

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

**DETERMINATION OF A DEVELOPMENT APPLICATION
PURSUANT TO SECTION 91 OF THE
“UNAMENDED” ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

I, the Minister for Urban Affairs and Planning, in pursuance of section 91 of the Unamended Environmental Planning and Assessment Act, 1979, and Clause 8 of State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development (SEPP 34), determine the development application referred to in Schedule 1 by granting consent to that application subject to the conditions set out in Schedule 2 (file R98/00010).

The reasons for the imposition of conditions are to ensure that potential hazards do not pose an unacceptable risk both on-site and off-site; ensure that best management practices and technology are adopted in the operation of the facility; provide for environmental monitoring and reporting of the future performance of the development; and protect the environmental and amenity of the locality during construction and operation of the plant.

MOD-180-11-2005-i – determined 9 January 2006

MOD 12-1-96 –i – determined 6 June 2006

DA 35/98 MOD 3 – determined 29 September 2009

DA 35/98 MOD 4 – determined 10 September 2012

DA 35/98 MOD 5 – determined 26 October 2018

DA 35/98 MOD 6 – determined 21 July 2026

Craig Knowles MP

Minister for Urban Affairs and Planning

Minister for Housing

Sydney, 1998

SCHEDULE 1

Application made by:	Orica Australia Pty Ltd
To:	Minister for Urban Affairs and Planning
In respect of land being:	16-20 Beauchamp Road, Matraville NSW 2036 Lot 1101, 1102, 1103, 1104 and 1105 DP 1227173
For the following development:	Installation of replacement Chlor-alkali plant to produce 35,000 tonnes per annum gaseous chlorine.
Development Application:	The Development Application DA No. 35/98 lodged with the Department of Urban Affairs and Planning on 30 June, 1998 accompanied by the environmental impact statement (EIS) entitled “Replacement Chlor-Alkali Plant for Orica Australia Pty Ltd”, June 1998, prepared by Dames & Moore Pty Ltd.

ABBREVIATIONS AND INTERPRETATION

Applicant	IXOM Operations Pty Ltd, or any other person(s) carrying out any development which this consent applies
CAP	Chlor-Alkali Plant as described in DA 35/98
CLP	Chlorine Liquefaction Plant, as described in DA 35/98-Mod-6
Containment building	The building housing the CLP and chlorine transportable vessels as described in DA 35/98-Mod-6
Contingent mode of operation of the CLP	Production of liquefied chlorine and filling of all types of chlorine transportable vessels
Council.....	Bayside Council
DA.....	Development application
Department	NSW Department of Planning, Housing and Infrastructure
Development	The development described in Schedule 1 and the EIS, including the works and activities comprising construction and operation of a replacement Chlor-Alkali Plant, as modified by the conditions of this consent
EIS.....	Environmental Impact Statement
EMP.....	Environmental Management Plan
EP&A Act.....	<i>Environmental Planning and Assessment Act 1979</i>
EPA.....	Environment Protection Authority
EPL	Environment Protection Licence 20547 issued under the <i>Protection of the Environment Operations Act 1997</i>
Entire facility	The whole facility within the development area up to and including DA35/98-Mod-6 including the existing chlor-alkali plant (CAP) and the chlorine liquefaction plant (CLP) and containment building
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm to the environment, and as a consequence of that environmental harm, may cause harm to the health and safety of human beings, and which may or may not be or cause a non-compliance Note: “Material harm” is defined in this consent
Material harm	Is harm that: a) involves actual harm to the environment that may include (but not be limited to) a leak, spill, emission other escape or deposit of a substance, and as a consequence of that environmental harm (pollution), may cause harm to the health or safety of people; or b) results in actual loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) Note: This definition excludes “harm” that is either authorised under this consent or any other statutory approval Note: For the purposes of this definition, material harm excludes incidents captured by Work Health and Safety reporting requirements
Minister	NSW Minister for Planning and Public Spaces (or delegate)
Normal mode of operation of the CLP	Production of liquefied chlorine and filling of 13 tonne chlorine tankers. The filling of 920 kilogram chlorine drums and 70 kilogram chlorine cylinders may be permitted as part of inspection and maintenance
NOW	NSW Office of Water
PHA	Preliminary Hazard Analysis titled ‘Quantitative Risk Assessment Proposed Chlorine Liquefaction Plant Modification to Chlor Alkali Facility,

Botany Industrial Park IXOM' (Revision 5), prepared by Sherpa Consulting dated 26 March 2026

Planning Secretary

Planning Secretary (or delegate)

RAC.....

Rail Access Corporation

RAP

Remedial Action Plan titled 'New Chlorine Liquefaction Plant, Denison Street, Banksmeadow NSW prepared by JBS&G dated 30 January 2025

SAC.....

Sydney Airport Corporation

Site.....

Site of the development, being Lot 1101, 1102, 1103, 1104 and 1105 DP 1227173 (formerly Lot 1, DP 608153)

Site Auditor

As defined in section 4 of the *Contaminated Land Management Act 1997*

Site Audit Report

As defined in section 4 of the *Contaminated Land Management Act 1997*

Site Audit Statement

As defined in section 4 of the *Contaminated Land Management Act 1997*

TMP.....

Transport Management Plan

Transportable vessels

13 tonne tankers, 920 kilogram drums and 70 kilogram cylinders which contain or may contain chlorine, including those which are marked as empty and those which could be considered as transit storage

SCHEDULE 2

CONDITIONS OF DEVELOPMENT CONSENT

1. The Applicant must carry out the development generally in accordance with:
 - a) the Environmental Impact Statement dated June 1998, prepared by Dames & Moore Pty Ltd and drawing number B73359 RevA;
 - b) modification application MOD-180-11-2005-i with respect to replacement of the sodium hypochlorite loading bays; upgrade of sodium the hypochlorite tank farm; and replacement of the technicians' changing room; and
 - c) modification application MOD-12-1-2006 with respect to the demolition of the decommissioned ChlorAlkali plant buildings at the Botany Industrial Park;
 - d) the letter to the Department dated 4 May 2006 prepared by Robert Evans, Site Environment Engineer, Orica relating to hazard reduction measures;
 - e) MOD 3 to relocate the sodium hypochlorite plant;
 - f) modification application 35/98 Mod 4, in relation to replacement of caustic tanks lodged with the Department of Planning and Infrastructure on 13 April 2012 and accompanied by an environmental assessment prepared by Parsons Brinckerhoff dated May 2012;
 - g) modification request 35/98 MOD 5, including supporting documentation prepared by IXOM Operations Pty Ltd dated 27 June 2018, 31 August 2018 and 9 October 2018;
 - h) modification application 35/98 Mod 6, including the Modification Report prepared by Element dated 13 August 2025 and Submissions Report prepared by Element dated 30 March 2026;
 - i) the plans in Appendix 1; and
 - j) the conditions of this consent.
- 1A. If there is any inconsistency between the plans and documentation listed under Condition 1 above, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency.
- 1B. The Applicant must construct the spill containment area of the caustic tanks in accordance with: *AS 3780-2008 The storage and handling of corrosive substances*.
- 1C. In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the development.
- 1D. The Applicant must comply with all written requirement(s) of the Planning Secretary arising from the Department's assessment of.
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents); and
 - (b) the implementation of any actions or measures contained within these documents.
- 1E. The Applicant must ensure all buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the National Construction Code.
2. At no time must the existing Chlor-alkali plant and the proposed Chlor-alkali plant operate simultaneously.

OPERATING LIMITS

- 2A. The Applicant must ensure:
 - (a) the maximum production capacity of the Chlor-Alkali Plant (CAP) does not exceed 35,000 tonnes of gaseous chlorine per year; and
 - (b) the maximum production capacity of the Chlorine Liquefaction Plant (CLP) does not exceed 50 tonnes of liquid chlorine per day.
- 2B. The Applicant must ensure all 13 tonne bulk chlorine tankers exit from the entire facility by turning right out of Botany Industrial Park Gate 3.

STORAGE LIMITS

- 3A. The storage of chlorine within the entire facility, at any one time, must not exceed the following number of vessels and quantities;
- (c) 100 cylinders of up to 70 kilograms each;
 - (d) 200 drums of 920 kilograms each;
 - (e) 2 bulk chlorine tankers of 13 tonnes each; and
 - (f) 50 tonnes of liquid chlorine within a single insulated bulk storage tank on duty.
- 3B. Up to two, 50 tonne insulated bulk storage tanks may be located within the entire facility at any one time. Notwithstanding this:
- (a) only one of these 50 tonne insulated bulk storage tank may store liquid chlorine in accordance with condition 3A; and
 - (b) the other bulk storage tank must not store liquid chlorine at the same time, must be kept on standby and may only be used for chlorine containment in the event of an emergency.
- 3C. The storage limits in Condition 3A only apply when the CLP described in DA35/98-Mod-6 is operational. The storage limits in Condition 17 continue to apply until the CLP is operational.
- 3D. All transportable vessels described in Condition 3A(a), (b) and (c), which may contain chlorine, including those which are marked as empty, and those which could be considered as transit storage, must always be stored and handled inside the containment building at all times.
- 3E. The Applicant must store and handle all chemicals, fuels and oils within the entire facility in accordance with:
- (a) the requirements of all relevant Australian Standards;
 - (b) *Australian Standard 2927 The storage and handling of liquefied chlorine gas* (AS 2927) or as agreed with SafeWork NSW; and
 - (c) the NSW EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Handbook* if the chemicals are liquids.
- In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.
- 3F. The Applicant must store and maintain all chemicals and materials required to operate the containment building scrubber at the minimum stock level, at all times. The minimum stock level must be established based on operating the scrubber to treat the worst-case uncontrolled release of chlorine that may occur within the building.
- 3G. The Applicant must maintain minimum tank capacities to store and contain all chemicals and materials leaving the containment building scrubber based on operating the scrubber to treat the worse-case uncontrolled release of chlorine which may occur within the building.
4. Within 6 months from the date of this consent, the Applicant must prepare for the approval of the **Planning Secretary** a report detailing the proposed timetable and procedures for decommissioning the existing Chlor-alkali plant and commissioning of the proposed Chlor-alkali plant.

COMPLIANCE

5. The Applicant must comply with all the reasonable requirements of the **Planning Secretary** in respect of the implementation of measures arising from the following conditions of development consent. Further, the Applicant must bring to the attention of the **Planning Secretary** any matter that may require further investigation and the issuing of instructions from the **Planning Secretary**. The Applicant must implement those instructions to the satisfaction of the **Planning Secretary** within such time as the **Planning Secretary** may specify.
6. The Applicant must meet reasonable requirements of all public authorities having statutory responsibilities in respect of the proposed development.

HAZARD MANAGEMENT

Design Requirements

7. The Applicant must implement all actions, control measures, safeguards and recommendations described in the PHA.
- 7A. The CLP and containment building must be designed and operated in accordance with *Australian Standard 2927 The storage and handling of liquefied chlorine gas* (AS 2927) or as agreed with SafeWork NSW.

- 7B. Prior to finalising the detailed design of the CLP and containment building, the Applicant must consult with SafeWork NSW regarding any requirements under the *Work Health and Safety Act 2011*, *Work Health and Safety Regulation 2025* and SafeWork's advice on DA35/98-Mod-6 dated 11 May 2026.

Pre-construction

8. At least one month prior to the commencement of construction of the CLP or containment building (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Planning Secretary may agree, the Applicant must prepare and submit for the approval of the Planning Secretary the studies set out below (the pre-construction studies). Construction, other than of preliminary works, must not commence until approval has been given by the Planning Secretary and, with respect to the Fire Safety Study, approval has also been given by Fire and Rescue NSW
- (a) A **Fire Safety Study** for the entire facility. The study must:
 - i. cover the relevant aspects of the Department's *Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study'* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*;
 - ii. consider potential changes to fire engineering design due to decoupling of the entire facility from utilities and services provided from neighbouring facilities within the Botany Industrial Park; and
 - iii. provide correspondence from Fire and Rescue NSW which specifies that all their operational requirements have been met.
 - (b) A **Hazard and Operability Study** for the CLP and containment building described under DA35/98-Mod-6. The study must:
 - i. be chaired by a qualified person, independent of the development and approved by the Planning Secretary prior to commencement of the study;
 - ii. be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'*;
 - iii. consider all tie-in and flow-on effects between MOD 6 and the existing chlor-alkali plant;
 - iv. consider all control measures and safeguards described in SafeWork NSW's submission of 11 May 2026. If the Applicant intends to defer the consideration of a control measure and safeguard, reasons must be documented in consultation SafeWork NSW; and
 - v. include an implementation program of all actions and recommendations made in the report. If the Applicant intends to defer the implementation of an action or recommendation, reasons must be documented.
 - (c) A **Safety Integrity Level Allocation and Verification Studies** consistent with *Australian Standard 61508 Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems* and *Australian Standard 61511 Functional Safety - Safety Instrumented Systems for the Process Industry Sector*.
 - (d) A **Final Hazard Analysis (FHA)** for the entire facility. The study must:
 - i. be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*;
 - ii. report on the consultation outcomes with SafeWork NSW in regard to the requirements under Condition 7B and include all actions arising from the consultation;
 - iii. re-evaluate and confirm all data and assumptions in the PHA, including justification of all differences between the PHA and FHA; and
 - iv. include a diagram showing the extent of the 1×10^{-9} per year individual fatality risk contour.
 - (e) A **Construction Safety Study** prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 'Construction Safety'*. For developments in which the construction period exceeds six months, the commissioning portion of the Construction Safety Study may be submitted two months prior to commencement of commissioning. The study must also identify suitable locations for the storage and handling of all chlorine transportable vessels, during the construction and commissioning phases of the CLP and containment building.

Pre-commissioning

9. The Applicant must develop and implement the plans and systems set below. No later than two months prior to the commencement of commissioning of the CLP or containment building, or within such further period as the Planning Secretary may agree, the Applicant must submit for the approval of the Planning Secretary documentation describing those plans and systems. Commissioning must not commence until approval has been given by the Planning Secretary.
- (a) An updated **Emergency Plan** and detailed emergency procedures for the entire facility. The Emergency Plan must include consideration of the safety of all people outside of the development who may be at risk from the development. The plan must be prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'*.
 - (b) A document setting out an updated **Safety Management System** covering all on-site operations and associated transport activities involving hazardous materials. The document must clearly specify all safety

related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records must be kept on-site and must be available for inspection by the Planning Secretary upon request. The Safety Management System must be developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'*.

Pre-startup

10. One month prior to the commencement of operation of the CLP, the Applicant must submit to the Planning Secretary, a **Pre-Startup Compliance Report** detailing compliance with Conditions 8 and 9, including:
- (a) dates of study/plan/system submission, approval, commencement of construction and commissioning;
 - (b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
 - (c) responses to any requirement imposed by the Secretary under Condition 12A.

Post-startup

11. Three months after the commencement of operation of the CLP, the Applicant must submit to the Planning Secretary, a **Post-Startup Compliance Report** verifying:
- (a) compliance with Condition 2B and relevant procedures;
 - (b) the Emergency Plan required under Condition 9(a) is effectively in place and that at least one emergency exercise has been conducted; and
 - (c) the Safety Management System required under Condition 9(b) has been fully implemented and that records required by the system are being kept.

Hazard Audit

12. Three years after the date of consent of DA35/98-Mod-6 and every three years thereafter, or at such intervals as the Planning Secretary may agree, the Applicant must carry out a comprehensive **Hazard Audit** of the entire facility and within one month of each audit submit a report to the satisfaction of the Planning Secretary. The audits must:
- (a) be carried out at the Applicant's expense by a qualified person or team, independent of the development who have been approved by the Planning Secretary prior to commencement of the audit;
 - (b) be carried out in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit'*;
 - (c) include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit; and
 - (d) report the annual number of movements of tankers and flatbed trucks associated with the transport of transportable vessels loaded with chlorine.
- 12A. Within one month of completing each Hazard Audit carried out in accordance with Condition 12, the Applicant must submit a report to the satisfaction of the Planning Secretary for approval. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

Quantitative Risk Assessment

13. Five years after the date of consent of DA35/98-Mod-6 and every five years thereafter, or at such intervals as the Planning Secretary may agree, the Applicant must carry out a comprehensive **Quantitative Risk Assessment (QRA)** of the entire facility and submit the QRA report to the satisfaction of the Planning Secretary for approval. The QRA must:
- (a) be prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'* with risk results assessed against the Department's *Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'* (HIPAP 4);
 - (b) consider all findings and recommendations from prior Hazard Audit reports under Condition 12 to verify that the design and operation of the entire facility remains consistent with the FHA;
 - (c) verify that the extent of all individual risk contours do not increase beyond the FHA results;
 - (d) consider and provide details on the most recent residential and employment population data and assumptions surrounding the entire facility;
 - (e) include a diagram showing the extent of the 1×10^{-9} per year individual fatality risk contour;
 - (f) report the risk contributors at locations where it could have significant impacts on the cumulative societal risk; and
 - (g) include a separate summary report which summarises the findings and results from the QRA, including and not limited to diagrams for individual risk contours and societal risk curves corresponding to the quantitative risk criteria in HIPAP 4. This separate report must be published by the Applicant on the facility operator's public website within one month of the Planning Secretary's approval of the QRA.

- 13A. The Applicant must comply with all reasonable requirements of the Planning Secretary in respect of the implementation of any measure arising from the reports submitted in respect of Conditions 7 to 13 inclusive within such time as the Secretary may agree.

BUILDING HEIGHT

14. Prior to lodging application for construction, the Applicant must seek the approval of Sydney Airport Corporation and the Civil Aviation Safety Authority (CASA) in respect of any structure, inclusive of vents, chimneys, aerials, TV antennae and construction which exceeds the height at which approval is required under the Civil Aviation (Buildings Control) Regulations. This includes any temporary structure and/or equipment planned to be used during construction. This application must include the following information:
- (a) The nature of the proposed structure/activity
 - (b) The proposed location of the structure/activity relative to Mapping Grid of Australia 1994 (MGA94)
 - (c) The maximum overall height of the proposed structure/activity relative to Australian Height Datum (AHD)
 - (d) The purpose for which the structure/activity is intended to be used;
 - (e) The maximum height, relative to AHD of any temporary structure or equipment including construction cranes, intended to be used in the erection of the proposed building/structure
 - (f) The period of the proposed operation and desired operating hours for any temporary structures.

TRAFFIC AND TRANSPORT

15. No later than two months prior to the commencement of commissioning of the proposed development, or within such further period as the Planning Secretary may agree, the Applicant must prepare and submit for the approval of the Planning Secretary a Traffic Management Plan (TMP) outlining management measures to ensure that road tanker drivers will predominantly use the main arterial roads – namely Foreshore Drive, General Holmes Drive and Wentworth Avenue, except for local deliveries. The Applicant must endeavour to enter into contractual arrangements with transport companies to require their trucks to use the routes determined under the TMP.
16. On-site parking must be provided for all vehicles associated with the operation and construction of the proposed development. This must include vehicles transporting equipment, materials, contractors and workers. Under no circumstances must vehicles transporting equipment or materials queue or park in neighbouring streets.
17. No more than one full (13 tonnes) road tanker of chlorine must be parked on site at any given time. The total amount of time a full road tanker is present on site must not exceed 4380 hours in any 12 month period. The tanker is to be parked in a dedicated area away from any main thoroughfare.

Note: As noted in Condition 3C, Condition 17 only applies until the CLP as described in DA35/98-Mod-6 is constructed and operational. Once the CLP is operational Condition 3A applies.

- 17A. The Applicant must ensure no tanker queuing or idling occurs on the public road network. All waiting, holding and loading activities shall be contained wholly within the site.
18. All parking spaces must be drained, sealed and line marked to the satisfaction of Bayside Council.

ENVIRONMENTAL MANAGEMENT

19. One month prior to commencement of construction work, the Applicant must prepare an Environmental Management Plan (EMP) in consultation with the Environment Protection Authority (EPA) and Department of Land and Water Conservation (DLWC) for the approval of the Planning Secretary. The EMP must be implemented during the construction phase of the upgrade to the satisfaction of the Planning Secretary. The EMP should be submitted as a supporting document for the application of the Pollution Control Approval from the EPA.
- 19A. Prior to the commencement of any demolition associated with MOD-12-1-2006, the Applicant must update and implement the EMP (referred to in condition 19 above) to include a program for daily monitoring of atmospheric mercury concentrations for the demolition works. The program must include procedures for immediate stoppage of the offending activity on detection of emission levels exceeding the limit under the POEO (Clean Air) Regulations, of 0.2 mg/cubic metre. Work must not recommence until remedial measures have been initiated to the satisfaction of the Planning Secretary and the DEC.
- 19B. Prior to the commencement of the construction of Mod 4, the Applicant must prepare a Construction Environmental Management Plan (CEMP) (in consultation with the EPA and to the satisfaction of the Planning Secretary. The CEMP must reflect the works proposed as part of Mod 4 and must include:
- (a) the results of the recent soil sampling undertaken by Orica and documented in the Figure titled Orica Botany Caustic Tank Project and dated 02/08/2012;
 - (b) measures, such as additional sampling and/or remedial measures, to manage any areas of mustow soil contamination;
 - (c) details of the management strategy for the handling, treatment and disposal of any contaminated material

- (d) a defined heavy vehicle route restricted to the arterial road network and contractor induction requiring the use the defined route;
 - (e) construction noise and vibration management measures including:
 - monitoring of heritage listed items during the use of any vibration intensive equipment; and
 - safe working distances for the vibration intensive equipment;
 - (f) soil sedimentation and runoff control measures;
 - (g) management measures to control dust; and
 - (h) waste management measures.
- 19C Prior to the commencement of the construction of MOD 5, the Applicant must prepare a Construction Environmental Management Plan (CEMP) for the approval of the Planning Secretary, which details relevant construction methodology and key mitigation measures. The CEMP for MOD 5 must include:
- (a) controls for the potential direct exposure to soil potentially impacted by mercury;
 - (b) erosion and sediment controls including the management of any stormwater or groundwater that may accumulate in the development footprint;
 - (c) details of the management strategy for handling, classification and disposal of any contaminated soil;
 - (d) an unexpected finds protocol which is to be enacted where mercury concentrations in the soil excavated during construction of MOD 5 exceed the 893 mg/kg mercury threshold;
 - (e) construction and demolition waste management;
 - (f) traffic management; and
 - (g) construction noise and vibration management.
- 19D The Applicant must:
- (a) not commence construction works required under MOD 5 until the CEMP is approved by the Planning Secretary; and
 - (b) carry out the construction works of MOD 5 in accordance with the CEMP approved by the Planning Secretary.
20. The EMP should address but not be limited to:
- (a) Details of the soil and groundwater investigation to be carried out in the area proposed for earthworks
 - (b) Details of the management strategy for the handling, treatment and disposal of any acid sulphate soils and any contaminated material
 - (c) Soil sediment control measures
 - (d) Surface run-off control
 - (e) Dust management plan
 - (f) Quality of excess water from construction site and monitoring
 - (g) Methods and discharges or use of excess water including criteria for discharge of stormwater to sewer, stormwater or treatment
 - (h) Groundwater protection
 - (i) The manner in which air and noise management and environmental monitoring will be implemented in relation to the new facilities.

No site works involving ground disturbance must commence prior to approval of the plan.

- 20A. One month prior to the commencement of commissioning of DA35/98-Mod-6 and within 3 months of the date of consent of each modification thereafter, the Applicant must update the Environmental Management Plan (EMP) for the entire facility to the satisfaction of the Planning Secretary. The EMP must:
- a. be prepared in consultation with the EPA;
 - b. detail all existing installed plant, equipment and systems;
 - c. detail environmental risks and the mitigation and control measures implemented at the site;
 - d. detail the site's effluent and stormwater management systems including:
 - i. effluent and stormwater drainage locations, flow paths and discharge points, including a site layout plan showing key infrastructure;
 - ii. drainage and treatment system capacity;

- iii. operational procedures for effluent and stormwater management; and
 - iv. roles and responsibilities for operation, inspection, maintenance and incident response;
 - e. include the final detailed design and operation of the CLP, including:
 - i. a layout plan showing the CLP and associated stormwater and effluent infrastructure;
 - ii. identification of any internal drains associated with the CLP;
 - iii. confirmation that internal drainage is directed to the existing effluent treatment system or other appropriately approved infrastructure; and
 - iv. measures to prevent contamination of clean stormwater during normal, abnormal or incident conditions.
 - f. include the final detailed design and operation of subsequent modifications, including layout plans, environmental controls and management measures.
- 20B. The Applicant must:
- (a) not commence commissioning of the CLP until the EMP required by Condition 20A is approved by the Planning Secretary;
 - (b) not commence commissioning or operation of any new equipment installed as part of any modification approved after DA35/98-Mod-6 until the updated EMP for the modification is approved by the Planning Secretary; and
 - (c) implement the most recent version of the EMP approved by the Planning Secretary for the duration of the development.
21. (a) Excavated material must be screened, tested and disposed of in accordance with the Department of Environment, Climate Change and Water's *Waste Classification Guidelines 2008*. Testing must include, but not be limited to, mercury and hexachlorobenzene.
- (b) Materials found to be contaminated must be disposed of to an appropriately licensed facility and not reused on site for any purpose.

REMEDIATION

Imported Soil

- 21A. The Applicant must:
- (a) ensure that only VENM, ENM, or other fill material approved in writing by EPA is brought onto the site for use as fill;
 - (b) keep accurate records of the volume and type of fill to be used; and
 - (c) make these records available to the Planning Secretary upon request.

Site Auditor

- 21B. Prior to the commencement of remediation works for the CLP and containment building, the Applicant must provide evidence to the Planning Secretary that a Site Auditor accredited under the *Contaminated Land Management Act, 1997* has been appointed, to independently review the implementation and validation of the remediation works. The scope of the audit is also to include consideration of the suitability of the long-term environmental management plan (LTEMP).

Remedial Works

- 21C. The Applicant must remediate the site in accordance with the design specifications and requirements detailed in the Remedial Action Plan *New Chlorine Liquefaction Plant, Denison Street, Banksmeadow NSW (RAP)* prepared by JBS&G dated 30 January 2025, and relevant guidelines produced or approved under the *Contaminated Land Management Act 1997*. Remediation works must be undertaken by a suitably qualified and experienced consultant(s).

Vapour Barrier

- 21D. Prior to the commencement of remediation works for the CLP and containment building, the Applicant must prepare a Construction Quality Assurance Plan (CQAP) to the satisfaction of the Planning Secretary. The CQAP must:
- (a) be reviewed and endorsed by the Site Auditor;
 - (b) include details of the Construction Quality Control and Construction Quality Assurance design, procedures, program and performance specifications to be achieved for the vapour barrier; and
 - (c) be prepared as described in the RAP.
- 21E. The Applicant must:
- (a) not commence remediation works until the CQAP is approved by the Site Auditor;
 - (b) ensure any revisions to the CQAP are reviewed and approved by the Site Auditor; and

- (c) implement the most recent version of the approved CQAP.

Materials Tracking Plan

- 21F. Prior to the commencement of remediation works for the CLP and containment building, the Applicant must prepare a Materials Tracking Plan (MTP) to the satisfaction of the Planning Secretary. The MTP must:
 - (a) be reviewed and endorsed by the Site Auditor;
 - (b) detail procedures for tracking materials impacted by mercury or chlorinated hydrocarbons that are relocated during remediation works to confirm they are retained above groundwater levels; and
 - (c) be prepared as described in the RAP.
- 21G. The Applicant must:
 - (a) not commence remediation works until the MTP is approved by the Planning Secretary;
 - (b) implement the most recent version of the MTP approved by the Planning Secretary.

Validation Report

- 21H. Within three months of completion of the remediation works for the CLP and containment building, the Applicant must submit to the Planning Secretary, a Validation Report that has been reviewed and endorsed by the Site Auditor. The Validation Report must be prepared in accordance with the approved RAP and relevant guidelines produced or approved under the *Contaminated Land Management Act 1997*.

Long Term Environmental Management Plan

- 21I. Prior to finalisation of the Site Audit Statement and Site Audit Report, the Applicant must prepare a Long Term Environmental Management Plan (LTEMP) for the CLP and containment building. The LTEMP must:
 - (a) detail the location, nature and extent of residual contamination at the site and the extent of the management area;
 - (b) detail risk management measures to prevent potential exposure to groundwater contamination;
 - (c) detail actions for maintaining the integrity of the containment area and vapour barrier;
 - (d) include an asbestos register and asbestos management plan;
 - (e) be prepared as described in the RAP;
 - (f) include a program for ongoing monitoring and review to ensure the LTEMP remains contemporary with relevant environmental standards; and
 - (g) detail mechanisms to report results to Council, EPA and the Planning Secretary.
- 21J. Upon completion of the Site Audit Statement and Site Audit Report, the Applicant must implement the approved LTEMP.

Site Audit Report and Site Audit Statement

- 21K. Within 3 months of the completion of the remediation works for the CLP and containment building, the Site Auditor must submit a Site Audit Statement (SAS) and Site Audit Report (SAR) to the EPA, Council and the Planning Secretary. The SAS and SAR must:
 - (a) be prepared in accordance with the NSW Contaminated Land Management – Guidelines for the NSW Site Auditor Scheme 2017;
 - (b) include the LTEMP required by condition 21I; and
 - (c) demonstrate the site is suitable for its intended industrial land use with the implementation of the LTEMP.

Asbestos

- 21L. The Applicant must ensure that any asbestos encountered during the remediation and construction works for the CLP and containment building is monitored, handled, transported and disposed of by appropriately qualified and licensed contractors in accordance with the requirements of SafeWork NSW and relevant guidelines, including:
 - (a) *Work Health and Safety Regulation 2017*;
 - (b) *SafeWork NSW Code of Practice – How to Manage and Control Asbestos in the Workplace* December 2022;
 - (c) *SafeWork NSW Code of Practice – How to Safely Remove Asbestos* December 2022; and
 - (d) *Protection of the Environment Operations (Waste) Regulation 2014*.
- 22. The Applicant must ensure that the proposed development, during construction and operation, does not impact on the neighbouring rail embankments. Details of drainage and stormwater management must be discussed with Rail Access Corporation (RAC) and Rail Estate to ensure that there is no impact on the operation of rail.
- 23. The Applicant must submit for the approval of the **Planning Secretary**, evidence that the environmental management of the proposed facilities has been integrated into the existing site Safety, Health and Environment Procedures.

Independent Audit

24. At 3 yearly intervals, from the date of commencement of operations of the development, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements in force at the time the Audit commences, as approved by the Planning Secretary and published on the Department's website.
- 24A. The Applicant must make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary and notify the Planning Secretary in writing at least seven days before this is done.

POLLUTION CONTROL APPROVALS AND LICENSES

25. The Applicant must obtain from the EPA all statutory approvals and licenses required under the Clean Air, Clean Waters, and Noise Control Acts and must renew and maintain the licenses for the life of the development.

WORK COVER REQUIREMENTS

- 26A Mod 3 must comply with Australian Standard AS 3780 *The Storage and Handling of Corrosive Substances*.
- 27A The Applicant must dispose of any asbestos contaminated materials in accordance with the requirements of WorkCover NSW.

NOISE

28. No later than one month prior to the start of construction, the Applicant must develop, to the satisfaction of the EPA, a Construction Noise Management Plan. This must provide details of noise control measures to be undertaken during construction. This plan must be developed in accordance with the requirements of the EPA Noise Control Manual.
29. All construction activities, likely to generate perceivable noise offsite, must be restricted to the hours 7.00 am to 6.00 pm, Monday to Friday, and 8.00 am to 1.00 pm, Saturday, unless otherwise agreed to in writing by the EPA on a case by case basis.
30. The technique used for piling during construction must be "auger piling" to ensure that there will be no vibration effects on nearby buildings or surrounding properties.
31. The development must be constructed to achieve the construction noise management levels detailed in *the Interim Construction Noise Guideline* (DECC, 2009) (as may be updated or replaced from time to time). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and appropriately managed.
32. The Applicant must ensure that noise generated by operation of the development does not exceed the noise limits in the EPL.
33. deleted
34. Where practicable, during the commissioning of the Chlor-alkali plant, the Applicant must ensure that test runs are conducted during daytime.
35. No later than one month prior to the start of operation, the Applicant must prepare to the satisfaction of the EPA, a Noise Management Plan to address operating the proposed development in accordance with the Site Noise Reduction Program.
36. All machinery must be installed and/or housed in such a manner as to prevent the emission of noise and transmission of vibration outside the premises.

AMENITY

37. The premises and operations must be conducted in such a manner as not to interfere with, or materially affect, the amenity of the neighbourhood by reason of noise, vibration, smell, fumes, vapour, steam, soot, ash, dust, waster water, waste products, grit, oil, or otherwise.
38. The occupier of the premises must not cause, permit, or allow the emission of any odorous air impurity from the development such that it can be detected outside the property boundaries by its odour.
39. All raw materials, manufactured goods and machinery must be stored wholly within the development and not in adjacent forecourts, yards, access ways, car parking areas, or on Council's footpath.
40. All work must be carried out inside the development and not in adjacent forecourts, yards, access ways, car parking areas, or on Council's footpath.
41. The Applicant must screen or direct all on-site lighting away from the residences and roadways to the satisfaction of Council.

42. Prior to construction, a colour scheme for the Chlor-alkali plant must be prepared by the Applicant consistent with the aims and objectives of the Botany Bay City Council's "Environmental Improvement Program – Banksmeadow Industrial Area" submitted to and approved by the [Planning Secretary](#).
43. Any temporary structure erected on the southern or western side of the site must be removed within 3 months being completed. Further, the temporary parking area for the contractors must cease being used within one month of the plant commissioning being completed.

AIR QUALITY

Air Quality Discharges

- 43A. The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria / air emission limits and air quality monitoring requirements as specified in the EPL applicable to the site.

Exhaust Stack Design

- 43B. The Applicant must ensure the final design of the exhaust stack and pollution control system on the CLP and containment building allows for emission testing requirements and addresses the relevant requirements of Australian Standard AS4323.1 *Stationary source emissions – Selection of sampling positions 2021*.

Post-Commissioning Verification Study

- 43C. Within 6 months of commissioning the CLP and containment building, the Applicant must prepare a Post-Commissioning Verification Study in consultation with the EPA and to the satisfaction of the Planning Secretary. The study must:
 - g. be prepared by a suitably qualified and experienced air quality specialist;
 - h. include sampling locations in accordance with the *Test Method 1 (TM-1) Selection of sampling positions* of the EPA's *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*;
 - i. include sampling for the air pollutants listed in Table 1 for EPL monitoring points 1, 3 and 4 (CLP);
 - j. include sampling when the plant is operating at full capacity and provide a suitable characterisation of emissions during normal plant operations.

Table 1: Post-Commissioning Monitoring Requirements

Pollutant	Units of measure	Frequency	Sampling Method
Chlorine	mg/m ³	Special frequency 1	TM-7
Dry gas density	kg/m ³	Special frequency 1	TM-23
Oxygen	Percent	Special frequency 1	TM-25
Temperature	Celsius	Special frequency 1	TM-2
Velocity	Metres per second	Special frequency 1	TM-2
Volumetric flowrate	Cubic metres per second	Special frequency 1	TM-2

- 43D. Within 6 weeks of completing the Post-Commissioning Verification Study required by Condition 43C, the Applicant must provide a report to the EPA and to the satisfaction of the Planning Secretary. The report must:
 - (a) include all monitoring results;
 - (b) detail all sampling locations;
 - (c) include all information required for Analytical Reports detailed in the EPA's *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*;
 - (d) detail plant operating conditions at the time of testing;
 - (e) compare monitoring results with the standards of concentration described in the *Protection of the Environment Operations (Clean Air) Regulation 2021* and the emission parameters assessed in the Air Quality Impact and Greenhouse Gas Assessment prepared by Todoroski Air Sciences dated 10 July 2025 submitted with DA35/98-Mod-6; and
 - (f) compare results with the continuous measurements from inline monitoring.

LANDSCAPING

44. Prior to seeking a construction certificate the Applicant must prepare a detailed landscape plan for the development to be implemented within 6 months of the commissioning of the proposed development to the satisfaction of Botany Bay City Council.

UTILITY SERVICES

45. Any necessary alterations to public utility installations must be made at the Applicant's own expense and must meet the requirements of both the Council and the relevant authority/s.

HERITAGE

46. Any equipment or structure decommissioned or demolished as a result of this development consent should be fully documented. A report detailing the chemical and manufacturing processes should be maintained together with any oral history, flow diagrams of the manufacturing process, photographic records and documentation including scale drawings in accordance with the Guidelines from the Heritage Office. Three copies of this report to be forwarded to Council.
- 46A. The Applicant must provide a supplementary report including a photographic record of any equipment or structure decommissioned or demolished as a result of Mod 4. Copies of the supplementary report must be provided to the Planning Secretary and the Bayside Council prior to demolition.

ANNUAL REPORT

47. The Applicant must submit an annual report to Planning Secretary in respect of the implementation and effectiveness of the conditions contained in this consent and compliance with the EIS and must bring to the notice of the Planning Secretary those matters which the Applicant considers may require further investigation. The first report must be submitted one year from the date of this consent, and subsequent reports must be submitted on the anniversary of this date or such period as the Planning Secretary may agree.
- This report must include a record of commercial traffic movements into and out of the site annually from the date of commencement of operation. The report must also include details of the hours spent by loaded chlorine road tankers on site, until the CLP is operational and Condition 3A comes into effect.
- Note: The requirements of Condition 47 may be incorporated into the Annual Report requirements of Condition 48, once the CLP is operational.*
48. One year after the date of consent of DA35/98-Mod-6 and every year thereafter, or at such intervals as the Planning Secretary may agree, the Applicant must prepare an **Annual Report** for the entire facility. This report must be published by the Applicant on the facility operator's public website and must include:
- (a) environmental performance;
 - (b) details of annual vehicle movements including dangerous goods and compliance with condition 2B;
 - (c) compliance with conditions of consent; and
 - (d) include details of the types and numbers of community complaints received during the year.
- 48A. At least one month prior to the commencement of contingent mode of operation of the CLP, the Applicant must notify the Planning Secretary and provide:
- (a) reasons for contingent mode of operation; and
 - (b) start and end dates for contingent mode of operation.

YEAR 2000 CONFORMITY

49. One month prior to the commencement of commissioning, the Applicant must provide the Planning Secretary with a report confirming that all automated systems, including embedded systems, used for plant operation, pollution control, fire safety and monitoring have been tested in accordance with the most recent edition of BSI/DISC PD2000-1 to confirmed continuous time and date functionality of those systems.

GENERAL

50. Adequate provision must be made within the development for the storage, collection and disposal of waste and recyclable materials to the satisfaction of the Council. A Waste Management Plan must be submitted to Council at the commencement of construction detailing the type and quantity of waste to be generated by the development; materials to be reused or recycled; facilities/procedures for the storage, collection and disposal of waste and on-going management of waste.
51. Prior to the commencement of construction the Applicant must implement an advertised 24-hour telephone service to handle complaints from members of the public during the construction period.
52. During the construction period the Applicant must maintain a Complaints Register which must be used to record details of all complaints received and actions taken by the Applicant in response to such complaints. The Register must be available for inspection to all relevant approval/consent authorities.
53. The Applicant must ensure the facility is built to withstand rail related vibration from the neighbouring rail yards.
54. The Applicant must also ensure that no adverse impacts from construction and operation of the development on the nearby rail corridor and railway land.
55. Any dispute arising between any of the parties in respect to these conditions must be referred to the Planning Secretary for resolution.
56. Before commencing construction, the Applicant must install and maintain vibration monitoring equipment in areas of vibration sensitive equipment on any neighbouring plants. This equipment must be maintained and monitored over the life of the construction and commissioning of the proposed development.

57. This approval and consent does not relieve the Applicant of the obligation to obtain any other approval under the Local Government Act, 1993 as amended, the Ordinance made thereunder or any other Act.

RIGHT OF APPEAL

If you are dissatisfied with this decision, section 97 of the Unamended Environmental Planning and Assessment Act, 1979 gives you the right to appeal the Land and Environment Court within 12 months of the date of receipt of this notice.

Notes:

- (a) This consent operates from the date endorsed on the notice of determination of the development application (see Section 93 of the Unamended Environmental Planning and Assessment Act, 1979); and:
- (b) This consent lapses 5 years after the date from which it operates (see Section 99 of the Unamended Environmental Planning and Assessment Act, 1979). The conditions of consent will however continue to be valid for the full operating life of the development.

FLOODING

58. Any structures below the 1% Annual Exceedance Probability plus 500 mm of freeboard must be constructed from flood compatible building components.

INCIDENT NOTIFICATION, REPORTING AND RESPONSE

59. The Applicant must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including:

- (a) date, time and location;
- (b) a brief description of what occurred and why it has been classified as an incident;
- (c) a description of what immediate steps were taken in relation to the incident; and
- (d) identifying a contact person for further communication regarding the incident.

60. The Applicant must provide the Department with a subsequent incident report in accordance with the requirements set out in Appendix 2 (Incident Notification and Reporting Requirements).

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Management Plan Requirements

61. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
- (a) detailed baseline data;
 - (b) a condition compliance table for that plan;
 - (c) details of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures and criteria; and
 - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
 - (e) a program to monitor and report on the:
 - (i) impacts and environmental performance of the development; and
 - (ii) effectiveness of the management measures set out pursuant to paragraph (d) above;
 - (f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (g) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (h) a protocol for managing and reporting any:
 - (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);
 - (ii) complaint;
 - (iii) failure to comply with statutory requirements; and
 - (i) a protocol for periodic review of the plan.

Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans*

Construction Environmental Management Plan

62. The Applicant must prepare a Construction Environmental Management Plan (CEMP) for the CLP and containment building in accordance with the requirements of Condition 61 and to the satisfaction of the Planning Secretary.
63. As part of the CEMP required under Condition 62 of this consent, the Applicant must detail measures to manage:
 - (a) traffic;
 - (b) erosion and sediment;
 - (c) dust, noise and vibration;
 - (d) unexpected finds;
 - (e) waste; and
 - (f) community consultation and complaints handling.
64. The Applicant must:
 - (a) not commence construction of the CLP until the CEMP is approved by the Planning Secretary; and
 - (b) carry out the construction of the CLP in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.

APPENDIX 1 - DEVELOPMENT LAYOUT PLANS



Figure 1: Location of Chlorine Liquefaction Plant and Sodium Hypochlorite Loading Bay (DA35/98-Mod-6)

APPENDIX 2 - INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. All incident notifications and reports must be submitted via the NSW planning portal (Major Projects).
2. The Applicant must provide notification as required under these requirements, even if the Applicant fails to give the notification required under condition 59 or, having given such notification, subsequently forms the view that an incident has not occurred.
3. Within **7 days** (or as otherwise agreed by the Planning Secretary) of the Applicant making the immediate incident notification (in accordance with condition 59), the Applicant is required to submit a subsequent incident report that:
 - (a) identifies how the incident was detected;
 - (b) identifies when the Applicant became aware of the incident;
 - (c) identifies any actual or potential non-compliance with conditions of consent;
 - (d) identifies further action(s) that will be taken in relation to the incident;
 - (e) a summary of the incident;
 - (f) outcomes of an incident investigation, including identification of the cause of the incident;
 - (g) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence, including the period for implementing any corrective and/or preventative actions; and
 - (h) details of any communication with other stakeholders regarding the incident.
4. The Applicant must submit any further reports as directed by the Planning Secretary.

INCIDENT REPORT REQUIREMENTS

5. If requested by the Planning Secretary, within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
6. The Incident Report must include:
 - (a) a summary of the incident;
 - (b) outcomes of an incident investigation, including identification of the cause of the incident;
 - (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - (d) details of any communication with other stakeholders regarding the incident.