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Grenof Water Technologies Pty Ltd

**Project Halogen - Material Change of Use and  
Reconfiguring a Lot within the Gladstone State  
Development Area**

Planning Report for a SDA Application under the *State Development and Public  
Works Organisation Act 1971*

November 2025

## Document History and Status

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## Glossary

Acronym / Abbreviation	Meaning
ACCC	Australian Competition and Consumer Commission
ASS	Acid sulfate soil
BYDA	Before You Dig Australia
CG	Coordinator-General
Cl <sub>2</sub>	Chlorine
CQG	CQ Environmental Pty Ltd (ABN 61 107 574 514) trading as CQG Consulting
CQRP	<i>Central Queensland Regional Plan 2013</i>
DA	Development application
DCA	Detailed Connection Advice
DETSI	Department of the Environment, Tourism, Science and Innovation
Development Scheme	GSDA Development Scheme May 2022
DSDIP	Department of State Development, Infrastructure and Planning
EA	Environmental authority
EDQ	Economic Development Queensland
EIS	Environmental impact statement
EMP	Environmental Management Plan
EP Act	<i>Environmental Protection Act 1994 (Qld)</i>
EP Reg	<i>Environmental Protection Regulation 2019 (Qld)</i>
ERA	Environmentally relevant activity
ERP	Emergency Response Plan
ESCP	Erosion and Sediment Control Plan
ESG	Environmental, social and governance
FNBGGGTB	First Nations Bailai, Gurang, Gooreng Gooreng and Taribelang Bunda People
GBRWHA	Great Barrier Reef World Heritage Area

Acronym / Abbreviation	Meaning
GEA	Gladstone Engineering Alliance
GHG	Greenhouse gas
GRC	Gladstone Regional Council
Grenof	Grenof Pty Ltd (ABN 17 166 936 894)
GSDA	Gladstone State Development Area
GWT	Grenof Water Technologies Pty Ltd (ABN 21 600 860 231)
ha	Hectares
HCl	Hydrochloric acid
IAR	Impact assessment report
km	kilometres
m	metres
MEDQ	Minister for Economic Development Queensland
mAHD	metres with respect to Australian Height Datum
MCU	Material change of use
MHF	Major hazard facility
ML	Mining lease
MNES	Matters of national environmental significance
MSES	Matters of state environmental significance
MTSC	Material transport and services corridor
NaOCl	Sodium hypochlorite
NaOH	Caustic soda
OCG	Office of the Coordinator-General
OIR	Office of Industrial Relations
OPW	Operational works
PBC	Prescribed Body Corporate
PCCC	Port Curtis Coral Coast

Acronym / Abbreviation	Meaning
PHWG	Project Halogen Working Group
Planning Act	<i>Planning Act 2016 (Qld)</i>
Planning Regulation	<i>Planning Regulation 2017 (Qld)</i>
Planning Scheme	<i>Gladstone Regional Council Planning Scheme 2017</i>
QIC	Queensland Investment Corporation (ABN 95 942 373 762)
Qld	Queensland
RaL	Reconfiguring a Lot
ROW	Right of way
RPEQ	Registered Professional Engineer of Queensland
RTAY	Rio Tinto Australia Yarwun
SDA	State Development Area
SDPWO Act	<i>State Development and Public Works Organisation Act 1971 (Qld)</i>
SWMP	Stormwater Management Plan
SQP	Suitably qualified person under section 564 of the EP Act
SPP	State Planning Policy
The Proposal	Project Halogen – chlor-alkali facility
The Site	Portions of Lot 1 on SP200899 and Lot 1 on MPH32292
TIA	Traffic Impact Assessment
TKN	Thysenkrupp nucera (Process design engineer)
TMR	Department of Transport and Main Roads
tpa / tpd	Tonnes per annum / Tonnes per day
Water Act	<i>Water Act 2000 (Qld)</i>
WHS Reg	<i>Work Health and Safety Regulation 2011 (Qld)</i>
WHSMP	Work Health and Safety Management Plan
WSAA	Water Services Association of Australia
WWBW	Waterway barrier works

# 1 Introduction

## 1.1 Background

Grenof Water Technologies Pty Ltd (GWT) is a 50:50 venture between Grenof Pty Ltd (Grenof) and the Queensland Investment Corporation (QIC). GWT has been established to develop a chlor-alkali facility in the Gladstone State Development Area (GSDA) (Project Halogen, the Proposal). Grenof will operate the facility.

The driver for Project Halogen is the sovereign risk associated with chemicals vital for Australia's industrial, economic and public health sectors as follows:

- Chlorine (Cl<sub>2</sub>):
  - no viable substitute for potable water disinfection;
  - single domestic producer with aging infrastructure, otherwise imported; and
  - current domestic stockpiles estimated to last in the order of four weeks only.
- Caustic soda (NaOH):
  - essential industrial chemical; and
  - total reliance on foreign supply.

Both products are currently imported into Gladstone for industrial use.

The criticality of the Project to the Queensland Government is evidenced through the QIC investment and the formation of the Project Halogen Working Group (PHWG); including representatives from the Department of State Development, Infrastructure and Planning (DSDIP), Office of the Coordinator-General (OCG), Office of Industrial Relations (OIR) and Economic Development Queensland (EDQ). The Commonwealth Government, through the Australian Competition and Consumer Commission (ACCC), granted authorisation to Water Services Association of Australia (WSAA) members to enhance the resilience of Australia's gaseous Cl<sub>2</sub> supply chain. The ACCC determination (AA1000657, valid until 14 June 2029) includes an authorisation to enable collective negotiation with suppliers of chlor-alkali products to construct a new gaseous Cl<sub>2</sub> bottling and drumming facility in Australia, including collective negotiation of supply contracts.

The Proposal will require a major hazard facility (MHF) licence as it will exceed the threshold for Cl<sub>2</sub> storage in Schedule 15 of the *Work Health and Safety Regulation 2011 (Qld)* (WHS Reg). The GSDA has been identified as a suitable location for the facility by the Coordinator-General (CG) given its identified purpose and buffer to sensitive land uses. EDQ has been assisting GWT with identifying an appropriate location within their GSDA landholdings, with a portion of Lot 1 on SP200899 and Lot 1 on MPH32292 (the Site, refer to Figure 1.1) recommended given its proximity to suitable transport routes and customers.

This Planning Report has been prepared by CQG Consulting (CQG) on behalf of GWT to support a development application (DA) for the following activities:

- Material change of use (MCU) – development permit for a special industry under the GSDA Development Scheme May 2022 (CG 2022) (Development Scheme); and
- Reconfiguring a lot (RaL) – development permit under the Development Scheme.

Operational works (OPW) for the clearing of regulated regrowth vegetation can be undertaken as a State Development Area (SDA) self-assessable development, where associated with a MCU and / or RaL authorised by an SDA approval.

An environmental authority (EA) for environmentally relevant activity (ERA) 7(6d) Chemical manufacturing: manufacturing, in a year, more than 100,000 tonnes of inorganic chemicals prescribed under Schedule 2 of the *Environmental Protection Regulation 2019 (Qld)* (EP Reg) will be required prior to commencement of operations. This approval will be sought in parallel with, but can only be granted after, the SDA approval for a MCU.

Project Halogen will manufacture the following chemicals triggering the ERA (project capacities listed are based on a 100% chemical basis at plant capacity):

- NaOH – approximately 100 tonnes per day (tpd), diluted to 50% concentration (i.e. approximately 200 tpd), for direct delivery to Rio Tinto Australia Yarwun (RTAY) and used in sodium hypochlorite (NaOCl) generation process;

- Liquefied Cl<sub>2</sub> gas – approximately 90 tpd, for delivery to water authorities and used in the hydrochloric acid (HCl) generation process; and
- Derivative products manufactured using the abovementioned primary chemicals as inputs:
  - NaOCl – approximately 40 tpd, diluted to a 12.5% concentration (i.e., approximately 320 tpd), for delivery to water authorities and other industrial customers; and
  - HCl – approximately 40 tpd, diluted to a 33% concentration (i.e., approximately 120 tpd), for delivery to various industrial and mining applications.

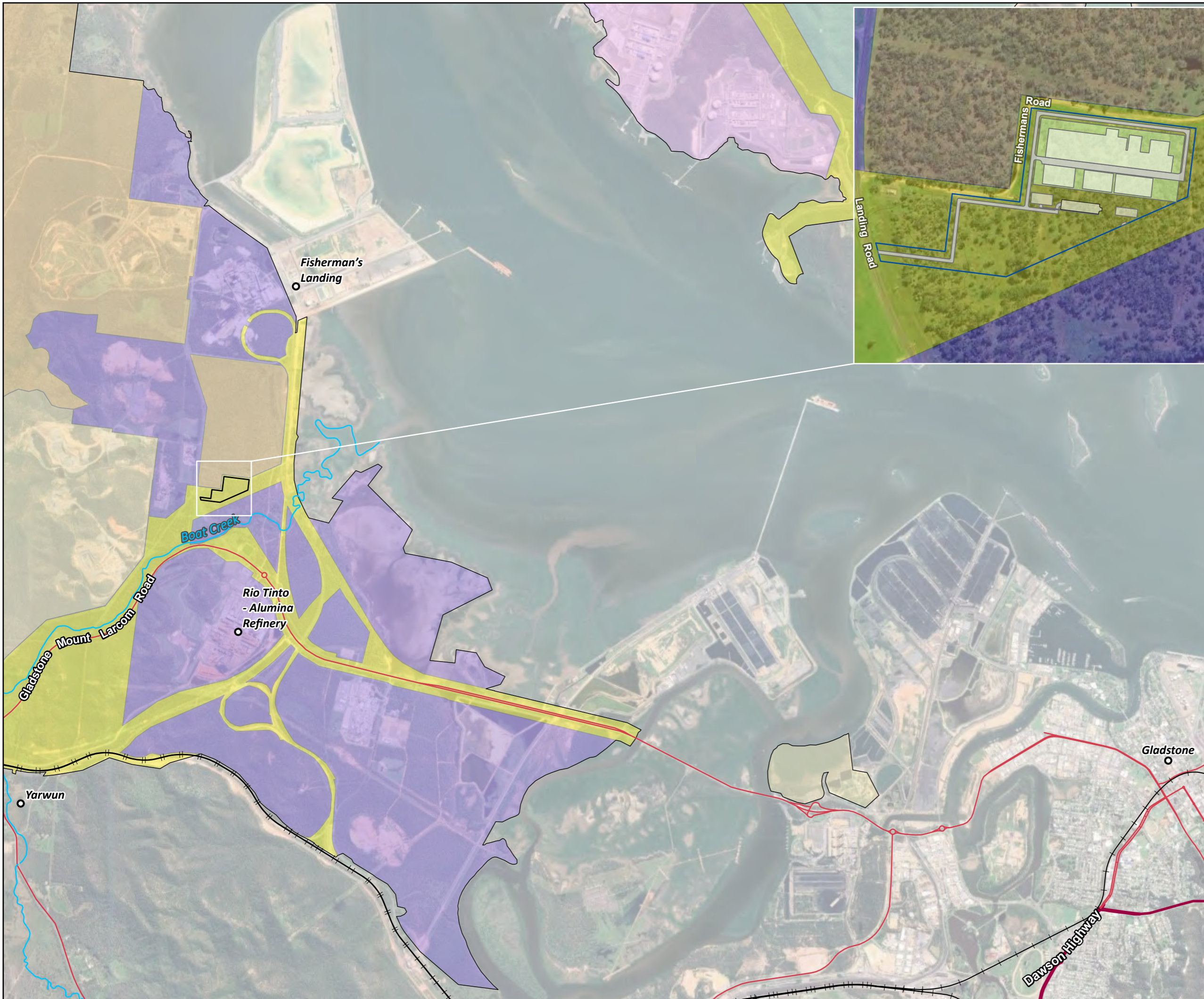
## 1.2 Purpose of the document

This Planning Report provides details about the Site and the Proposal, as required to be a properly made application under Schedule 2 section 2.1(2) of the Development Scheme (refer to Table 1.1).

Table 1.1: SDA application requirements

Requirement	Planning Report reference or comment
(a) be made to the CG in the approved form	Online submission made at <a href="https://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/development-schemes-applications-and-requests/make-an-sda-application-or-request/application-request-form">https://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/development-schemes-applications-and-requests/make-an-sda-application-or-request/application-request-form</a>
(b)(i) include a clear and accurate description of the land subject to the application	Section 1.1, Figure 1.1 and Table 1.3
(b)(i) include the proponent's name, address and contact details	Table 1.3
(c) identify the development for which approval is being sought	Section 4
(d) subject to subsection (3), include the written consent of the owner of the land	Appendix A
(e) state the referral triggers under the Planning Act (and referral entities if known) for the application	Section 2.2 and Appendix B
(f) if the application is part of a larger development, include a description of the larger development and details of how the application relates to the larger development	Not applicable
(g) include a statement on whether the development has been, is or will be subject to an EIS or IAR	The development has not been subject to an environmental impact statement (EIS) or impact assessment report (IAR) as it is not considered to trigger this requirement under the SDPWO Act (refer to Section 2.1.1.1).  In consultation with the OCG, GWT have determined an MCU would be the most appropriate approval pathway for the Proposal.

Requirement	Planning Report reference or comment
<p>(h) be accompanied by:</p> <p>(i) a detailed and comprehensive planning report and</p> <p>(ii) if one has been prepared, an EIS or IAR relevant to the application including a Coordinator-General's report and</p> <p>(iii) payment of the relevant fee, if prescribed by regulation.</p>	<p>(i) This Planning Report</p> <p>(ii) Not applicable as per response to (g)</p> <p>(iii) Payment of the relevant fee will be made upon submission.</p>



**Legend**

- Project Area
- North Coast Rail Line
- Boat Creek

**Roads**

- Highway
- Major Road

**Gladstone SDA Precinct**

- Port Related Industry Precinct
- Environmental Management Precinct
- High Impact Industry Precinct
- Industry Investigation Precinct
- Materials Transportation and Services Corridor Precinct
- Medium Impact Industry Precinct

N

Scale 1:40,000 (A3)

0 600 1,200 1,800

Metres

Coordinate System: GDA2020 MGA Zone 56

**Figure 1.1**

**Project Halogen**

**Project Location**

**CQG Consulting**

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**Project No: 25054**  
**Map No: 25054-06**  
**Revision: RevA**  
**7 November 2025**

### 1.3 Development Approval Triggers

The development approval triggers relevant to the construction and operation of the special industry and RaL under the SDPWO Act are summarised in Table 1.2 and further discussed at Section 2.

Table 1.2: Development approval triggers

Instrument	Trigger	Level of assessment	Comment
Development Scheme under SDPWO Act	MCU – special industry	SDA assessable Section 2.4.5, Table 5 Column 2	Application submitted to the CG as the assessment manager.
	RaL – lease exceeding 10 years	SDA assessable Section 2.4.5, Table 5 Column 2	
	Operational works – clearing of native vegetation	SDA self-assessable Schedule 3, Part 3.1	Where associated with a MCU and / or RaL authorised by an SDA approval, regulated regrowth vegetation may be cleared in accordance with SDA self-assessable development requirements.

### 1.4 Supporting Technical Reports

Technical reports and drawings supporting this DA are summarised in Table 1.3.

Table 1.3: Supporting documentation

Drawing / report title	Prepared by	Date	Reference	Appendix
MHF assessment (including responses to State code 21: Hazardous chemical facilities)	Safety Solutions	10 November 2025	A0335-REP-001 (Rev 1)	Appendix B.3
Conceptual design layout	CQG & Grenof	6 November 2025	25054-02 (Rev A)	Appendix C
	Prudentia	28 October 2025	OC25008-000-Z-GAR-001 (Rev B)	
Technical Note: Project Halogen – Material and Transport Services Corridor (MTSC) Precinct	Safety Solutions	12 September 2025	A0335-TN01_1	Appendix D

Drawing / report title	Prepared by	Date	Reference	Appendix
Ecological (habitat and fauna) assessment	CQG	11 November 2025	25054 (Rev 1)	Appendix E
Bushfire hazard assessment	Blackash	10 November 2025	J4104 (Ver 1.2)	Appendix F
Air quality assessment	Katestone	10 November 2025	D25015-5 (Ver 1.0 Final)	Appendix G
Greenhouse gas (GHG) assessment	Katestone	12 November 2025	D25014-4 (Ver 1.0 Final)	Appendix H
Noise and vibration assessment	SEG	30 October 2025	250724D02 (Final)	Appendix I
Preliminary baseline soil assessment	CQG	11 November 2025	25054 (Rev 2)	Appendix J
Traffic impact assessment (TIA)	Premise	3 November 2025	POO3805-R01 (Rev A1)	Appendix K
Environmental management plan (EMP)	CQG	12 November 2025	25054 (Rev 1)	Appendix L
Erosion and Sediment Control Plan (ESCP)	TOPO	12 November 2025	25-0204/R4211 (Ver C)	Refer to Appendix C of the EMP (Appendix L)
Stormwater Management Plan (SWMP)	TOPO	12 November 2025	25-0204/R4331 (Ver C)	Refer to Appendix D of the EMP (Appendix L)

## 1.5 Development Application Details

Details about the DA are provided in Table 1.4.

Table 1.4: DA Details

<b>Proposed Development:</b>	<b>Special Industry and Reconfiguring a Lot</b>
<b>Type of development:</b>	<ul style="list-style-type: none"> <li>• MCU – special industry; and</li> <li>• RaL – lease period exceeding 10 years</li> </ul>
<b>Type of development approval sought:</b>	MCU and RaL SDA approval
<b>Site address:</b>	56 Fisherman’s Road and 26 Landing Road, Yarwun QLD 4694
<b>Real property description:</b>	<p>Part of lots:</p> <ul style="list-style-type: none"> <li>• Lot 1 on MPH32292; and</li> <li>• Lot 1 on SP200899.</li> </ul> <p>The Site is presented in Figure 1.1.</p>
<b>Site area:</b>	Approximately 7.65 hectares (ha)
<b>Assessment manager:</b>	Coordinator-General (CG)
<b>Owner details:</b>	Minister for Economic Development Queensland (MEDQ)
<b>Proponent details:</b>	<p>Name: Grenof Water Technologies Pty Ltd</p> <p>ABN: 21 600 860 231</p> <p>Address: 10 Mizzen Close, Wurtulla QLD 4575</p> <p>Contact person: Scott Barnes (Managing Director)</p> <p>M: 0408 187 102 and E: <a href="mailto:scott.barnes@grenof.com">scott.barnes@grenof.com</a></p>

## 2 Planning Instruments and Development Assessment

### 2.1 State Planning Instruments

#### 2.1.1 State Development and Public Works Organisation Act 1971

##### 2.1.1.1 EIS or IAR referral

As required under the provisions for a properly made application under Schedule 2 section 2.1(2) of the Development Scheme, a statement against the relevant criteria regarding whether development has been, is or will be subject to an EIS or IAR is as follows:

1. Complex approval requirements, involving Local, State and Federal governments – key approval requirements for the use within the GSDA that has been set aside for industrial purposes are as follows:
  - MCU and RaL under the Development Scheme;
  - EA for ERA 7(6d) Chemical manufacturing: manufacturing, in a year, more than 100,000 tonnes of inorganic chemicals under the Environmental Protection Act 1994 (Qld) (EP Act) (refer to Section 2.1.3); and
  - MHF licence under only (refer to Section 1.3 and Appendix B.3).
2. Significant environmental effects – no Matters of National Environmental Significance (MNES) or Matters of State Environmental Significance (MSES) to be significantly impacted (refer to Section 3 and Appendix E). Located within the GSDA designated for industrial facilities;
3. Strategic significance to the locality, region or State, including for the infrastructure, economic and social benefits, capital investment or employment opportunities it may provide – strategic in relation to Cl<sub>2</sub> production for the country, but relatively low cost, infrastructure requirements and workforce (refer to Section 4); and
4. Significant infrastructure requirements – not applicable as noted above (refer to Section 4).

##### 2.1.1.2 SDA Approval

SDAs are areas declared by regulation under the SDPWO Act. The GSDA was declared in December 1993, with the Development Scheme prepared pursuant to sections 79 to 80 of the SDPWO Act (current version dated May 2022).

The Site is located within the MTSC Precinct of the GSDA, therefore is subject to assessment under the Development Scheme.

In accordance with section 1.3.1(1) of the Development Scheme, development identified in Tables 1 to 6 as SDA assessable development requires an SDA application to be made to the CG in accordance with Schedule 2 in order to obtain an SDA approval.

Further, in accordance with section 1.3.1(2) of the Development Scheme, development identified in Tables 1 to 6 as SDA self-assessable development does not require an SDA approval but must comply with the requirements identified in Schedule 3.

This Planning Report has been prepared by CQG on behalf of GWT to support a development application (DA) for the following regulated development within the MTSC Precinct under the Development Scheme associated with the Proposal:

- Section 2.4.5 Table 5 Column 2 – SDA assessable development: MCU for a special industry (chemical manufacturing facility) as defined in Schedule 1 Part 2 of the Development Scheme;
- Section 2.4.5 Table 5 Column 2 – SDA assessable development: RaL for a lease exceeding 10 years in as defined under Schedule 2 of the SDPWO Act, consistent with Schedule 2 of the *Planning Act 2016 (Qld)* (Planning Act); and
- Section 2.4.5 Table 5 Column 1 – SDA self-assessable development: OPW for clearing native vegetation where associated with an MCU or a RaL, and where able to comply with the requirements for SDA self-assessable development.

Section 2.1.1(3) of the Development Scheme states that:

*An SDA application will be assessed against the following, to the extent they are considered relevant by the Coordinator-General:*

- a) *The strategic vision for the Gladstone SDA*
- b) *The overall objectives for development in the Gladstone SDA*
- c) *The preferred development intent for each development precinct*
- d) *SDA wide assessment criteria*

Refer to **Appendix B.1** for responses related to the Proposal against these benchmarks. In addition, SDA self-assessable OPW requirements for clearing native vegetation in accordance with Schedule 3 of the Development Scheme are addressed in **Appendix B.1**.

### **2.1.2 Environmental Protection Act 1994**

The EP Act prescribes the assessment framework for an EA for an ERA. In accordance with Schedule 2 of the EP Reg, the following prescribed ERA is relevant to the Proposal:

- ERA 7(6)(d) – manufacturing, in a year, more than 100,000 tonnes of inorganic chemicals.

An environmental authority (EA) for ERA7(6)(d) will be required for the operational activity of manufacturing chemicals. In accordance with Section 120(3) of the EP Act, a prescribed ERA in a SDA must be applied for following lodgement of the SDA application for an MCU. Accordingly, a EA application will be submitted post lodgement of this SDA application.

### **2.1.3 Central Queensland Regional Plan**

The Site is located within the boundaries of the *Central Queensland Regional Plan 2013 (CQRP)*. The CQRP provides a regional planning framework to *"identify regional outcomes for the region, regional policies for achieving the regional outcomes, and the state's intent for the future spatial structure of the region, including Priority Agricultural Areas, Priority Living Areas, and priority outcomes for infrastructure"*.

The Site is located outside priority living areas and priority agricultural areas.

The Proposal will support expanding industrial development within the GSDA specifically designated for such uses.

### **2.1.4 State Planning Policy**

The State Planning Policy (SPP), established under the Planning Act, details matters of planning interest across Queensland which enable development, seek to protect the natural environment and allow communities to grow and prosper.

The State interests relevant to the Proposal are detailed below:

- Economic growth: development and construction – development in an SDA creating jobs:
  - in accordance with relevant state interest policies under the SPP, appropriate infrastructure is available for the Proposal and is evidenced by consultation between Grenof and service providers to date.
- Environment and heritage: Biodiversity – MSES regulated vegetation (Category C – endangered or of concern) (refer to ecological assessment at **Appendix E**); and
- Safety and resilience to hazards: MHF considerations (refer to MHF assessment at **Appendix B.3**).

Prescribed matters under the SPP and likely impacts have been considered and addressed in the technical reporting supporting this SDA application.

## 2.2 Referral Agency Details

As part of the referral stage of an SDA application, the CG decides if an application requires referral.

In accordance with Schedule 2 Section 2.1(2)(e) of the Development Scheme, identification of the relevant referral triggers under the Planning Act and *Planning Regulation 2017 (Old)* (Planning Regulation) is required. Refer to Table 2.1 for Planning Act referral triggers and agencies.

Table 2.1: Planning Act referral triggers and agencies

Referral requirement	Referral entity
1. Planning Regulation – Schedule 10, Part 5, Division 4, Table 2 – Non-devolved environmentally relevant activities	Department of the Environment, Tourism, Science and Innovation (DETSI)
2. Planning Regulation – Schedule 10, Part 9, Division 4, Subdivision 1, Table 1 – State transport infrastructure generally	Department of Transport and Main Roads (TMR)
3. Planning Regulation – Schedule 10, Part 9, Division 2, Table 1 – RaL subject to an easement or near a substation site	Ergon Energy
4. Planning Regulation – Schedule 10, Part 9, Division 2, Table 2 – MCU of premises near a substation site or subject to an easement	
5. Planning Regulation – Schedule 10, Part 7, Division 3 – Hazardous chemical facility	Office of Industrial Relations (OIR)

The application will be assessed against the State Development Assessment Provisions (SDAP), in accordance with the following applicable State codes based on the triggers identified in Table 2.1:

- State code 6: Protection of state transport networks – triggered for exceedance of the “threshold for a local government area 1 and 2” for a special industry, as prescribed under Schedule 20(19) of the Planning Regulation: *Development impacting on State transport infrastructure and thresholds* i.e., special industry use with machinery annual throughput of product of 10,000 tonnes; and
- State code 21: Major hazardous facilities – triggered for the use of premises for a facility at which a prescribed hazardous chemical (Cl<sub>2</sub> storage) is present or likely to be present in a quantity that exceeds 10 percent of the chemical’s threshold quantity under Schedule 15 of the WHS Reg.

Refer to Appendix B.2 for the State Code 6 response. Refer to Appendix B.3 for the State Code 21 response (provided at Appendix A of the MHF assessment).

A response to State code 22: Environmentally relevant activities, that would be required for referral requirement 1 if this were a DA under the Planning Act, is not provided or considered relevant to this SDA application. Relevant assessment benchmarks for ERA 7(6)(d) will be addressed under a subsequent EA application as stated in Section 2.1.2.

## 2.3 Local Planning Instruments

### 2.3.1 Gladstone Regional Council Planning Scheme

Councils are generally consulted on all SDA applications that fall within their respective local government areas.

The Proposal is located within the Gladstone Regional Council (GRC) local government area, with the Site zoned Special Purpose under the *Gladstone Regional Council Planning Scheme 2017* (Planning Scheme), as subject to assessment by the CG (refer to Section 2.1.1.2).

Overlays under the Planning Scheme of relevance to the Site, and of interest to the GRC as part of the referral process, are presented in Table 2.2.

Table 2.2: Local Planning instrument details

Type	Comments
Planning Scheme	<i>Gladstone Regional Council Planning Scheme 2017</i>
Applicable overlays:	<p>Council overlay mapping intersecting the Site:</p> <ul style="list-style-type: none"> <li>• Acid Sulfate Soils (ASS) 5 to 20 metres (m) with respect to Australian Height Datum (mAHD);</li> <li>• Airport buffer 8 to 13 kilometres (km);</li> <li>• Bushfire hazard – Medium Potential Bushfire Intensity;</li> <li>• Mining leases (ML) – associated with ML80081 (Queensland Energy Resources Pty Ltd); and</li> <li>• Regional infrastructure – associated with the Ergon Energy easement (refer to Table 2.1).</li> </ul>
Applicable assessment benchmarks	<ul style="list-style-type: none"> <li>• Bushfire Hazard Overlay Code.</li> </ul>

The Bushfire Hazard Assessment (refer to Appendix F) provides a response to the Bushfire Hazard Overlay Code.

In relation to other overlays relevant to the Site that are not otherwise addressed by Table 2.1:

- ASS – no indication of ASS on the Site based on a preliminary baseline soil assessment undertaken (refer to Appendix J);
- Airport buffer – minimal air emissions predicted from the Proposal (refer to Appendix G), with any emissions not likely to result in concerns to aircraft given Cl<sub>2</sub> gas is heavier than air and tends to gather in valleys and low-lying areas once released into the atmosphere (refer to Appendix B.3); and
- ML application associated with ML80081 – Stuart oil shale application pending since 1999 (refer to Section 2.4.1.6).

It is anticipated that approval will be required for works in a road reserve for access to the Site and any required upgrades (refer to the TIA at Appendix K), and potentially for trade waste disposal.

GWT will take further advice from GRC and the OCG with respect to any requirements regarding OPW for site works, or otherwise as required during the referral stage.

## 2.4 Stakeholder Consultation

The CG will decide if the SDA application requires referral or public consultation in accordance with Schedule 2 Section 2.2 and 2.3 respectively of the Development Scheme.

In accordance with Schedule 2 Section 2.1(7)(b) of the Development Scheme, the CG may determine that referral and / or public consultation do not apply because the CG is satisfied with the referral and/or public consultation undertaken. The following advice of previous consultation undertaken is provided to inform this assessment.

### 2.4.1 Referral agency engagement

#### 2.4.1.1 DETSI

GWT met with DETSI to discuss their interests relevant to the Proposal at an agency briefing arranged by the OCG on 3 September 2025. Pre-lodgement advice was provided by DETSI via the OCG on the requirements for the EA submission (refer to Appendix M).

Subsequent to this meeting, further advice was sought and received from DETSI in relation to air quality modelling requirements for the Project (refer to **Appendix M**). Based on this advice, detailed dispersion modelling was prepared as presented in **Appendix G**.

As noted in Section 1.1, an EA for ERA 7(6d) Chemical manufacturing: manufacturing, in a year, more than 100,000 tonnes of inorganic chemicals prescribed under Schedule 2 of the EP Reg will be sought in parallel with, but can only be granted after, the SDA approval for a MCU.

#### **2.4.1.2 TMR**

TMR was invited to the agency briefing arranged by the OCG on 3 September 2025, but chose to instead provide advice in relation interests relevant to the Proposal in writing (refer to **Appendix M**).

A TIA has been prepared to address this advice (refer to **Appendix K**).

#### **2.4.1.3 Ergon**

GWT supplied details of the general site location to Ergon as part of a preliminary connection advice submission under Chapter 5A of the National Electricity Rules.

GWT received advice from Ergon dated 3 September 2025 (Work Request: 2033580), including acknowledgement of the general site position.

The next step in the connection process is to proceed with a Detailed Connection Advice (DCA), requiring the provision of relevant technical requirements, in order to proceed with lodging a connection application. Ergon identified two options for power connection to the GWT facility, and no red flags in relation to the general site location, based on the preliminary information provided. In order to progress the DCA, GWT met with Ergon on 8 October 2025. Similarly, no issues with the Site location were identified at this meeting, with discussions focussed on a DCA assuming the proposed Option 2 for connection (new dedicated 66 kilovolt feeder from Boat Creek substation) as outlined in the Preliminary Connection Advice.

#### **2.4.1.4 OIR**

The OIR is represented on the PHWG (refer to Section 1.1), and have been engaged throughout the development of the MHF assessment (refer to **Appendix B.3**).

Continued consultation will be required throughout the detailed design phase as comprehensive safety management systems and detailed safety cases are developed.

OIR attended the agency briefing arranged by the OCG on 3 September 2025. Given the engagement to date related to the MHF assessment, no further advice was provided following the agency briefing.

#### **2.4.1.5 GRC**

GRC Councillors and senior management were provided with a closed deputation briefing on the Proposal on 12 August 2025 at the GRC council chambers. GWT provided a presentation and fielded follow up questions during the deputation with GRC Council.

#### **2.4.1.6 DNRMMRRD**

As part of the agency briefing process, CG provided a copy of Proposal details to referral agencies likely to be triggered as part of the SDA application. Initial advice provided by DNRMMRRD in relation to vegetation clearing in a category C area on freehold land was standard and not in consideration of self-assessable provisions for regrowth vegetation under the Development Scheme.

In relation to Mining Lease application ML80081 it was recommended that GWT contact Queensland Energy Resources Pty Ltd to discuss progression of the application and any implications for development (refer to **Appendix M**).

CQG made verbal enquiries with DNRMMRRD – Mineral Hub on the 27 October 2025 concerning the current status of ML80081. Mineral Hub advised a response in writing would be provided. CQG followed up with Mineral Hub via email on 4 November 2025, however, to date no response has been received.

EDQ as the landowner provided the following advice in relation to the status of ML80081: *I confirm that Mining Lease Application 80081 is located on Lot 1 MPH32292. As landowner the Minister for Economic Development Queensland has not entered into a compensation agreement with the authorised holder and is not in negotiations for an agreement* (John White, *pers. comm.*, 11 November 2025).

## 2.4.2 First Nations engagement

CQG has assisted GWT with engagement with the Traditional Owners in the Gladstone region; the First Nations Bailai, Gurang, Gooreng Gooreng and Taribelang Bunda People (FNBGGGTB).

To date, engagement with the FNBGGGTB has included:

- Contact with the Group Chief Executive Officer of the FNBGGGTB Development Corporation and the Port Curtis Coral Coast (PCCC) Trust Manager, and the FNBGGGTB Cultural Heritage Coordinator, tabling background information on the Project, requested to meet with the Prescribed Body Corporate (PBC), and confirmation of GWT's intent to enter (20 August 2025); and
- Engagement of the FNBGGGTB to conduct cultural heritage monitoring during early works geotechnical investigations – conducted on September 2025.

GWT is committed to meet with the FNBGGGTB PBC in the future when the PBC is available, to discuss the Proposal and opportunities for shared benefits.

## 2.4.3 Community engagement

GWT has become a member of the local industry peak body, the Gladstone Engineering Alliance (GEA) and attended and presented an overview of the Proposal at the GEA conference in October 2025. This followed the attendance by Grenof at the GEA 2024 conference.

A public announcement of the Proposal was made by Bryson Head, Assistant Minister for Regional Development, Resources and Critical Minerals and GRC Mayor Matt Burnett during the 2025 GEA conference, which was well received. This event provided a good opportunity for GWT to meet with businesses and community members to discuss the Proposal and other areas of interest to the locals.

Grenof is active on social media with Facebook and LinkedIn pages as well as a website that describes the Proposal and its location.

Future engagement will include a breakfast briefing held at the GEA boardroom in Goondoon Street, Gladstone, to inform interested businesses about the Proposal and opportunities to register as a supplier.

An article will be issued to the local newspaper, The Gladstone Observer, and updates of the Proposal's status will be uploaded onto the website. Other communication modes to keep the community informed will be outlined in the GWT Stakeholder and Community Engagement Plan currently being prepared by CQG.

### 3 Site Details

The Site (refer to Figure 1.1) is located on freehold land owned by the MEDQ.

The nearest sensitive land uses adjacent to the Site are residents located approximately 3.7 km to the west, the Yarwun township approximately 4 km to the south-west and potential recreational uses of Port Curtis a minimum of 500 m away (noting this is also the busy Gladstone Port waterway).

Within the GSDA approximately 500 m to the north-west of the Site is the home of the Gladstone Model Aero Club.

Table 3.1 summarises the Site characteristics, while Table 3.2 provides photographs of the Site pre-development.

Table 3.1: Site description

Site Characteristic	Description
Existing land use:	Vacant land (refer also to Table 3.2). There is some historical evidence of rural activity over the Site.
Easements:	Easement A on CTN2165, adjacent to Landing Road and Lot 1 on SP200899 is registered to the Capricornia Electricity Board. This easement intersects the proposed alternative (currently preferred) access location from Landing Road (refer to Section 4.2.2.1).  There are no specific conditions listed under the dealing document that restrict access or access improvements beneath the easement (refer to Appendix A). There are provisions regarding erection of buildings or structures on the easement requiring prior approval from the Capricornia Electricity Board. Ergon Energy have been made aware of the proposed access location via the DCA process initiated by GWT (refer to Section 2.4.1.3).
Existing materials / structures:	Nil
Topography and views:	The site is relatively flat ranging from 7 to 10 mAHD sloping from Fisherman's Road towards Boat Creek in the south-eastern portion of Lot 1 on MPH32292 (refer also to Table 3.2, Appendix F and Appendix C and D of Appendix L).
Soils and geology:	The Site is located on soils associated with the Quaternary Period, which is made up of recent deposition, consisting of sand, silt, mud, gravel, and residual soil and colluvium (Wilson and Taylor 2012). Australian Soils Classification for the Site listed: <ul style="list-style-type: none"> <li>• "Narrows", colluvial fans and alluvial fans below the coastal range along The Narrows Strait, north of Gladstone, with bleached, loamy or silty surface, sodic texture contrast soils and eucalypt woodland with swamp mahogany, tea tree understorey and gum-topped box woodland.</li> </ul> Geotechnical investigations were carried out by D&N Geotechnical on 15 and 16 September 2025, with results considered in development of the ESCP and SWMP (refer to Appendix C and D of Appendix L) and the preliminary baseline soil assessment (refer to Appendix J).  Based on these investigations, the Site soils are likely highly dispersive and will need to be managed accordingly during construction. The baseline soil assessment did not support the presence of ASS in concentrations that would necessitate any further assessment.

Site Characteristic	Description
	Appropriate management measures to mitigate potential land degradation impacts will be implemented during construction as outlined in <b>Appendix L</b> .
Waterways and drainage	<p>The Proposal is setback from Boat Creek (mapped watercourses under the <i>Water Act 2000 (Qld)</i> (Water Act) watercourse identification map) which is located approximately 250 m to the south portion of the Site. This aligns with a purple (high risk to fisheries) waterway for waterway barrier works (WWBW) (<i>Fisheries Act 1994 (Qld)</i>), that drains to the Great Barrier Reef World Heritage Area (GBRWHA) to the east.</p> <p>The Proposal will not directly impact Boat Creek, the GBRWHA, fish passage or marine plants.</p> <p>Refer to <b>Section 4</b> and <b>Appendix L</b> for details of management for potential indirect impacts.</p>
Vegetation	<p>The Site is mapped as MSES regulated regrowth growth (Category C – endangered or of concern) vegetation.</p> <p>The Proposal cannot avoid clearing vegetation present on the Site, described as regrowth vegetation with scattered remnant trees. A significant impact assessment undertaken on matters considered likely or known to occur on the Site based on desktop reviews and site-specific ecological surveys indicated that no significant residual impact to MNES species or MSES species habitat was considered likely, provided appropriate mitigation measures are implemented as outlined in the ecological assessment (refer to <b>Appendix E</b>) and the EMP (refer to <b>Appendix L</b>). OPW for the clearing of regulated regrowth vegetation can be undertaken as a SDA self-assessable development, where associated with a MCU and / or RaL authorised by an SDA approval (Section 2.4.5 Table 5 Column 1 of the Development Scheme). Therefore, no offsetting of residual impacts is required.</p>
Heritage, cultural and archaeological values	<p>A cultural heritage search undertaken did not identify any Aboriginal or Torres Strait Islander cultural heritage recorded within the Site (refer to <b>Appendix N</b>).</p> <p>GWT will continue to engage with FNBGGGTB, to conduct cultural heritage monitoring during any ground disturbing activities in accordance with the <i>Aboriginal Cultural Heritage Act 2003: Duty of Care Guidelines</i> (refer to <b>Section 2.4.2</b>).</p>

Table 3.2: Site photographs

Photograph	Description
	<p>Facing east into the Site from Fisherman's Road (16 October 2025)</p>
	<p>Facing south into the Site from Fisherman's Road (16 October 2025)</p>

Photograph	Description
	<p>Internal Site photo. Existing vegetation / grass (also refer to Appendix E) (12 August 2025)</p>
	<p>Facing south-east. Existing Substation adjacent to Fisherman's Road (16 October 2025)</p>
	<p>Facing South. Intersection of Landing Road and Fisherman's Road Source: Premise TIA (refer to Appendix K)</p>

## 4 Proposal Details

### 4.1 Overview of the Proposal

#### 4.1.1 Purpose

The Purpose of Project Halogen is to reduce Australia's sovereign risk associated with essential chemicals including Cl<sub>2</sub> (single domestic producer with aging infrastructure, also imported) and NaOH (reliance on foreign supply), which are vital for our nation's industrial, economic, and public health sectors.

#### 4.1.2 Key elements

Key elements of the Proposal include:

- Chlor-alkali plant consisting of:
  - plant and equipment north – production area including the electrolyser room (refer to Section 4.2.2.3); and
  - plant and equipment south – salt and product storage.
- Ancillary facilities:
  - office;
  - parking area;
  - utilities;
  - access intersection – options being Fisherman's or Landing Road, with the latter currently preferred (refer to Section 4.2.2.1 and Appendix K);
  - entry gate and internal maneuvering area; and
  - secure fencing of the Site boundaries.

Refer to Appendix C for the Site conceptual layout plan.

### 4.2 Details of the Proposal

#### 4.2.1 Construction phase

Key production components of the chlor-alkali facility will be delivered to the Site in modular arrangements via B-double heavy vehicles up to 26 m in length. No over-size over-mass vehicles are proposed.

Plant components will be assembled on Site on concrete slabs. Refer to Appendix C for a conceptual layout of the facility.

Other construction phase activities will likely include:

- Clearing and grubbing activities;
- Filling and levelling of the Site;
- Establishment of internal construction access roads and drainage;
- Concrete batching and delivery of construction materials;
- Delivery of plant equipment to establish key elements (refer to Section 4.1.2); and
- Upgrade of construction access to full intersection design standards prior to operations (refer to Section 4.2.2.1). Prior to the availability of the operations intersection, an access treatment suitable to safely accommodate construction vehicles and equipment will be established by the Delivery Manager.

Hours of construction will generally be restricted to daytime hours (i.e., Monday to Saturday, excluding public holidays, from 6:30 am to 6:30 pm as per GRC n.d). However, it is noted that night works may be required for large concrete pours, or other time sensitive construction activities. Nuisance to the nearest sensitive receptors is not anticipated given the significant buffer distance between (refer to Section 3) and minimal number of activities that may potentially warrant night work activities outside standard building work hours.

## 4.2.2 Operations phase

### 4.2.2.1 Access intersection

The narrow width of the Fisherman's Road reserve (being 20 m wide) poses constraints to the access intersection design for B-double movement swept paths for the Proposal's ongoing operational needs.

Use of this intersection would likely require acquisition of land on the south-east corner of the intersection (portion of Lot 2 on SP200899) and relocation of Ergon power poles to accommodate the swept path design (refer to Figure 1 intersection layout in Appendix K).

Another access option, directly off Landing Road immediately south of Lot 2 on SP200899, has been identified as an alternative arrangement (refer to Figure 1.1). Given this arrangement would not require land acquisition or movement of power poles and is in-principle acceptable to MEDQ as the landowner (identified in the owners consent to lodge the DA, refer to Appendix A), it is currently identified as the preferred option.

The access treatment is yet to be confirmed, however, will likely comprise compacted gravel with a nominal two coat bitumen seal treatment.

### 4.2.2.2 Key activities

Project Halogen will comprise a modular chlor-alkali production facility supplied by Thyssenkrupp nucera (TKN), manufacturing the following chemicals (project capacities listed are based on a 100% chemical basis at plant capacity):

- NaOH – approximately 100 tonnes per day (tpd), diluted to 50% concentration (i.e. approximately 200 tpd), for direct delivery to Rio Tinto Australia Yarwun (RTAY) and used in sodium hypochlorite (NaOCl) generation process;
- Liquefied Cl<sub>2</sub> gas – approximately 90 tpd, for delivery to water authorities and used in the hydrochloric acid (HCl) generation process; and
- Derivative products manufactured using the abovementioned primary chemicals as inputs:
  - NaOCl – approximately 40 tpd, diluted to a 12.5% concentration (i.e., approximately 320 tpd), for delivery to water authorities and other industrial customers; and
  - HCl – approximately 40 tpd, diluted to a 33% concentration (i.e., approximately 120 tpd), for delivery to various industrial and mining applications.

The base case is for product offtakes from the plant of 160,000 tpa (based on actual produced concentrations), but this may vary dependent on market demands for specific chemicals.

The proposed hours of operation are 24 hours a day, 7 days a week, with the following personnel assumed:

- 24/7 operations – 5 operators alternating over each 12 hour shift (four crews x 5 staff each in total); and
- Standard business hours – 14 management and administrative support staff.

Key activities that will be undertaken during operation include:

- Plant operation;
- Delivery of inputs to plant (salt and chemicals);
- Storage for input salt and chemicals and output chemicals and wastes;
- Transport of outputs from plant (chemicals and waste products);
- Security – including fencing and surveillance systems;
- Subcontractor management – coordinating with subcontractors for specialised maintenance or repair tasks;
- Data analysis and reporting – analysing data to optimise output production and other key performance metrics e.g., environmental, social and governance (ESG) metrics (including, but not limited to, greenhouse gas abatement performance); and
- Waste management:
  - segregate waste streams; and
  - any waste generated that cannot be reused in the process will be transported offsite by an appropriately licensed contractor.

#### 4.2.2.3 Process summary

The electrolytic process uses electricity to convert high-purity brine into Cl<sub>2</sub> gas, H<sub>2</sub> gas and NaOH, with a membrane separating the resulting products (refer to Figure 4.1). The entire facility will have a closed loop design and consequently will not have any fugitive air releases. A potential fugitive source based on facilities elsewhere is the electrolyser room. In the case of the Proposal, the electrolyser room will be designed so that any leaks will be immediately identified by the control system due to the monitoring of pressure on either side of each electrolyser. The control system will have the capability to detect leaks as small as a pinhole.

A schematic view of the chlorine electrolysis cells is provided in Figure 4.2. In comparison to the alternative electrolysis techniques (diaphragm cell process and the mercury cell process), the membrane cell process has the following benefits:

- Low total energy consumption;
- Low investment and operating costs;
- Does not use mercury or asbestos; and
- High-purity chemical production.

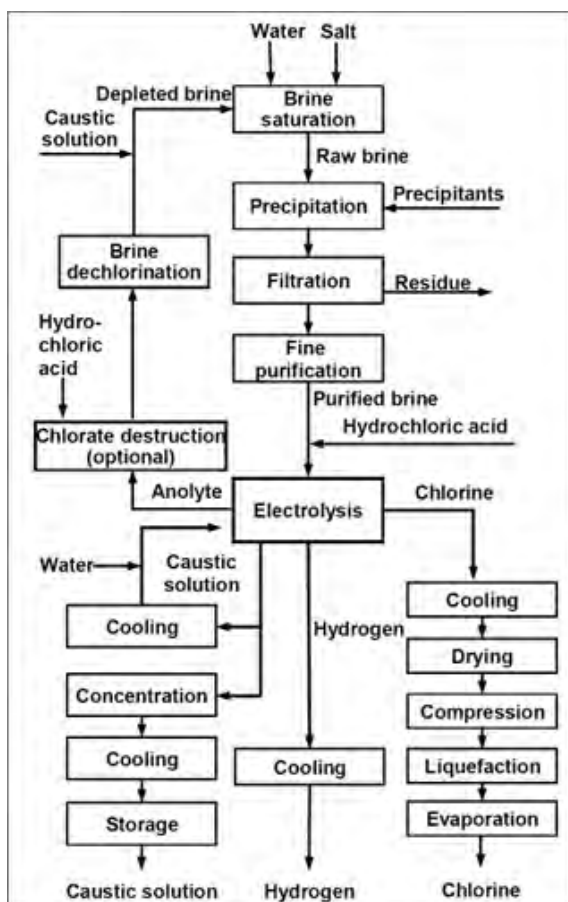


Figure 4.1: Typical flow diagram of the membrane cell technique (source: European Commission 2014)

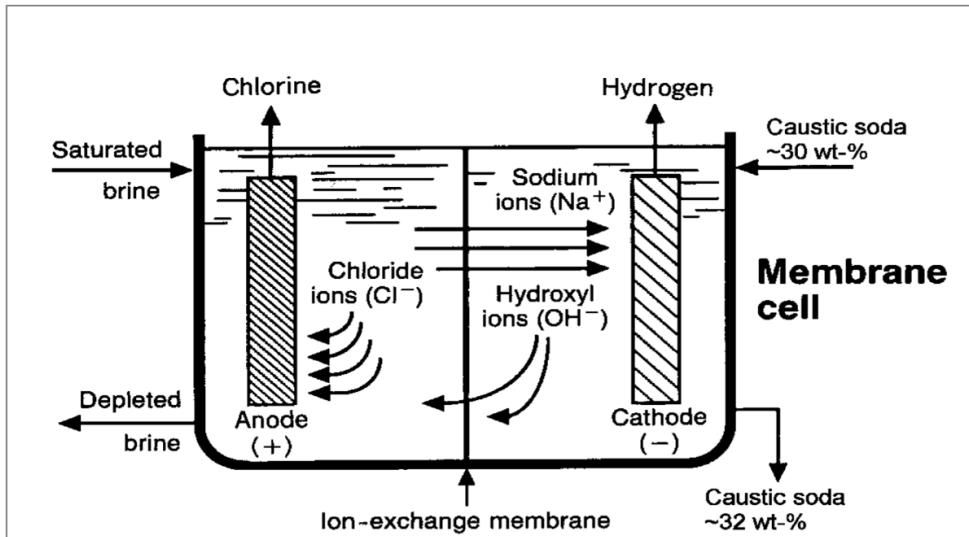


Figure 4.2: Schematic view of chlorine electrolysis cells for membrane cell technique (source: European Commission 2014)

Refer to Appendix C for a conceptual layout of the facility,. Discipline specific detail is also provided in the individual technical reports listed in Table 1.2.

#### 4.2.3 Decommissioning phase

The estimated life of the chlor-alkali facility is approximately 50 years (lease period to be negotiated with MEDQ).

Prior to decommissioning GWT is to confirm the final land use with the landowner (MEDQ). Given the Site is within the GSDA, it is expected this will require the land to be left in a fit state suitable for future industrial purposes consistent with the Development Scheme. In any case the Site must be left safe, stable and non-polluting.

The current decommissioning plan would involve:

- Removal of all specific Project Halogen infrastructure, equipment and waste materials to ensure no sources of ongoing environmental harm or nuisance. Safe, stable and non-polluting hardstand or sealed surfaces, and non-specific Project Halogen infrastructure including service connections, may be retained in consultation with the landholder; and
- The acceptance criteria for handover to the landholder assumes the Site has been assessed as stable by a Registered Professional Engineer of Queensland (RPEQ) and non-polluting by a suitably qualified person (SQP) under the EP Act.

No progressive rehabilitation can occur during operations, with rehabilitation works only to commence in the decommissioning phase.

## 4.3 Environmental Impacts and management systems

### 4.3.1 Overview

An Environmental Management Plan (EMP) has been prepared in support of this DA which stipulate operational controls and mitigation measures that are recommended to be administered to ensure environmental impacts as a result of the Proposal are appropriately managed (refer to Appendix L).

The EMP has been informed by specialist technical reports for hazards, ecology, bushfire, air quality, greenhouse gas, contaminated land, noise, traffic, stormwater management and erosion and sediment control (refer to Table 1.2).

### 4.3.2 Traffic

The TIA prepared for the Proposal (refer to Appendix K) indicates that the Proposal will not increase the risk score of any existing risk items above their “without development” level and no action is required to mitigate existing road safety issues.

Although some significant impacts were identified, this is based on conservative assumptions, and on State-controlled roads will be mitigated via a one-off pavement contribution if development commences before 2028. If operations do not commence until 2028 or later, the development impact on state-controlled road pavement will not be significant (<5%).

Construction activities are not expected to generate over-size-over-mass (OSOM) vehicle movements or move vehicle movements than peak operations traffic. Therefore, construction traffic is expected to be no worse than operation traffic and only operations traffic has been assessed to mitigate both operations and construction impacts.

Refer to code responses at Appendix B.1 and Appendix B.2, and TIA at Appendix K for further details.

### 4.3.3 Noise and vibration

Noise generated from the Site operation will comprise:

- Occasional heavy vehicle noise associated with the delivery and export of materials;
- Front-end loader noise associated with salt materials handling;
- Continuous noise associated with pumps, electric motors and process equipment; and
- Potentially low frequency noise elements associated with the chlorine and air compressors.

No blasting is proposed for the construction, and the operational facility equipment as described above does not generate significant vibration.

Noise from the operation is expected to readily comply with the noise level goals and acoustic quality objectives at sensitive receptors, with a “no response” response from shorebirds in the intertidal area (refer to Appendix I).

### 4.3.4 Air

#### 4.3.4.1 Air quality

The air quality assessment undertaken (refer to Appendix G) identified the key operational emission sources as the waste gas dechlorination stack (Cl<sub>2</sub> emissions) and HCl vent burner stack (Cl<sub>2</sub> and HCl emissions). Other potential sources were identified as negligible so were not included in the dispersion modelling.

Both emissions complied with the relevant assessment criteria at the nearest sensitive receptor (residence) located 3.7 km to the west, with the highest concentration of either pollutant anywhere in the model domain predicted to be less than 0.3 % of the relevant air quality assessment criteria.

Hydrogen is produced in the chlor-alkali production process and the Project will be capturing the hydrogen for use in steam generation rather than venting to the atmosphere.

Dust emissions during the construction phase were also identified as negligible.

#### 4.3.4.2 Greenhouse emissions

The GHG assessment undertaken (refer to **Appendix H**) identifies the Proposal as a medium to high emitter, with baseline operational Scope 1 and 2 GHG emissions estimated at 3,985 t CO<sub>2-e</sub> and 56,413 t CO<sub>2-e</sub> respectively annually. The Proposal is expected to reduce imported chemical shipping emissions by approximately 3,500 t CO<sub>2-e</sub> to 22,000 t CO<sub>2-e</sub> per annum depending on the shipping method considered.

GWT is committed to ensuring that the Proposal contributes to the transition to a low emissions global economy, whilst manufacturing essential chemicals for the region.

The Proposal will result in a 25% reduction in energy use (Scope 2 emissions) compared to the existing domestic supplier (base case) through design and procurement of best practice and highest efficiency production technology. Reductions in emissions will also be realised through the provision of a local alternative instead of shipping chemicals from across the globe.

The operation will be required to report GHG emissions generated through the National Greenhouse and Energy Reporting scheme on an annual basis. A greenhouse gas abatement plan has been prepared for the Proposal (refer to **Appendix H**). Performance against the plan will also be monitored and reported on an ongoing basis (refer to **Appendix L**).

GWT will manage the projected impacts of climate change (e.g., increased rainfall, cyclone activity and bushfires) through the operational EMP (to be ISO 14001 certified), WHSMP (to be ISO 45001 certified) and ERP. The ERP will include a Bushfire Emergency Management and Evacuation Plan prepared in accordance with the requirements of Australian Standard *AS3745-2010 Planning for Emergencies in facilities*.

#### 4.3.5 Ecology

The Proposal cannot avoid clearing vegetation present on the Site, described as regrowth vegetation with scattered remnant trees. A significant impact assessment undertaken on matters considered likely or known to occur on the Site based on desktop reviews and site-specific ecological surveys indicated that no significant residual impact to MNES species or MSES species habitat was considered likely, provided appropriate mitigation measures are implemented as outlined in the ecological assessment (refer to **Appendix E**) and EMP (refer to **Appendix L**).

OPW for the clearing of regulated regrowth vegetation can be undertaken as a SDA self-assessable development, where associated with a MCU and / or RaL authorised by an SDA approval (refer to Section 2.1.1.2).

The Site is identified as of Medium Potential Bushfire Intensity under the SPP's Bushfire Prone Area mapping and the GRC Planning Scheme Bushfire Hazard Overlay. This risk of bushfire will be mitigated through clearing of vegetation as part of self-assessable OPW.

Land degradation and indirect ecological impacts will be avoided through implementation of measures outlined in the EMP (refer to **Appendix L**).

#### 4.3.6 Water

The Site is located within the GBRWHA catchment area which triggers assessment against section 41AA of the EP Reg as part of the EA application (refer to Section 2.1.2). This relates to the release of fine sediment and / or dissolved inorganic nitrogen from the Site.

The Proposal will not directly impact the GBRWHA, fish passage or marine plants. The Proposal is setback from Boat Creek (mapped watercourses under the Water Act) which is located approximately 250 m to the southern portion of the Site.

Appropriate erosion and sediment control measures will be implemented during construction to protect and maintain water quality values. During operations the Site surface will be stabilised, with appropriate stormwater and wastewater controls in place. Any wastewater generated that cannot be reused in the process will be transported offsite by an appropriately licensed contractor or treated onsite in the future if a suitable treatment system is identified (refer to **Appendix L**).

Overland flow water that is collected within the operational area may be reused where available and practicable, including for dust suppression and material conditioning during construction. In accordance with Section 97 of the

Water Act, overland flow of water may be collected and retained as part of the Proposal to satisfy the requirements of the EA.

#### 4.3.7 Cultural heritage

The FNBGGGTB People, as Traditional Owners of the Site, have been involved throughout the initial site assessment process through the provision of cultural heritage monitors during the geotechnical investigations.

A cultural heritage search undertaken did not identify any Aboriginal or Torres Strait Islander cultural heritage recorded within the Site (refer to **Appendix N**).

GWT will continue to engage with FNBGGGTB, to conduct cultural heritage monitoring during any ground disturbing activities in accordance with the *Aboriginal Cultural Heritage Act 2003: Duty of Care Guidelines* (refer to **Section 2.4.2**).

#### 4.3.8 Waste

There will be minimal waste generated by the Proposal. Operations will be managed in accordance with the waste hierarchy defined in section 9 of the *Waste Reduction and Recycling Act 2011 (Qld)* i.e., waste to first be avoided, then reduced, reused, recycled, recovered and treated, with disposal only considered when there is no viable alternative.

Wastes that are generated will be segregated to improve reuse and recycling opportunities and contained within dedicated receptacles to avoid contamination, litter or attraction of fauna.

All waste, including any hazardous wastes (e.g., minor hazardous goods packaging and sewage waste), will be contained and regularly removed from the Site by appropriately licensed contractors in accordance with requirements under the EP Act.

## 5 Conclusion

This Planning Report has been prepared by CQG on behalf of GWT to support a State Development Area application made to the Coordinator General under the *State Development and Public Works Organisation Act 1971* for a Material Change of Use for a Special Industry and Reconfiguring a Lot.

Clearing of native vegetation required as part of the construction phase will be carried out under the provisions of self-assessable Operational Works post the Material Change of Use approval.

The Proposal is considered to comply with the relevant assessment benchmarks established under the Development Scheme.

GWT look forward to the Coordinator General's favourable consideration of this State Development Area application, subject to reasonable and relevant conditions.

## 6 References

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Wilson, P.R. and Taylor, P.M. (2012) Land Zones of Queensland. Queensland Herbarium, Queensland Department of Science, Information Technology, Innovation and the Arts, Brisbane. 79 pp.

## Limitations

This report has been prepared for GWT, for issue to the CG within the context of the GSDA Development Scheme May 2022 SDA requirements.

CQG<sup>[1]</sup> takes no responsibility and disclaims all liability for any loss or damage that any party may suffer as a result of using or relying on any such information or recommendations contained in this report.

CQG has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above. No other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

Where information has been provided to CQG, this has been referenced in the report. In preparing this report, CQG has relied upon, and presumed accurate, any information provided by GWT and sub-consultants on its behalf and / or from other sources as referenced within. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that the conclusions expressed in this report may change.

No assessment beyond that specified in the document has occurred.

These limitations must be read in conjunction with other limitations noted within the report, and attachments to the report.

Should further information become available regarding the Project, CQG reserves the right to review the report in the context of the additional information.

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