste material is only stored and/or treated within vessels or compounds listed in Table 2 and identified on the map of containment infrastructure in Schedule 1, in accordance with the requirements specified within Table 2.

Table 2: Containment infrastructure

Storage vessel or compound	Material	Requirements
TSFs	Tailings	• Maintain a minimum freeboard equivalent to that required to contain a 1 in 100 year storm event over 72 hours from the operational pond surface to lowest elevation of perimeter embankment. <u>Brampton In-Pit TSF</u> • Maximum operating level of Reduced Level 418.1 m. • Maximum tailings elevation at deposition point Reduced Level 423 m.
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
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

4 The Licence Holder shall:
(a) Undertake inspections as detailed in Table 3;
(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 3: 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

5 The Licence Holder shall 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.

6 The Licence Holder shall 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 4.

Table 4: Management of waste[1, 2, 3]

Waste type	Management strategy	Requirements
Sewage	Biological, physical and chemical treatment	694.5 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 shall only take place within the landfill area shown on the Map of emission points in Schedule 1; and • Landfilling of Clean Fill and Uncontaminated Fill shall only take place within waste rock materials or completed mining voids and/or waste rock dumps shown on the map of emission point in Schedule 1.
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 shall only occur at the locations shown on the Map of emissions points in Schedule 1; • Waste shall be placed in a defined trench or within an area enclosed by earthen bunds; • The active tipping area shall 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 ➢ 3m of the highest level of the water table aquifer

Waste type	Management strategy	Requirements
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 shall 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 shall 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 will be placed over each cell; • Landfilling of HDPE liner, HDPE piping, tyres and conveyor belts shall only take place within the Pits and Waste Rock Dumps shown on the Map of emission points in Schedule 1; and • Cell locations where HDPE liner, HDPE piping, tyres and conveyor belts are to be buried will 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.

7 The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained on site at all times.

Table 5: 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*.

8 The Licence Holder is to 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.

9 The Licence Holder must construct the Brampton In-Pit TSF, Bigge Transfer Pond, Bigge Settlement Pond, Bigge pipelines, Bigge saline injection bores and Bigge and Garden mining pits saline injection bores and pipeline extension in accordance with the requirements specified in the infrastructure requirements detailed in Table 6. The Licence Holder must not depart from the design and construction requirements specified in Table 6 except:
(a) Where such departure is minor in nature and does not materially change or affect the infrastructure; or
(b) Where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment; and
(c) All other conditions in this Licence are still satisfied.

Table 6: Infrastructure requirements[1]

Infrastructure	Requirements (Design and construction)
Brampton In-Pit TSF	**TSF general** • Maximum operating level of Reduced Level 418.1 m; and • Maximum tailings elevation at deposition point Reduced Level 423 m. **Tailings Deposition Pipeline** • Single open-ended disposal point; • Located at the north-east end of the In-Pit TSF; 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. **Decant Return Water Pipeline** • Transportable pump and suction line to recover water from the In-Pit TSF; and • Decant water pipeline from the In-Pit TSF to the Ore Processing Facility.
Bigge saline injection bores SRP213, SRP214, SRP215, SRP216, SRP217, SRP218, SRP219, SRP220, SRP221, SRP222, SRP223, SRP224, SRP225, SRP226, SRP227, SRP228, SRP229, SRP230, SRP231, SRP232, SRP233, SRP234, SRP235, SRP236, SRP237 Bigge and Garden saline injection bores 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, SRP305, SRP306, SRP307, SRP308, SRP309, SRP310, SRP311, SRP312, SRP313, SRP314, SRP315, SRP316, SRP317	Must be installed for the purpose of targeting reinjection of saline groundwater in Oakover aquifer only at locations as depicted in the Map titled *The location of the brackish and saline water emission points* in Schedule 1 of this Licence 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.

Infrastructure	Requirements (Design and construction)
Bigge Transfer Pond Bigge Settlement Pond	• HDPE liner/concrete or similar impermeable layer; and • Minimum vertical freeboard of 200mm
Bigge Pipelines Bigge and Garden Mining Pits 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.

Note 1: Where the details and commitments of the documents listed in condition 10 are inconsistent with any other condition of this Licence, the conditions of this Licence shall prevail.

10 The Licence Holder shall operate the Brampton In-Pit TSF, Bigge Transfer Pond, Bigge Settlement Pond, Bigge pipelines, Bigge saline injection bores Bigge and Garden mining pits saline injection bores and pipeline extension in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 29.

Emissions and discharges

Authorised discharge points for emissions

11 The Licence Holder shall ensure that where waste is emitted to air from the emission points in Table 7 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 7: Emission points to air

Emission point reference and location on Map of emission points	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	

12 The Licence Holder shall ensure that where waste is emitted to surface water from the nominated contingency discharge points in Table 8 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 8: Point source emissions to surface water

Emission point reference	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

13 The Licence Holder shall ensure that where waste is emitted to groundwater from the emission points in Table 9 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 9: Point source emissions to groundwater

Emission point reference and location on Map of emission points		Description	Source including abatement
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, SRP215, 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, SRP305, SRP306, SRP307, SRP308, SRP309, SRP310, SRP311, SRP312, SRP313, SRP314, SRP315, SRP316, SRP317, SRP 318	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	Direct injection below ground	Water from mine dewatering

14 The Licence Holder shall ensure that where waste is emitted to land from the emission points in Table 10 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 10: Emissions to land

Emission point reference	Description	Source including abatement
L1 – Cloudbreak Camp irrigation area	Pipe feeding irrigation area of 20.05 hectares	Treated wastewater from Cloudbreak Camp WWTP and reverse osmosis reject water.

Monitoring

General monitoring

15 The Licence Holder shall 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.

16 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.

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

Discharge point monitoring

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

Table 11: Monitoring of point source emissions to surface water

Emission point reference	Parameter	Limit	Units	Frequency
DP02_West DP12_East DP13_OPF	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.

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

Table 12: Monitoring of point source emissions to groundwater

Emission point reference	Parameter	Units	Frequency
Each saline and brackish reinjection emission point referenced in Table 9	Volume	GLpa	Annually
Hillside West[2]: SP0021_HSW_INJ Brampton Saline[3]: SP0139_BRP_SINJ Long Saline[3]: SP SP0023_LON_SINJ SP0024_LON_SINJ SP0025_LON_SINJ SP0026_LON_SINJ SP0126_LON_SINJ SP0127_LON_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	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 **Metals, Metalloids and Non-metals** Aluminium Antimony Arsenic Beryllium Boron Cadmium Chromium Cobalt Copper Iron Manganese Mercury Nickel Lead Selenium Silver Zinc	mg/L	

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 and Bigge Saline) only required when reinjection of saline water occurring

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

Table 13: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
L1	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	org/100mL	

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

Process monitoring

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

Table 14: 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

22 The Licence Holder shall undertake the monitoring in Table 15 according to the specifications in that table.

Table 15: Monitoring of ambient groundwater quality

Monitoring point reference and location[2]	Parameter	Units	Averaging period	Frequency
Landfill monitoring bores				
MW02r MW03 MW04 MW16 MW17	Standing water level	mbgl	Spot sample	Six monthly
	pH[1]	pH units		
	Electrical Conductivity[1]	µS/cm		
	Total Recoverable Hydrocarbons	mg/L		

Monitoring point reference and location[2]	Parameter	Units	Averaging period	Frequency
	Metals, Metalloids and Non-metals Arsenic Cadmium Chromium Copper Mercury Lead Nickel Zinc Nitrate Phosphate			
TSF				
MDMW01 HSMB10A_S LNP02 LNP03 LNP04 BRM21 BRM39	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 Ammonia	mg/L		
	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	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			

Monitoring point reference and location[2]	Parameter	Units	Averaging period	Frequency
	Magnesium Chloride Alkalinity Sulfate Nitrate **Metals, Metalloids and Non-metals** 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

Records and reporting

23 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 9 of this licence;
(c) Any maintenance of infrastructure that is performed in the course of complying with condition 9 of this licence;
(d) Monitoring programmes undertaken in accordance with condition 18, condition 19, condition 20, condition 21 and condition 22 of this licence; and
(e) Complaints received under condition 25 of this licence.

24 The books specified under condition 23 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.

25 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.

26 The Licence Holder must submit to the CEO no later than 31 March each year after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 16, and which provides information in accordance with the corresponding requirement set out in Table 16.

Table 16: Annual Environmental Report

Condition or table (if relevant)	Parameter	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 5	Annual water balance	None specified
Condition 6, Table 4	Location of HPDE liner, HDPE piping, tyre and conveyor belt disposal areas	Map and grid coordinates
Condition 11, Table 7	Average percentage sulphur content of diesel fuel used	None specified
Condition 14, Table 10	L1 – representative photographs of the irrigation area, summary of vegetation health and weed management implemented during reporting period	None specified
Condition 18, Table 11	Contingency discharge monitoring	None specified
Condition 19, Table 12	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 20, Table 13	Monitoring of emissions to land and interpretation of results against plant design specifications	None specified
Condition 21, Table 14	Process monitoring results and interpretation of results	None specified
Condition 22, Table 15	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 25	Complaints summary	None specified
Condition 28	Annual Audit Compliance Report	None specified

27 The Licence Holder shall ensure that the Annual 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.

28 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 by no later than 31 March after the end of that annual period an Annual Audit Compliance Report in the approved form.

29 The Licence Holder shall ensure that the conditions listed in Table 17 are notified to the CEO in accordance with the notification requirements of the table.

Table 17: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
Condition 1, Table 1 Condition 6, Table 4 Condition 18, Table 11 Condition 21, Table 14	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.	N1
Condition 9	The Licence Holder shall submit a compliance document to the CEO, following the construction of the Brampton In-Pit TSF, Bigge Transfer Pond, Bigge Settlement Pond, Bigge pipelines, Bigge saline injection bores and Bigge and Garden mining pits saline injection bores and pipeline extension. The compliance document/s shall: (a) be certified by a suitably qualified engineer and certify that the works were constructed in accordance with the construction requirements specified in Condition 9, Table 6; (b) provide a list of departures from the specified works certified by a suitably qualified engineer; 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	Within 7 days of the completion of construction	None specified
Condition 12, Table 8	Contingency discharge	Within 3 days of cessation of the discharge; and including results from the monitoring required under Condition 18 Table 11	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 3

Definitions

In this licence, the terms in Table 18 have the meanings defined.

Table 18: 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
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

Term	Definition
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
GLpa	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 maps Figures 1 - 14
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
RTU	means Remote Telemetry Units;
Schedule 1'	means Schedule 1 of this Licence unless otherwise stated
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
Schedule 3	means Schedule 3 of this Licence unless otherwise stated

Term	Definition
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

Schedule 1: Maps

Premises map

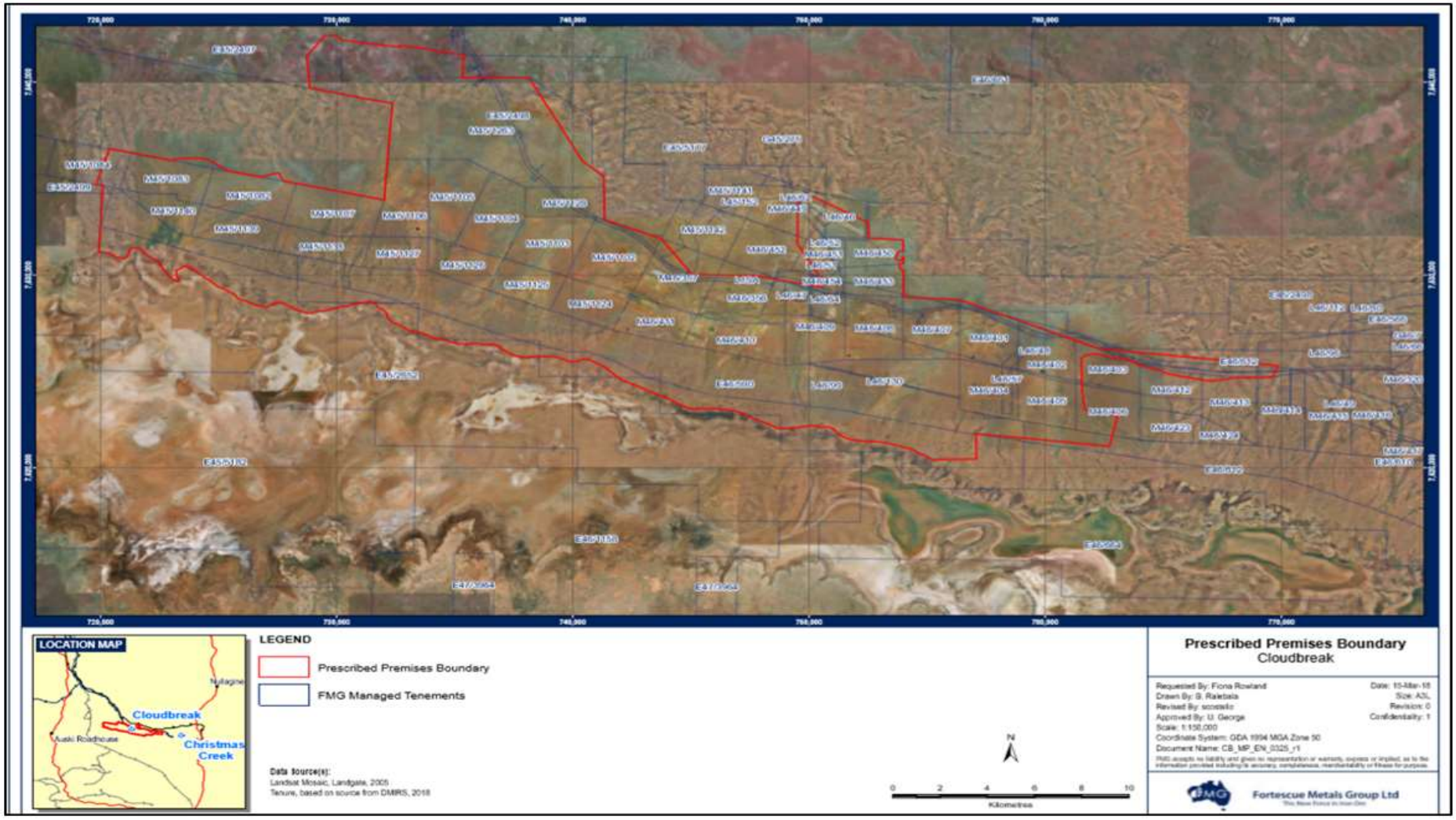

Figure 1: Premises Boundary depicted in red

Map of environmentally sensitive areas

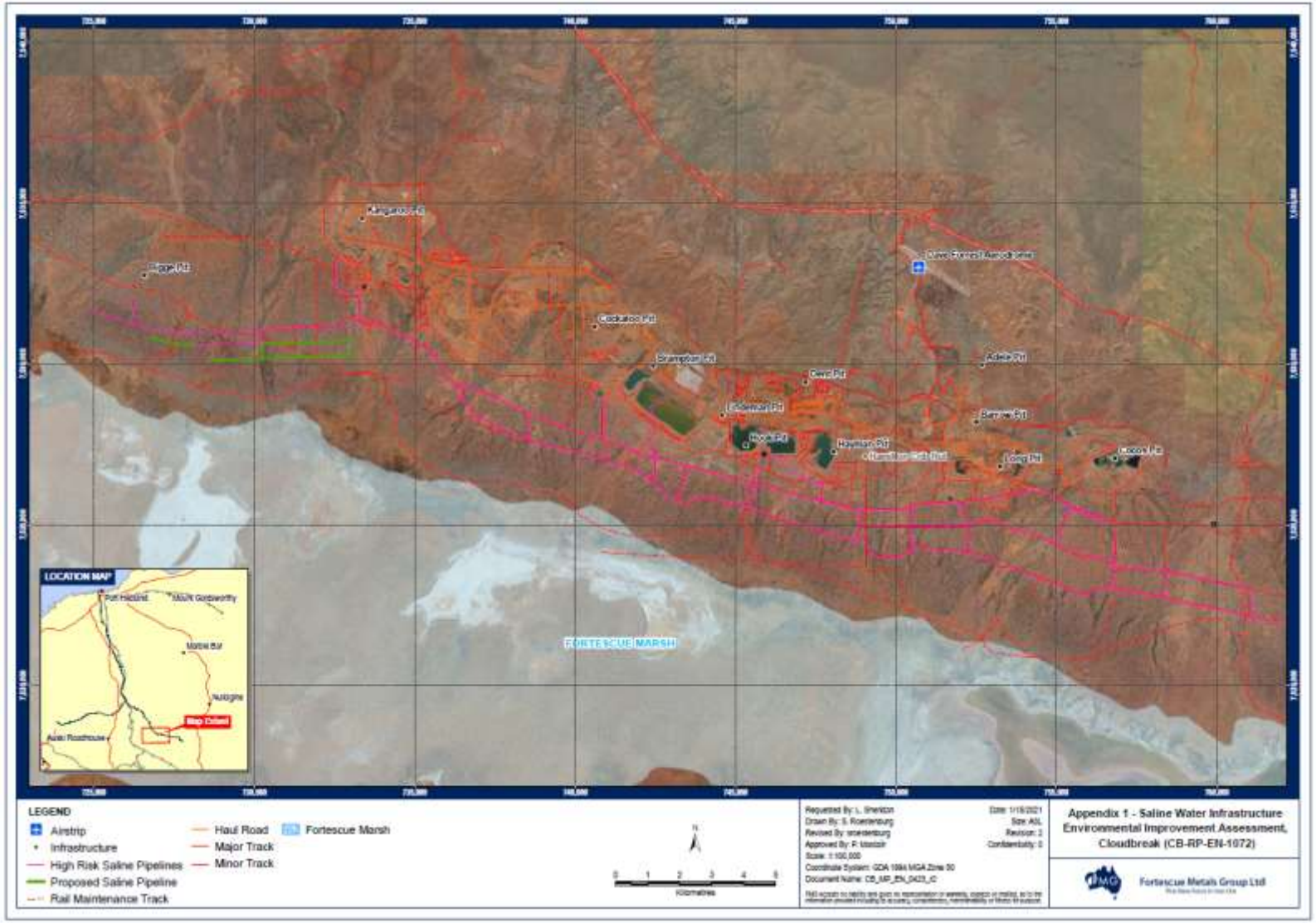

Figure 2: Location of the environmentally sensitive areas

Maps of emission points and monitoring locations

Figure 3: Location of the landfill defined in Condition 6, Table 4 and the landfill groundwater monitoring locations defined in Condition 22, Table 15 (landfill monitoring locations)

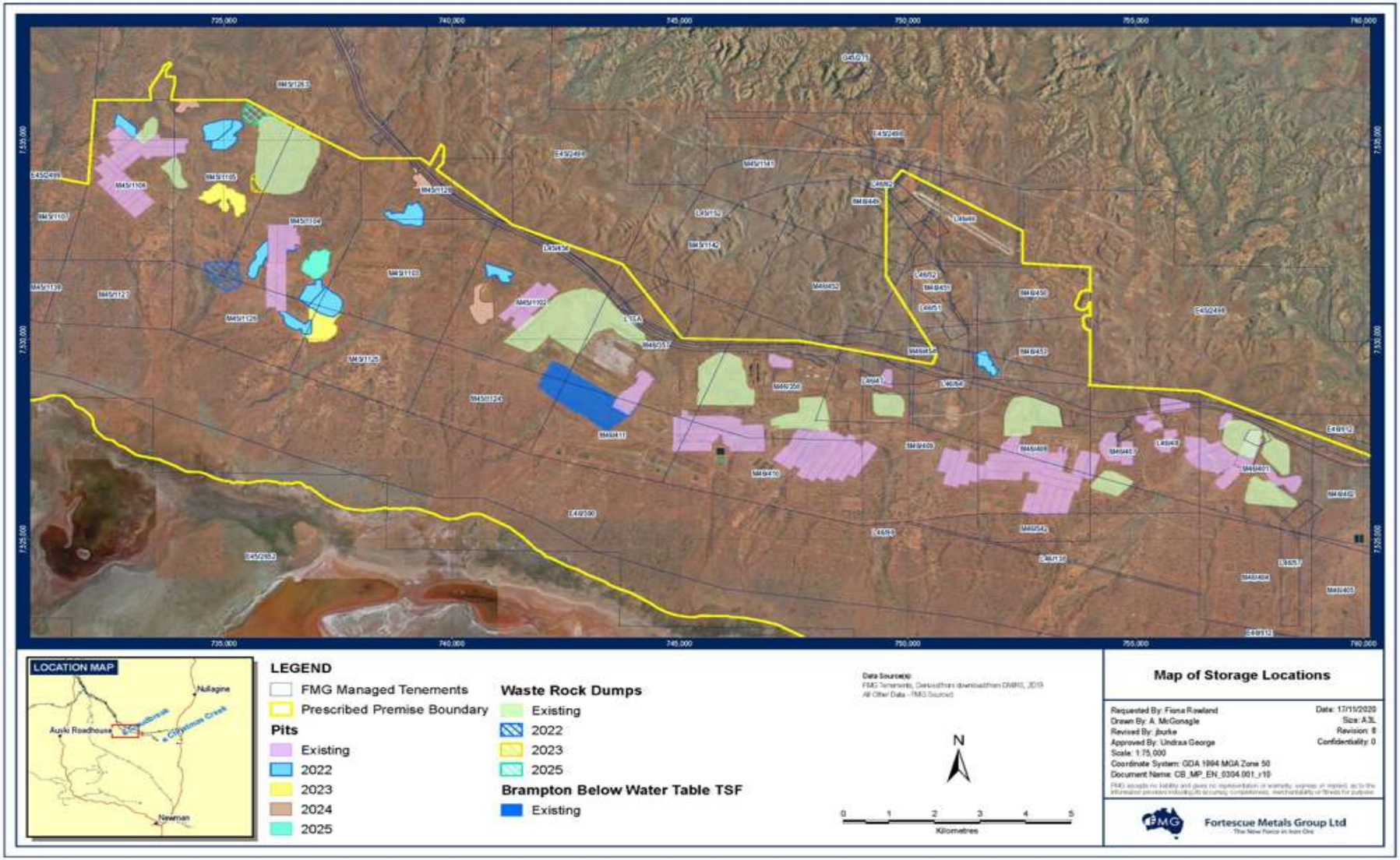

Figure 4: Locations of the disposal locations for tyres, conveyor belts, untreated timber, disused pipelines and concrete, HDPE liner and HDPE piping defined in Condition 6, Table 4

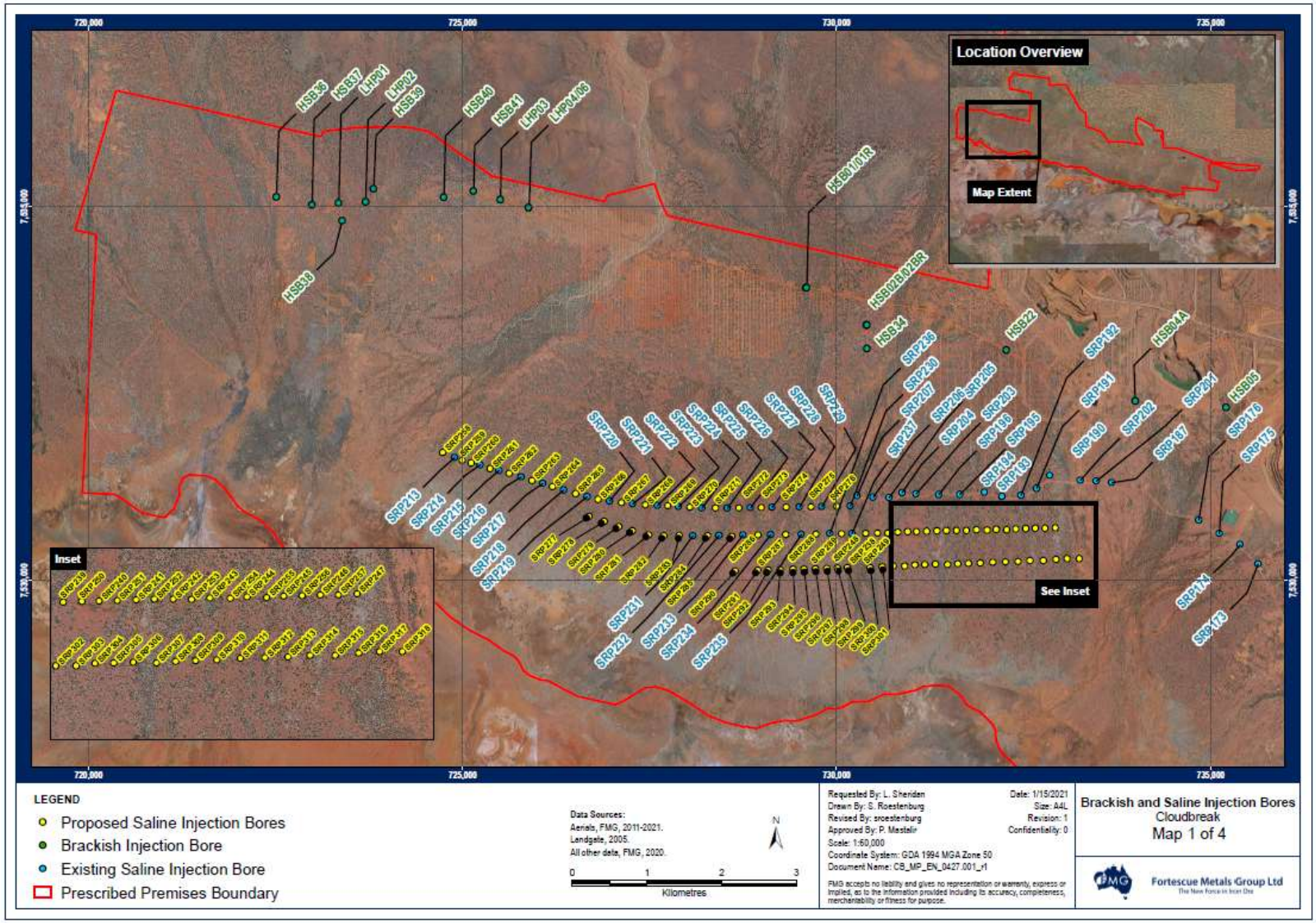

Figure 5: Locations of the brackish and saline water emission points to groundwater referred to in Condition 9 Table 6 and Condition 13, Table 9

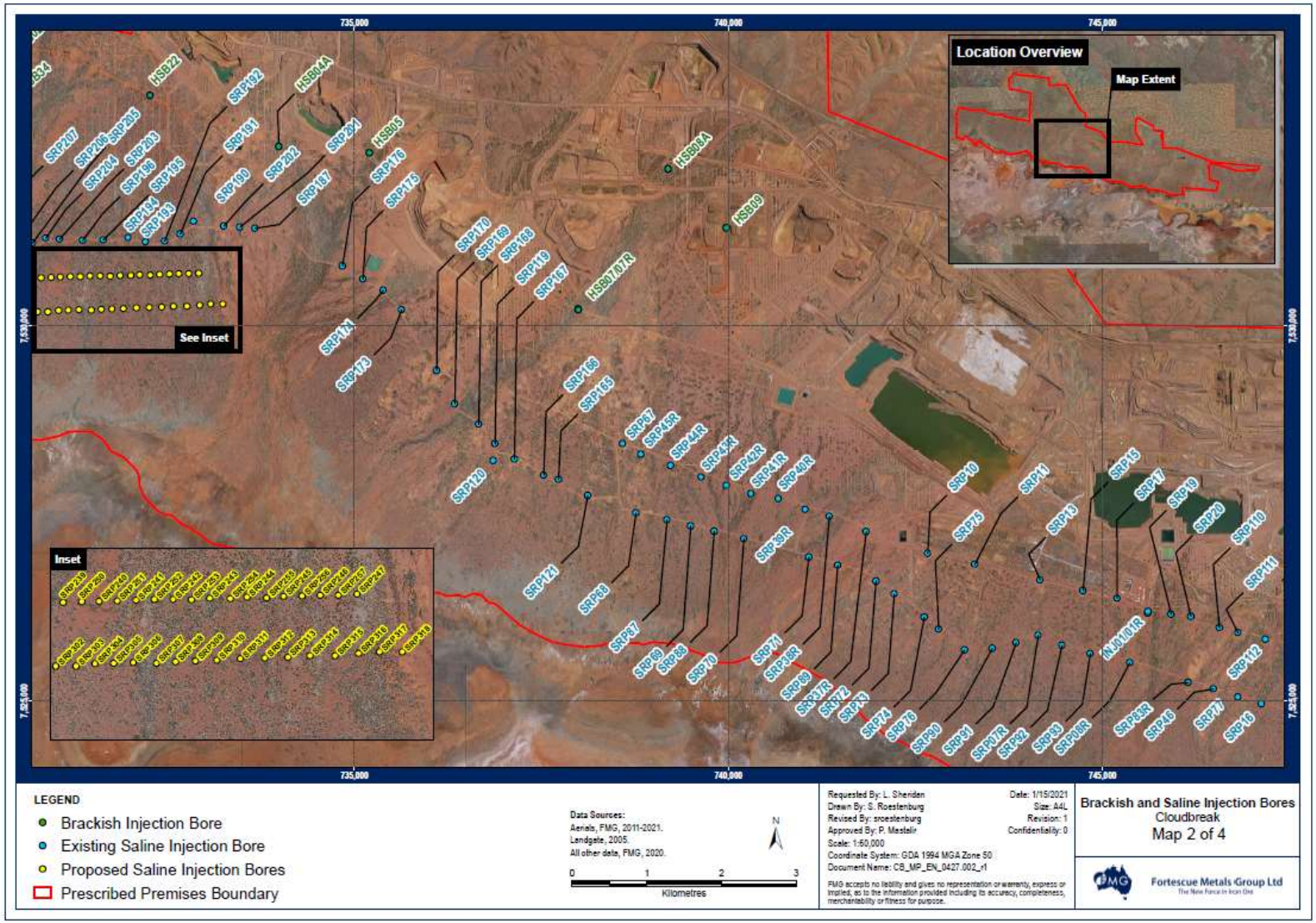

Figure 6: Locations of the brackish and saline water emission points to groundwater referred to in Condition 9, Table 6 and Condition 13, Table 9

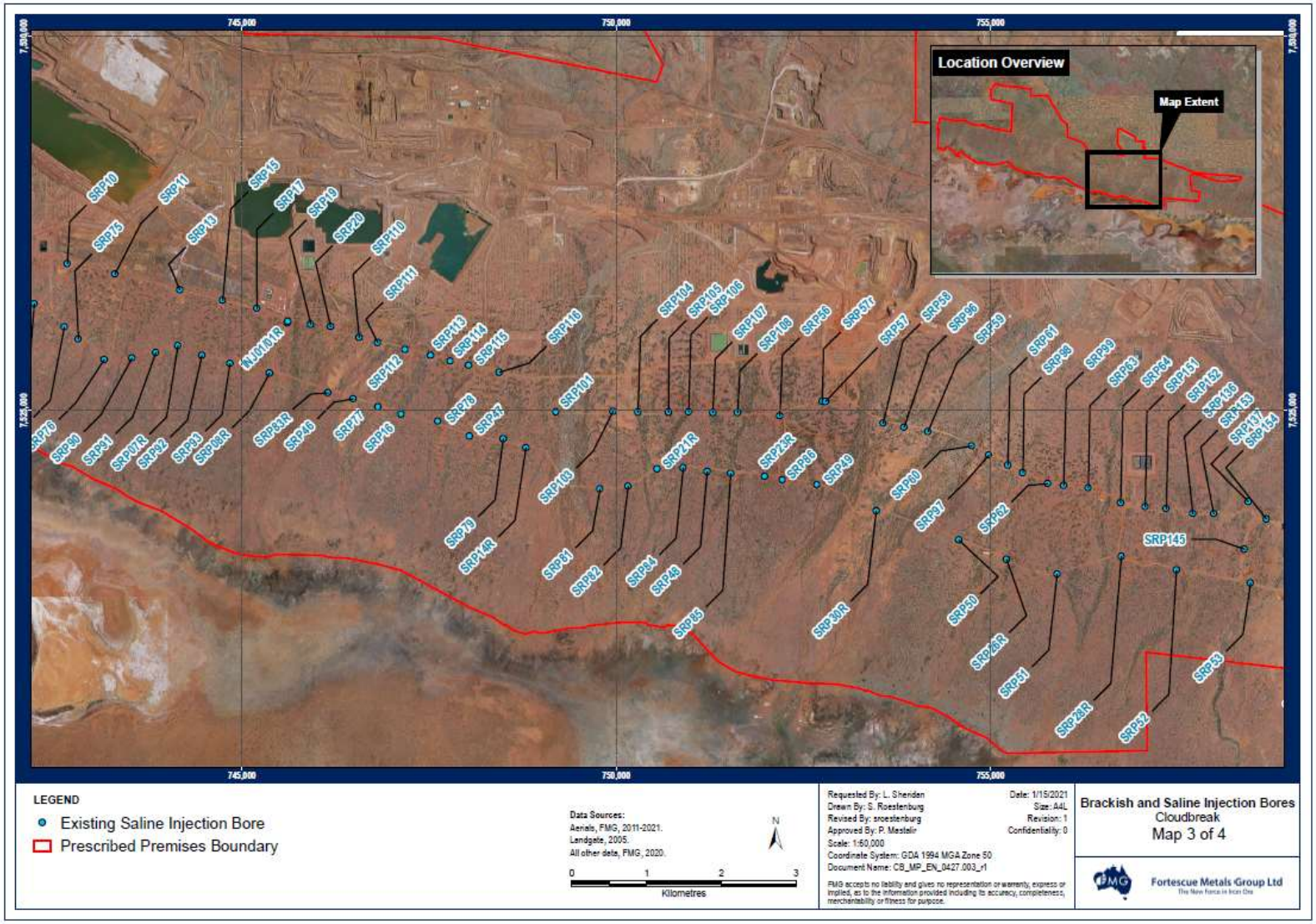

Figure 7: Locations of the brackish and saline water emission points to groundwater referred to in Condition 9 Table 6 and Condition 13, Table 9

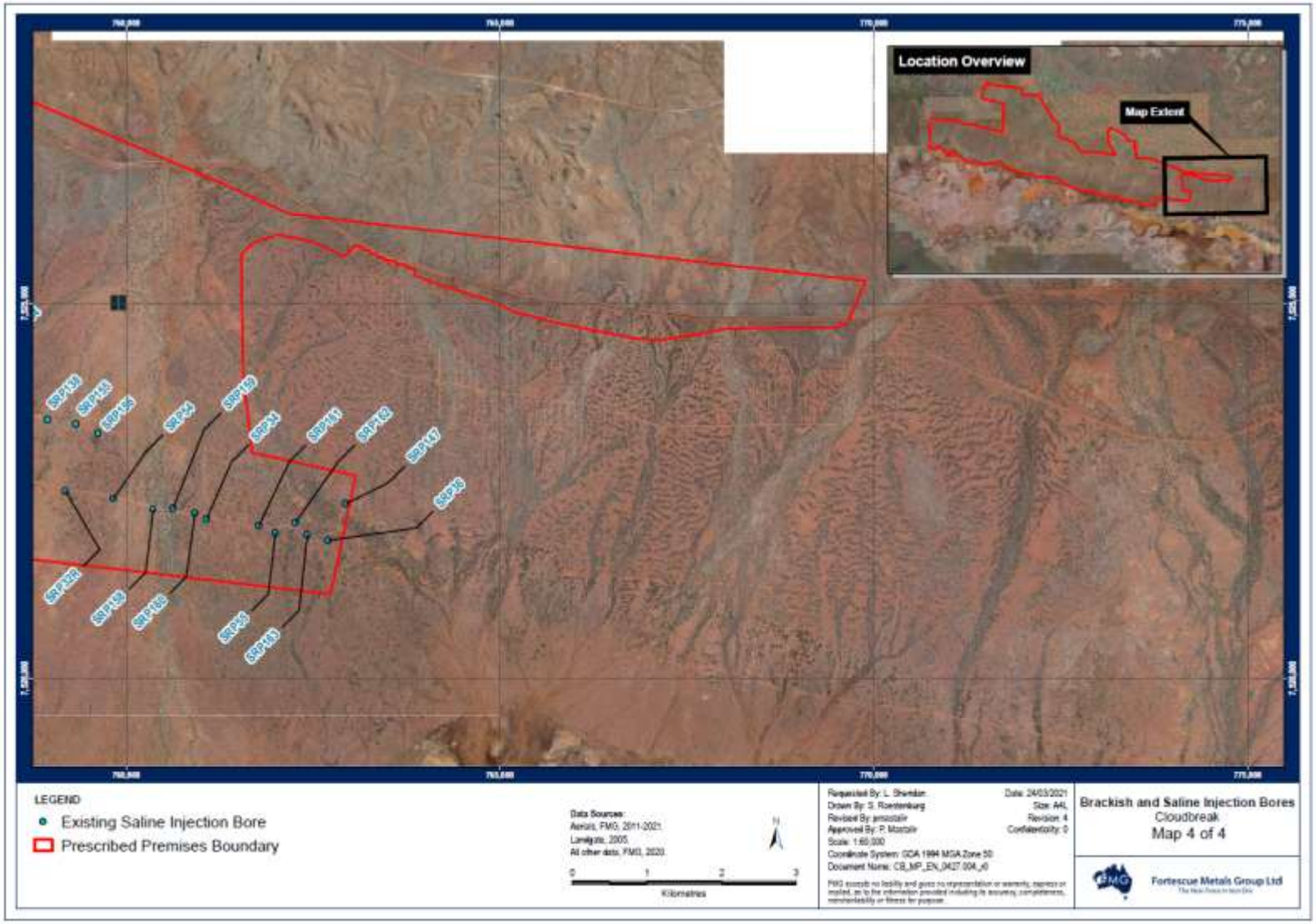

Figure 8: Locations of the brackish and saline water emission points to groundwater referred to in Condition 9 Table 6 and Condition 13, Table 9

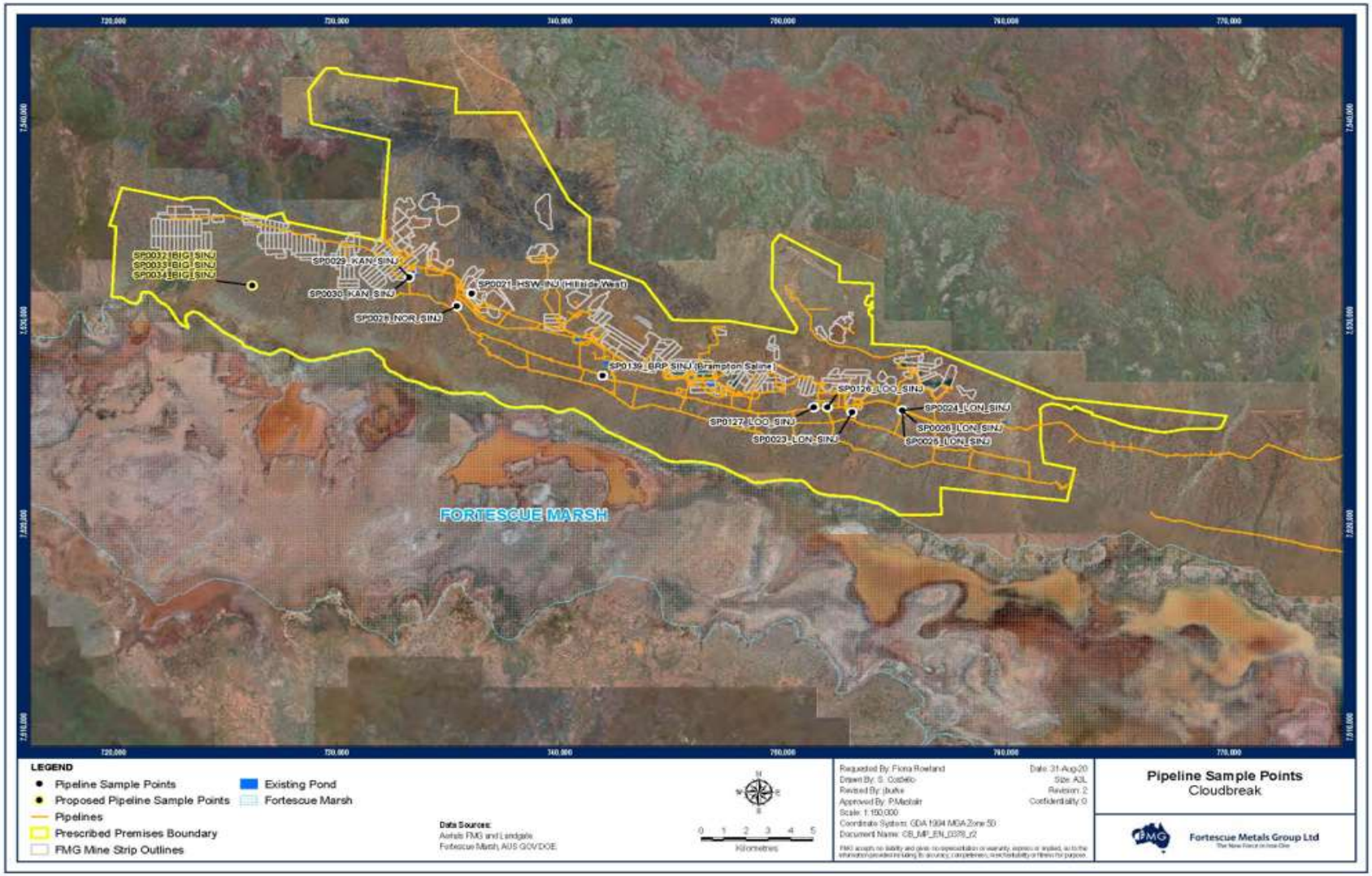

Figure 9: Location of the monitoring points defined in Condition 19 Table 12

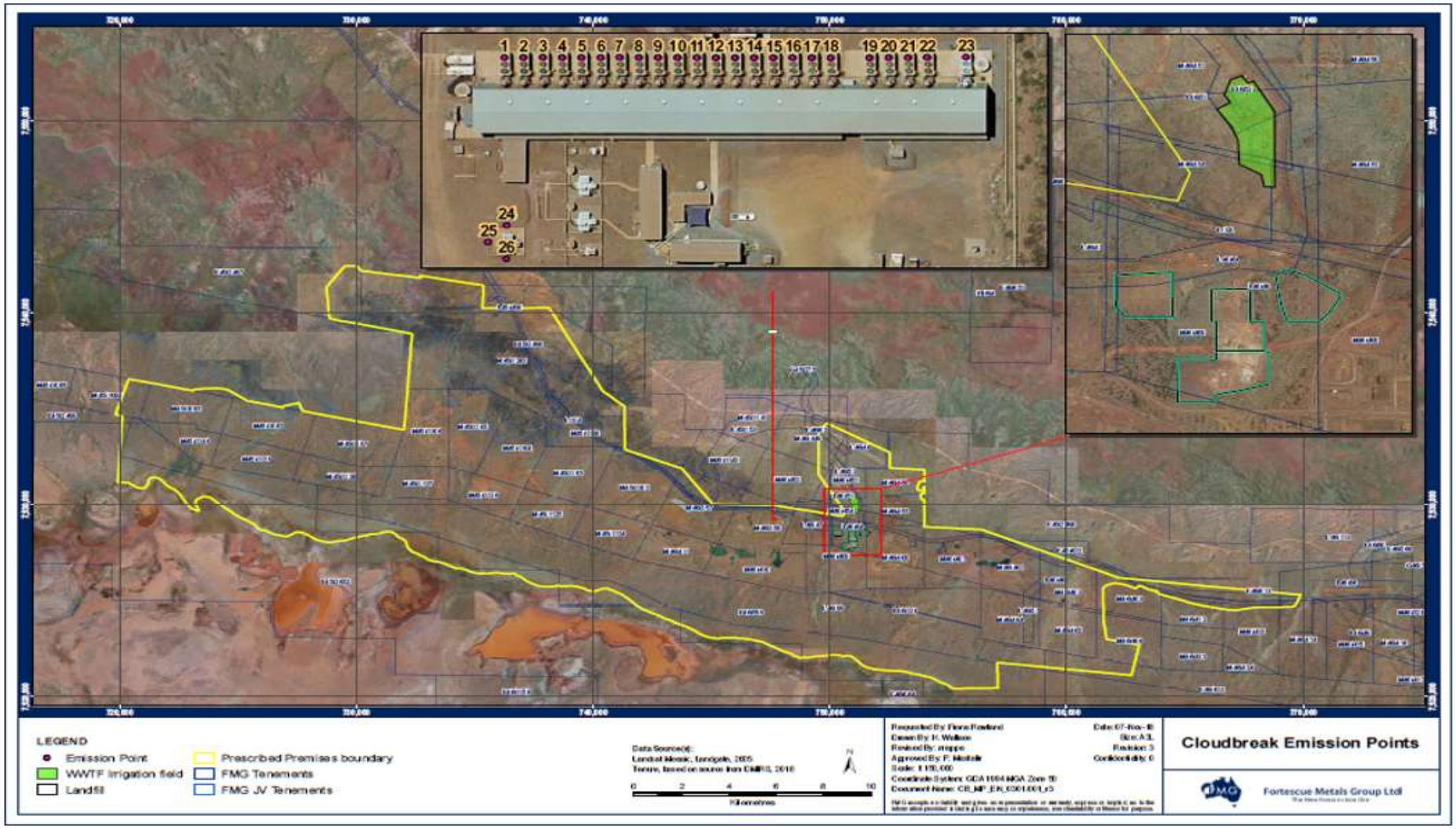

Figure 10: Location of the emission and monitoring points defined in Condition 11, Table 7, Condition 14, Table 10 and Condition 20, Table 13

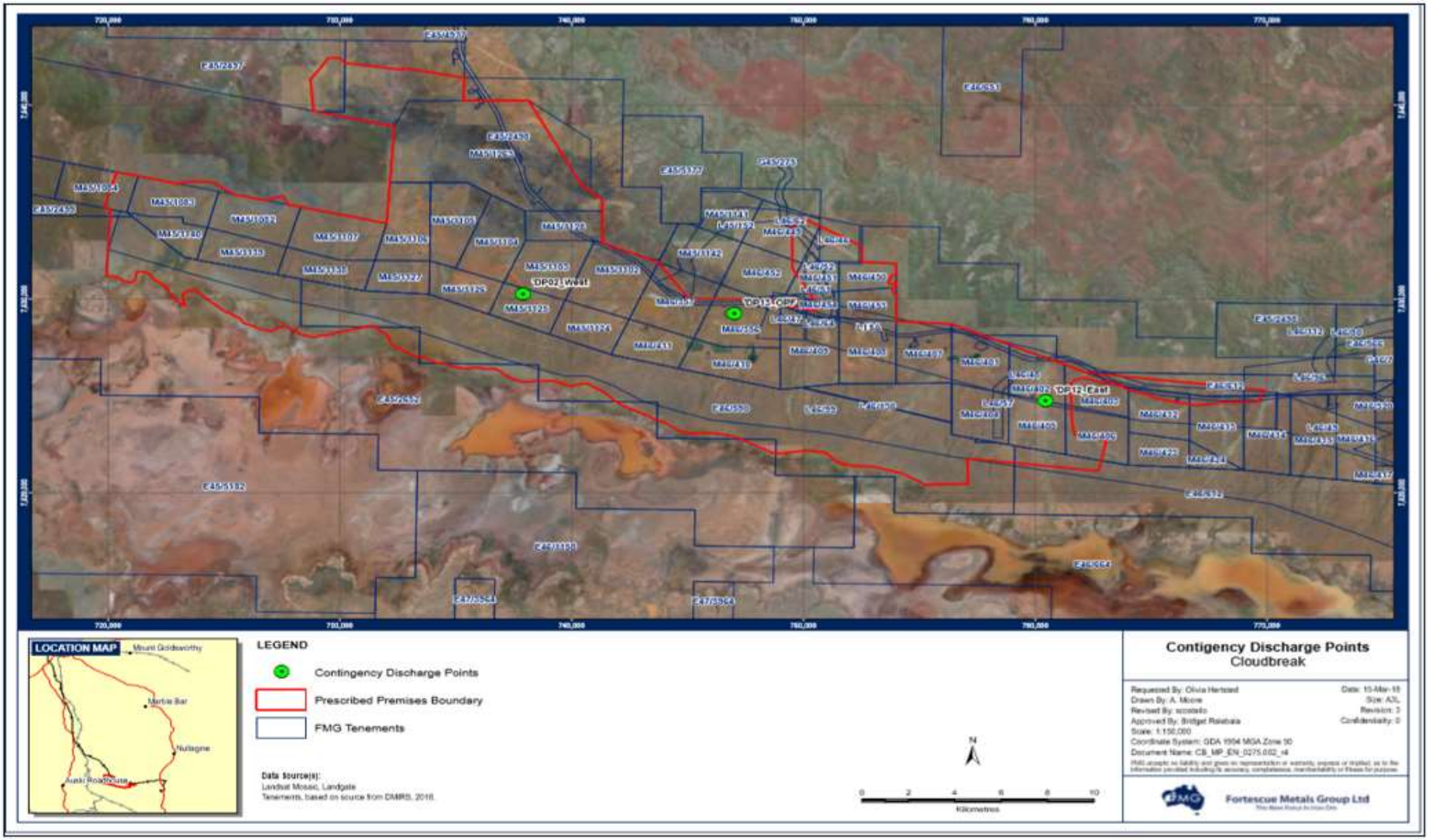

Figure 11: Location of the contingency discharge emission and monitoring points defined in Condition 12, Table 8 and Condition 18, Table 11

Figure 12: Location of the tailing facilities monitoring points defined in Condition 22, Table 15

Figure 13: Location of the ambient groundwater monitoring points defined in Condition 22, Table 15

Map of containment infrastructure

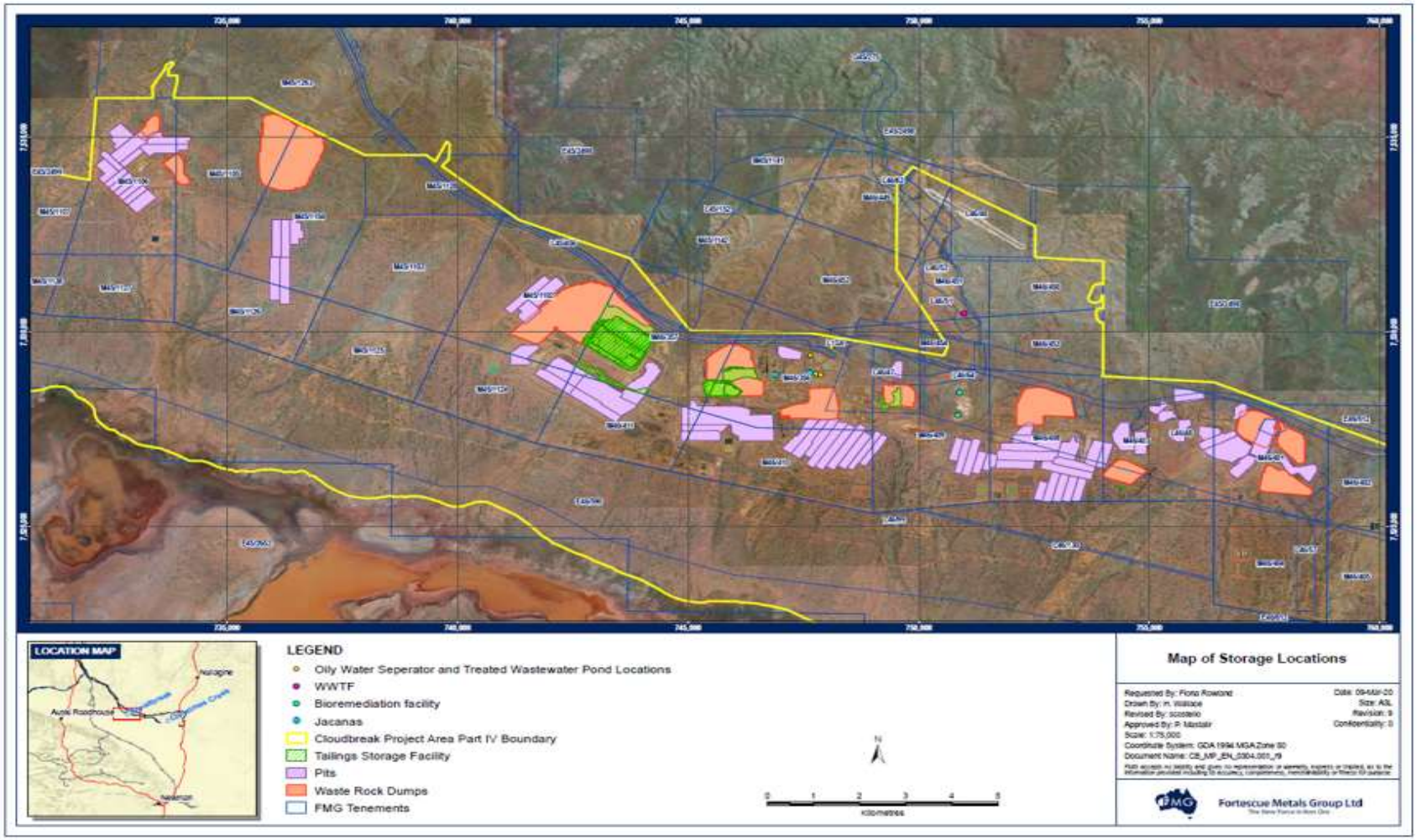

Figure 14: Location of the containment infrastructure defined in Condition 3, Table 2 and Process Monitoring location defined in Condition 21, Table 14

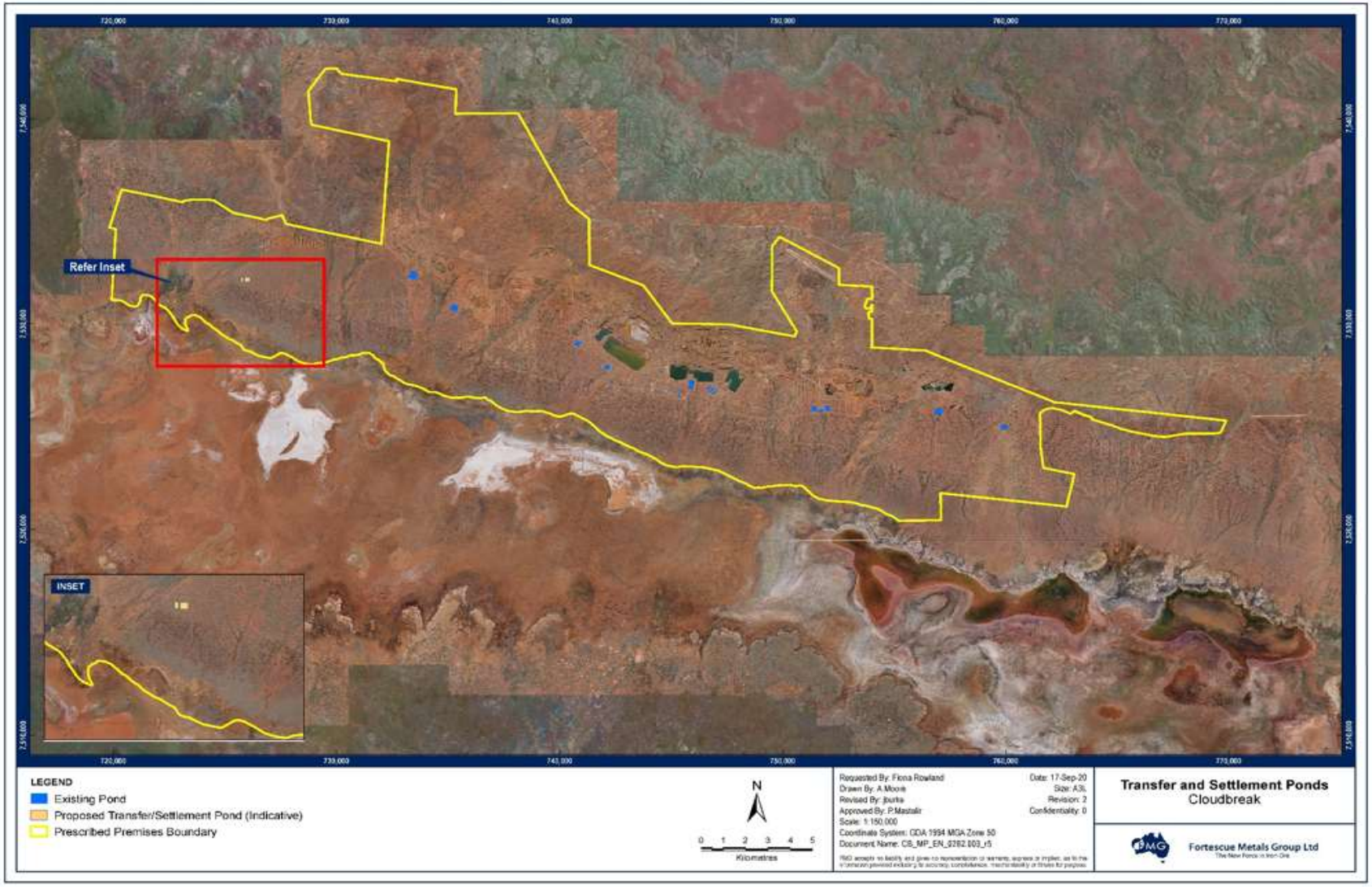

Figure 15: Location of the Bigge Transfer Pond and Bigge Settlement Pond containment infrastructure defined in Condition 3, Table 2

Schedule 2: Prescribed Premises Categories

The Premises prescribed categories under schedule 1 of *Environmental Protection Regulation 1987*

Prescribed Premises categories

Category number	Category Description	Category production or design capacity	Approved Premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year	50,000,000 tonnes per Annual Period
6	Mine dewatering	50,000 tonnes or more per year	Maximum of 150,000,000 tonnes per Annual Period (reinjected)
52	Electric power generation	10 megawatts or more in aggregate (using a fuel other than natural gas)	50.6 megawatts
54	Sewage facility	100 cubic metres or more per day	694.5 cubic metres per day
57	Used tyre storage	100 tyres or more	2,000 tyres
64	Class II putrescible landfill site	20 tonnes or more per year	10,000 tonnes per Annual Period
73	Bulk storage of chemicals, etc.	1,000 cubic metres in aggregate	7,700.5 cubic metres

Schedule 3: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L8199/2007/2 Licence Holder: Chichester Metals Pty Ltd
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 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	

Name	
Post	
Signature on behalf of Chichester Metals Pty Ltd	
Date	