

Advisory Report: Proposed IXOM Chlorine Liquefaction Plant Modification at 16-20 Beauchamp Road, Banksmeadow

1.0 Executive Summary

1.1 Introduction to the Proposed Modification

This report provides preliminary advice from Bayside Council to the Department of Planning, Housing and Infrastructure (DPHI) regarding a modification application (CM 25/276766) lodged by IXOM Operations Pty Ltd. The application pertains to the existing State Significant Development (SSD) consent DA 35/98 at 16-20 Beauchamp Road, Banksmeadow. The proposed modification involves the construction and operation of a new Chlorine Liquefaction and Packaging (CLP) plant. The facility is designed with a maximum production capacity of 50 tonnes per day (tpd) and is intended to serve as a redundancy measure for IXOM's existing Laverton, Victoria facility. The proponent claims that by servicing New South Wales clients locally, the project will reduce the long-distance transport of bulk chlorine from Victoria, with liquefied chlorine to be stored on-site and distributed primarily via 13-tonne tankers, drums, and cylinders.

1.2 Key Findings and Preliminary Advice

A comprehensive review of the proposal summary and related documentation reveals that the submitted materials are preliminary and critically insufficient for a development of this nature and risk profile. The documentation lacks essential, legally mandated assessments and plans that are paramount for ensuring public safety and environmental protection in a densely populated urban area with a documented history of industrial incidents and contamination. The maximum production capacity and proposed storage volumes indicate that the facility is highly likely to be classified as a Major Hazard Facility (MHF) under the NSW *Work Health and Safety Regulation 2017*. This classification triggers a series of rigorous, non-negotiable legal requirements, none of which appear to have been adequately addressed in the proponent's summary.

The proponent's framing of the project as a reduction in transport distance is a superficial benefit that overlooks a significant redistribution of risk. Instead of long-haul trips on inter-state motorways, the project will introduce an increased frequency of short-haul, high-risk transport of bulk chlorine on Bayside Council's local road network, in close proximity to residential areas and schools. The historical context of the site, including a major contamination legacy and a recent near disaster at a nearby plant, further underscores the need for an exceptionally high standard of documentation and risk mitigation.

Bayside Council's preliminary advice is to formally recommend that DPHI suspend the assessment of this modification application until the proponent submits a series of

comprehensive and detailed studies that fully address all regulatory requirements and public safety concerns.

1.3 Summary of Recommendations

Bayside Council recommends that the DPHI require the proponent to submit the following:

- A full **Major Hazard Facility (MHF) Safety Case**, including a detailed Safety Assessment, Safety Management System, and a comprehensive Emergency Plan, in consultation with SafeWork NSW, Fire and Rescue NSW, and Bayside Council.
- A quantitative **Chlorine Gas Dispersion Model** to map the off-site consequences of a worst-case scenario incident on sensitive receivers.
- A comprehensive **Transport Risk Assessment** that explicitly quantifies and mitigates the risks associated with the daily, short-haul distribution of bulk chlorine on the local road network.
- A detailed **Pollution Incident Response Management Plan (PIRMP)**, prepared in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act).
- A thorough **historical and cumulative risk assessment** that demonstrates how the new plant will not exacerbate pre-existing environmental contamination or site-specific risks.

The proponent's general claims of safety are not a substitute for these legally mandated and contextually critical documents. **The current application is not adequate to determine the project's implications and therefore cannot be supported in its current form.**

2.0 Introduction and Background

2.1 Project Proponent and Site Context

The proponent for this modification is IXOM Operations Pty Ltd. The site in question is located at 16-20 Beauchamp Road, Banksmeadow, New South Wales. The property is described as a commercial headquarters in a central Botany location, offering office and industrial space, and is positioned on the corner of Beauchamp Road and Denison Street. The site is a part of the greater Botany Industrial Park, an area with a long history of chemical manufacturing. The current modification is an extension of an existing State Significant Development (SSD) consent, DA 35/98, which was originally granted on 6 November 1998, for the installation of a Chlor-Alkali Plant to produce 35,000 tonnes per annum of gaseous chlorine.

The industrial nature of the site exists in close proximity to residential and educational facilities, a fact that is central to this assessment. The nearest noise-sensitive residential uses are approximately 480m to the east, across the Botany rail corridor. More critically, several schools are situated within a short distance, including Matraville Public School (0.63km), St Agnes' Catholic Primary School (0.82km), and Champagnat Catholic College (1.36km). This proximity to vulnerable populations necessitates a heightened level of scrutiny for any development proposal that involves the production, storage, or handling of highly hazardous materials.

2.2 Description of the Proposed Modification

The proposed modification entails the construction and operation of a new chlorine liquefaction and packaging (CLP) plant. The facility is designed to liquefy and package chlorine on-site, providing a production capacity of up to 50 tpd. The primary function of this new plant is to provide operational redundancy for IXOM's existing facility in Laverton, Victoria, thereby ensuring market demand can be met if the Laverton plant becomes inoperable.

The project involves the storage of liquefied chlorine in a dedicated stock tank. Distribution is planned primarily via 13-tonne chlorine tankers, with additional capabilities for filling drums and cylinders for smaller-scale distribution. The proponent states that the plant will be housed in a containment building equipped with a scrubbing system to manage potential emissions. Additionally, the project includes the relocation of the existing sodium hypochlorite loading bay and the re-purposing of outdoor storage space for drums and cylinders into a more secure, contained area. The proposal does not seek to increase the existing approved maximum production capacity of 35,000 tonnes per annum of chlorine products.

2.3 Purpose and Scope of This Report

This report is a direct response to the DPHI's request for Bayside Council's preliminary advice on the proposed modification. Its purpose is to conduct a detailed analysis of the project's potential implications on the Bayside local government area and to assess the adequacy of the documentation submitted by the proponent. The report is structured to systematically review the proposal against the relevant legislative frameworks and to identify critical risks and deficiencies in the application. The scope of this advice is to provide a robust, evidence-based preliminary position that serves the best interests of the Bayside community by ensuring that all potential risks associated with this high-impact development are thoroughly and transparently addressed.

3.0 Legislative and Regulatory Framework Analysis

A project of this scale and nature, involving the production and handling of a highly hazardous substance, is subject to a strict and multi-layered legislative and regulatory

framework in NSW. This framework imposes mandatory requirements on the proponent, and any submission must demonstrate a clear understanding of and compliance with these obligations.

3.1 The *Environmental Planning and Assessment Act 1979* (EP&A Act) and State Significant Development (SSD)

The proposed development, as a chemical industry and manufacturing facility, is classified as a State Significant Development (SSD) under the *Environmental Planning and Assessment Act 1979* (EP&A Act). The assessment of such projects is coordinated by the DPHI, and development consent is required from the Independent Planning Commission or the Minister for Planning. This particular proposal is lodged as a modification application under Section 4.55 of the EP&A Act, which is used for changes to a consent where the proposed development remains "substantially the same" as the original approval. The adequacy of this classification is a matter for the DPHI, but Bayside Council's review focuses on whether the documentation for this modification is commensurate with the high risks involved. The EP&A Act and its associated regulations require a rigorous assessment of all environmental impacts, guided by principles of ecologically sustainable development, including the precautionary principle and intergenerational equity.

3.2 The *Protection of the Environment Operations Act 1997* (POEO Act) and the NSW EPA

The construction and operation of a chemical production facility is a "scheduled activity" under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). As such, the occupier of the premises is legally required to hold an Environment Protection Licence (EPL) issued by the NSW Environment Protection Authority (EPA). The POEO Act grants the EPA broad powers to enforce compliance, including issuing clean-up notices and prosecuting environmental offences in the Land and Environment Court.

A core requirement for any EPL holder is the preparation, implementation, and maintenance of a Pollution Incident Response Management Plan (PIRMP). Under the POEO Act, specifically Part 5.7A, this plan must detail procedures for notifying relevant authorities and the community in the event of a pollution incident. The protocol for immediate notification, as demonstrated by other IXOM facilities, prioritises emergency services (000), followed by the EPA, NSW Health, SafeWork NSW, and the local council. This mandatory plan must be kept on-site, tested regularly, and implemented immediately in the event of an incident that causes or threatens material harm to the environment.

3.3 The *Work Health and Safety Regulation 2017* (WHS Regulation 2017) and Major Hazard Facilities (MHF)

The proposed CLP, due to its intended capacity, is directly implicated by the provisions of the *Work Health and Safety Regulation 2017* (WHS Regulation 2017). A facility that stores, handles, or processes large quantities of hazardous chemicals may be classified as a Major Hazard Facility (MHF).

Under Schedule 15 of the WHS Regulation, a facility is a determined MHF if the quantity of a Schedule 15 chemical present or likely to be present exceeds its designated threshold. For chlorine, this threshold is 25 tonnes. The proposed facility's stated maximum production capacity of 50 tpd, coupled with the storage of bulk quantities in a stock tank and 13-tonne tankers, makes it highly likely to exceed this threshold and therefore be an MHF.

The MHF classification imposes a series of stringent duties on the operator, including:

- **Notification:** The operator must notify SafeWork NSW within three months if the quantity of a Schedule 15 chemical exceeds 10% of the threshold quantity (i.e., over 2.5 tonnes of chlorine).
- **Safety Case:** An MHF operator must prepare a comprehensive written safety case that demonstrates how all risks will be managed. The safety case must include a summary of the safety assessment, emergency plan, and safety management system. It must be reviewed and revised when a modification is proposed to the facility.
- **Safety Management System (SMS):** The operator must establish and implement a documented SMS that is the principal means of ensuring safe operation.
- **Emergency Plan:** An emergency plan must be prepared in consultation with Fire and Rescue NSW, the NSW Rural Fire Service, and the local council. This plan must address all health and safety consequences of a major incident, both on-site and off-site, and provide for the testing of emergency procedures. The operator must provide the local council with a summary of the safety case and details on how a major incident will be communicated to the community.

3.4 Dangerous Goods and Transport Regulation in NSW

The project involves the transport of bulk liquefied chlorine, which is classified as a hazardous chemical and dangerous good. The

Dangerous Substances Act 1979 and the *Work Health and Safety Act 2011* govern the keeping, handling, and transport of such materials. Transport for NSW and the National Heavy Vehicle Regulator (NHVR) manage the authorised road networks for heavy vehicles.

Table 1: Key NSW Legislation and Its Relevance to the IXOM CLP Modification

Act / Regulation	Relevant Section / Regulation	Purpose	Relevance to Proposed CLP
<i>Environmental Planning and Assessment Act 1979</i>	<i>SSD, Section 4.55</i>	Establishes the planning and assessment system for development in NSW.	The project is an SSD modification, requiring assessment of environmental, social, and economic impacts. The modification process should not compromise the integrity of the original consent.
<i>Protection of the Environment Operations Act 1997</i>	<i>Schedule 1, Part 5.7A, Sections 148, 153A-F</i>	Prevents and controls pollution, and manages environmental incidents.	The facility is a "scheduled activity" requiring an EPL. A PIRMP is mandatory, outlining procedures for immediate notification to authorities and the community in the event of a pollution incident.
<i>Work Health and Safety Regulation 2017</i>	<i>Schedule 15, Part 7.1</i>	Protects the health and safety of workers and the public from workplace risks.	The proposed quantities of chlorine likely classify the site as an MHF, requiring notification to SafeWork NSW and the preparation of a comprehensive Safety Case, Safety Management System, and Emergency Plan.
<i>Dangerous Substances Act 1979</i>	<i>Part 3</i>	Regulates the keeping, handling, and transport of dangerous substances.	The project involves the handling of chlorine, a dangerous substance. All on-site and off-site transport activities must comply with this Act and other relevant codes for dangerous goods.