

Ms Deana Burn,  
Major Projects  
Department of Planning Housing and Infrastructure  
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24 September 2025

**Ref No: F2025/00309**

Dear Ms Burn,

**RE: MOD 6 IXOM Chlorine Liquefaction Plant (DA35/98-Mod-6)**

I refer to the notification received from the Department requesting Council's input into the IXOM Operations Pty Ltd a modification application for the Orica Chlor-Alkali Plant (DA35/98-Mod-6), located at 16-20 Beauchamp Road, Banksmeadow. Council notes this modification is for IXOM Operations to construct and operate a new chlorine liquefaction packaging plant on the site.

Council notes that the original consent in 1998 approved the installation of a replacement Chlor-Alkali Plant to produce 35,000 tonnes per annum of gaseous chlorine at Botany. This development replaced the existing mercury-cell technology with a modern membrane cell technology. The development also included closure of the chlorine liquefaction plant.

It is noted that, while the Modification seeks approval for the construction of a chlorine liquefaction plant at the Botany Industrial Park (BIP) within the Bayside Local Government Area, the site's proximity to the Randwick City Council boundary means that many Randwick City residents are directly affected by the operations of businesses located within the BIP. Ixom Operations presented the modification proposal to the Matraville Precinct Committee in April 2025. Following this presentation, residents have raised concerns with Council regarding the proposal, particularly in relation to increased risk, noise, and traffic impacts associated with the proposed modification.

Council officers have reviewed the Modification Report prepared by Element Environment for IXOM Operations 25 August 2025 and provides the following comments below.

**Key Issues**

**Development not substantially the Same**

Council is concerned that the installation of a new chlorine liquefaction plant may represent a substantial departure from the terms and content of the original development consent. Any modification to a development application in NSW must meet the "*substantially the same*" development test as provided under the Environmental Planning and Assessment Regulation 2017.

Section 4.55(2) of the Environmental Planning and Assessment Act 1979 allows an applicant to apply to the consent authority to modify a development consent where the proposed changes are more than minor, but the development would still be substantially the same development as originally approved.

This provision applies to modifications that go beyond correcting minor errors or making changes with minimal environmental impact. While such modifications may involve more substantial alterations—such as changes to the design, layout, or operational aspects—they must not fundamentally alter the nature or purpose of the original development. The consent authority must be satisfied that the development, as modified, remains substantially the same as the one originally approved.

Importantly, Section 4.55(2) does not require the proposed modification to have no or minimal environmental impact—that threshold applies to Section 4.55(1A). Modifications under 4.55(2) may involve more significant environmental impacts and typically require a more detailed assessment, public notification, and a supporting

Statement of Environmental Effects. In this context, Council contends that the proposed modification involves a greater environmental risk than previously assessed, yet lacks the level of detailed risk analysis that would be more appropriately addressed through a new Development Application.

Establishment of a new chlorine liquefaction plant may give rise to cumulative impacts of associated emissions (see relevant comments below) that may need to be fully considered in a development application rather than a modification application especially given potential existing emissions from Port Botany and the adjacent Botany Industrial Park. Furthermore, there may be deficiencies in the proposed modification application that, otherwise, would be subject to a more in-depth and comprehensive assessment under a development application. Listed below are Randwick Council's environmental, safety, risk, amenity and traffic concerns regarding the proposal, which cumulatively suggest that these issues are best addressed through a new development application rather than a modification application.

### **Environmental and risk impacts**

Chlorine gas plants inherently involve risk; however, the introduction of liquefied chlorine presents additional safety, transport, and storage hazards, including bulk storage and the potential for catastrophic release scenarios. Where liquefaction fundamentally alters the form, risk profile, and potential impacts of a chlorine plant, the development may no longer be regarded as "substantially the same."

If the risk and hazard profiles are materially different, the proposal cannot be characterised as substantially the same development. The Land and Environment Court (L&E Court) has previously held that where modifications introduce materially different risks or environmental effects, they are not capable of being considered substantially the same. Accordingly, if the proposal introduces materially greater risks—even where the underlying land use remains unchanged—it will fail to satisfy the "substantially the same" test.

### **Public Risk – Extension of Irritation Injury Contours**

The Qualitative risk Assessment provided in Appendix D of the report includes a summary table of risks. This Table 9.1 in shows irritation injury risk extending past Ixom Boundary to the south and west. The report notes the extension of the risk contours do not reach the nearest residential areas and do not extend to non-industrial land, so the HIPAP 4 toxic irritation criterion is met.

However, this contour now extends outside of the Botany Industrial Park and reaches 38 McPherson Street Banksmeadow which is the location of the existing [Banksmeadow Recycling Yard](#). This facility is open to the general public six days a week as an independent recycling facility. This extension of the risk contours onto an existing facility with public access clearly qualifies as an offsite risk to the public. The introduction of new publicly accessible receptors within a hazard contour represents a material change in the risk profile of the development.

Under HIPAP 4, land that is publicly accessible is considered sensitive to toxic releases, as occupants are typically untrained and may be unaware of emergency procedures. The extension of a hazard contour onto such land introduces a new offsite risk to the public that was not present under the current configuration of the Chlor-Alkali Plant. This change in exposure context is significant in land use safety planning, as HIPAP 4 emphasises the need to protect vulnerable and untrained populations from hazardous incidents.

Accordingly, the introduction of new offsite receptors within a hazard contour may constitute a material change in the risk profile of a development. In this regard, the Land and Environment Court of NSW (L&E Court) has previously found that modifications introducing new public exposure can render a development not "substantially the same" as originally approved. Notably, in *Vacik v Penrith City Council [1992] NSWLEC 8 and Moto Projects (No 2) Pty Ltd v North Sydney Council [1999]*, the Court held that changes which materially alter the nature or risk profile of a development—particularly by increasing public exposure—may fall outside the scope of permissible modifications under Section 4.55(2) of the Environmental Planning and Assessment Act 1979. Council's draft submission includes this matter.

Council is of the opinion that this modification constitutes a material change in risk profile given the offsite public risk and is no longer comparable to what was originally approved. Accordingly, the proposal does not satisfy the requirements of s4.55(2) of the EP&A Act 1979, and a full new development application assessment is required to ensure adequate consideration of offsite public safety.

### **Contamination/Remediation**

The Remediation Action Plan (RAP) prepared by JBS&G Australia Pty Ltd identifies asbestos in near-surface soils and mercury and chlorinated hydrocarbons in soil vapour as key contaminants presenting potential health risks. While a range of remediation options has been proposed in accordance with National Environmental Protection Council (NEPC) (2013) and EPA (2017) guidelines, Council's environmental health officer notes that the full extent of contamination—particularly vapour impacts—may extend beyond the site boundaries. Accordingly, Council

officers consider that further investigation into these potential off-site vapour impacts is required upfront prior to the determination of the application, along with confirmation of appropriate remediation protocols.

Additionally, Council's officer further recommends that, prior to determination of the modification, verification from an NSW EPA Accredited Site Auditor, via a Site Audit Statement (SAS B), should be provided upfront, confirming that the proposed remediation is appropriate for the identified contamination and will not result in greater environmental or human health risks than leaving the site undisturbed. In addition, the proposed Environmental Management Plan referred to in the proponent's remediation assessment should be developed and reviewed by the NSW EPA Accredited Site Auditor to confirm that the plan is reasonable and feasible in addressing site-specific contamination and health risks.

These deficiencies in the assessment of (a) the off-site vapour impacts and (b) the feasibility and appropriateness of the proposed remediation action represents another cumulative risk arising from the proposal. These deficiencies are considered unacceptable for a proposal of this scale, on a site that is already heavily contaminated from past activities, being a "significance risk of harm site". This suggests that these matters should be comprehensively addressed via a DA submission and not a Modification Application.

### **Traffic and Transportation Concerns**

A Transport and Traffic Assessment (Appendix B) has been prepared which essentially finds that modelling indicates that, under normal operations scenarios and extreme case scenario (closure of the Laverton CLP site in Victoria), the proposal is likely to have minimal impact on traffic operations and road performance during the traffic peak hours.

Notwithstanding this, Council raises concerns regarding the methodology adopted in the traffic impact assessment, which places disproportionate reliance on the fact that the site's current traffic generation is below the truck movement limits approved in the original Environmental Impact Statement (EIS). This approach overlooks the need to assess the actual impacts of increased traffic volumes on the Level of Service (LoS) at key local intersections. While the LoS may currently remain within acceptable thresholds, even modest increases in truck movements—particularly during peak periods—could exacerbate congestion and compromise road safety.

In this context, Council seeks clarification on whether the community will be notified of the specific timing and scheduling of truck movements, especially under the extreme case scenario involving the closure of the Laverton Chlorine Liquefaction Plant in Victoria. Such transparency is critical to avoid conflicts with residential and school traffic and to ensure that any operational changes are managed in a way that minimises local traffic disruption.

In the worst-case scenario—where the Victorian Chlorine Liquefaction Plant becomes non-operational—truck movements associated with the proposed facility could substantially exceed current projections. Despite this potential increase, the modification application does not outline any mitigation measures to address the corresponding rise in heavy vehicle traffic.

Council stresses that, under such conditions, road tankers must not be permitted to queue or idle within nearby residential streets while awaiting loading or unloading. All tanker movements, including any queuing or holding patterns, must be fully contained within the boundaries of the subject site to prevent negative impacts on local traffic, residential amenity, and road safety.

The submitted Traffic and Transport Assessment fails to consider these operational contingencies, and as a result, no traffic mitigation strategies have been proposed to manage increased vehicle volumes in high-demand scenarios involving the Chlorine Liquefaction Plant.

In New South Wales (NSW), the applicant would be aware that there are strict regulations governing the transportation of liquid chlorine by road tanker trucks. These regulations are part of broader safety measures to protect people, property, and the environment. The Environmental Protection Authority (EPA) and SafeWork NSW are responsible for overseeing the transport of dangerous goods, including liquid chlorine. Key regulations include the designation of specific hazardous goods routes, which are essential for several reasons:

- **Safety:** Designated routes are selected to reduce the risk of accidents in densely populated or environmentally sensitive areas.
- **Emergency Response:** These routes are chosen to ensure that emergency services can respond quickly and effectively to any incidents.
- **Infrastructure:** The routes are designed to accommodate the unique needs of hazardous goods transport, including the strength and width of roads suitable for heavy tanker trucks.
- **Minimising Exposure:** By using designated routes, the exposure of the general public to potential hazards is minimized.

These measures help ensure that the transportation of dangerous goods, such as liquid chlorine, is carried out as safely as possible.

Council notes that the Dangerous Goods Risk Assessment (DGRA) in Appendix N, prepared by Sherpa Consulting, does not rely on the Vopak Port Botany Expansion – Denison Street Transport Quantitative Risk Assessment, July 2016 Update, Revision 4, prepared by Scott Lister and issued in August 2016 for the assessment of cumulative impacts of transportation of dangerous goods. This document was specifically identified as a requirement under the Secretary's Environmental Assessment Requirements (SEARs). Instead, the proponent's risk consultant developed an alternative baseline model from which changes in cumulative transport risk associated with the modification proposal were assessed. Details regarding the development of this baseline risk model are not clearly justified within the DGRA, raising concerns about the validity of the model that underpins the assessment cumulative transport risk.

Additionally, Council notes that no traffic count data for current Dangerous Goods (DG) transport movements along Denison Street were undertaken as part of this study. Instead, the proponent relies on DG truck movement data derived from an outdated 2012 survey (ROAR Traffic Survey 2012). These traffic counts are now significantly outdated and do not reflect current operational conditions. Moreover, the Vopak Site B Expansion Traffic Impact Assessment (2016) alone anticipated an increase of more than 100 additional truck movements per day, representing a conservative 1.7-fold increase in the average hourly traffic volume compared with 2013 levels. In the absence of updated traffic count data, the cumulative impact of the proposed modification cannot be accurately assessed based on the current volume of DG truck movements along Denison Street. Consequently, any determination of cumulative transport risk remains incomplete and potentially unreliable.

In summary, the modification application has not provided details as to how and to what extent the proposal accords with relevant state regulation including dangerous goods routes to ensure safety for people, property, and the environment. These matters should be comprehensively addressed via a DA submission and not a Modification Application.

### **Operational Noise implications**

The proponent has submitted a detailed noise assessment with reference to the Environmental Protection Licence (EPL) No. 20547, dated 13 January 2025, and the noise limits specified under condition L4.2. The proposed plant is intended to operate on a continuous 24-hour basis.

While Council recognises the need to balance the competing priorities of industrial and residential land uses, it is essential that this balance is achieved in a fair and reasonable manner that safeguards existing residential amenity. In this regard, Council Environmental Health officer notes that the night-time noise criterion specified in condition L4.2 of the EPL is approximately 7 dB(A) higher than the corresponding residential amenity criteria contained within the Noise Policy for Industry (2017). Council is concerned that reliance solely on the EPL criteria may not provide adequate protection for existing residential receivers, as these residents are likely to perceive and be adversely affected by any increase in background noise when additional plant is introduced to the site. This raises the potential for future complaints, particularly given the sensitivity of residential receivers to night-time noise.

In addition, the acoustic report makes no reference to condition L4.3 of the EPL, which requires consideration of the intrusiveness criterion for active plant. For completeness and robustness of the assessment, the proponent should be required to model the worst-case operating scenario; that is, all significant plant items operating concurrently during the night-time period (10:00 pm to 7:00 am) with assessment undertaken at the most affected noise-sensitive receiver. This would provide greater confidence that the operation of the plant will remain compliant with condition L4.3 under realistic worst-case conditions and minimise the likelihood of amenity impacts for the existing residents.

Thank you for the opportunity to provide comment on this Ixom Mod 6 proposal. Council formally objects to the proposed modification (DA35/98-MOD-6) to the existing Chlor-Alkali Plant on the grounds of increased public risk and as a modification the proposal should have no or minimal environmental impact.

As the proposed modification therefore raises material public safety concerns, where the overall hazard and impact profile is no longer comparable to what was originally approved it warrants a full development application assessment, rather than approval as a minor modification. Council recommends that if IXOM wants to proceed with the chlorine liquefaction plant should be pursued as a new State Significant Development and be accompanied by a comprehensive Environment Impact Assessment to ensure all environmental impacts associated with the proposal are properly identified, quantified and assessed.

### **Air quality**

The air quality assessment undertaken for the proposed modification to the chlorine liquefaction plant advises that the project can operate without causing significant impacts to local air quality or public health. Using conservative assumptions, air dispersion modelling (via the CALPUFF model) assessed both normal and emergency operating scenarios, including potential shifts in chlorine supply due to the non-operation of the Laverton plant.

Results confirm that predicted chlorine concentrations will remain well within relevant air quality criteria at all sensitive receptor locations. During construction, potential dust impacts are assessed as low risk and can be effectively managed through standard mitigation measures. Additionally, the project's estimated annual greenhouse gas emissions are minimal representing approximately 0.0002% of national and 0.001% of NSW emissions—and are expected to decrease over time as the electricity grid decarbonises. Overall, the assessment advises that the modified plant will implement appropriate air quality management measures to ensure continued compliance and community protection.

It is recommended that ongoing quarterly air quality monitoring be undertaken and included as a condition of the site's NSW EPA Environmental Protection Licence (EPL) issued for the operation of the plant.

We acknowledge the community representations that have been received expressing opposition to the proposed construction of the chlorine liquefaction plant at the site. These concerns have informed, and been considered in, this submission.

If you have any questions regarding Council's comments, please do not hesitate to contact David Ongkili Acting Manager Strategic Planning on 9093 6793 9093 or [David.ongkili@randwick.nsw.gov.au](mailto:David.ongkili@randwick.nsw.gov.au)

Yours sincerely,



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**Manager Strategic Planning**

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<p><b>English</b></p> <p>If you need help to understand this letter, please come to Council’s Customer Service Centre and ask for assistance in your language or you can contact the Telephone Interpreter Service (TIS) on 131 450 and ask them to contact Council on 1300 722 542.</p>	<p><b>Greek</b></p> <p>Αν χρειάζεστε βοήθεια για να καταλάβετε αυτή την επιστολή, παρακαλείστε να έρθετε στο Κέντρο Εξυπηρέτησης Πελατών της Δημαρχίας (Council Customer Service Centre) και να ζητήσετε βοήθεια στη γλώσσα σας ή τηλεφωνήστε στην Τηλεφωνική Υπηρεσία Διερμηνέων (Telephone Interpreter Service — TIS) τηλ. 131 450 και να ζητήσετε να επικοινωνήσουν με τη Δημαρχία τηλ. 1300 722 542.</p>	<p><b>Italian</b></p> <p>Se avete bisogno di aiuto per capire il contenuto di questa lettera, recatevi presso il Customer Service Centre del Municipio dove potrete chiedere di essere assistiti nella vostra lingua; oppure mettetevi in contatto con il Servizio Telefonico Interpreti (TIS) al 131 450 e chiedete loro di mettersi in contatto col Municipio al 1300 722 542.</p>
<p><b>Croatian</b></p> <p>Ako vam je potrebna pomoć da biste razumjeli ovo pismo, molimo dođite u Općinski uslužni centar za klijente (Council’s Customer Service Centre) i zatražite pomoć na svom jeziku, ili možete nazvati Telefonsku službu tumača (TIS) na 131 450 i zamoliti njih da nazovu Općinu na 1300 722 542.</p>	<p><b>Spanish</b></p> <p>A la persona que necesite ayuda para entender esta carta se le ruega venir al Centro de Servicios para Clientes [Customer Service Centre] de la Municipalidad y pedir asistencia en su propio idioma, o bien ponerse en contacto con el Servicio Telefónico de Intérpretes [“TIS”], número 131 450, para pedir que le comuniquen con la Municipalidad, cuyo teléfono es 1300 722 542.</p>	<p><b>Vietnamese</b></p> <p>Nếu quý vị không hiểu lá thư này và cần sự giúp đỡ, mời quý vị đến Trung Tâm Dịch Vụ Hướng Dẫn Khách Hàng của Hội Đồng Thành Phố (Council’s Customer Service Centre) để có người nói ngôn ngữ của quý vị giúp hay quý vị có thể liên lạc Dịch Vụ Thông Dịch qua Điện Thoại (TIS) ở số 131 450 và yêu cầu họ liên lạc với Hội Đồng Thành Phố (Council) ở số 1300 722 542.</p>
<p><b>Polish</b></p> <p>Jeśli potrzebujesz pomocy w zrozumieniu treści tego pisma, przyjdź do punktu obsługi klientów (Customer Service Centre) przy Radzie Miejskiej i poproś o pomoc w języku polskim, albo zadzwoń do Telefonicznego Biura Tłumaczy (Telephone Interpreter Service — TIS) pod numer 131 450 i poproś o skontaktowanie się z Radą Miejską (Council) pod numerem 1300 722 542.</p>	<p><b>Indonesian</b></p> <p>Jika Anda memerlukan bantuan untuk memahami surat ini, silakan datang ke Pusat Pelayanan Pelanggan (Customer Service Centre) Pemerintah Kotamadya (Council) dan mintalah untuk bantuan dalam bahasa Anda, atau Anda dapat menghubungi Jasa Juru Bahasa Telepon (Telephone Interpreter Service - TIS) pada nomor 131 450 dan meminta supaya mereka menghubungi Pemerintah Kotamadya pada nomor 1300 722 542.</p>	<p><b>Turkish</b></p> <p>Bu mektubu anlamak için yardima ihtiyaciniz varsa, lütfen Belediye’nin Müşteri Hizmetleri Merkezi’ne gelip kendi dilinizde yardım isteyiniz veya 131 450’den Telefonla Tercüme Servisi’ni (TIS) arayarak onlardan 1300 722 542 numaradan Belediye ile ilişikiye geçmelerini isteyiniz.</p>
<p><b>Hungarian</b></p> <p>Amennyiben a levél tartalmát nem érti és segítségre van szüksége, kérjük látogassa meg a Tanácsház Ügyfél Szolgálatát (Customer Service Centre), ahol magyar nyelven kaphat felvilágosítást, vagy hívja a Telefon Tolmács Szolgálatot (TIS) a 131 450 telefonszámon és kérje, hogy kapcsolják a Tanácsházat a 1300 722 542 telefonszámon.</p>	<p><b>Czech</b></p> <p>Jestliže potřebujete pomoc při porozumění tohoto dopisu, navštivte prosím naše Středisko služeb pro veřejnost (Council’s Customer Service Centre) a požádejte o poskytnutí pomoci ve vaší řeči anebo zavolejte Telefonní tlumočnickou službu (TIS) na tel. číslo 131 450 a požádejte je, aby oni zavolali Městský úřad Randwick na tel. číslo 1300 722 542.</p>	<p><b>Arabic</b></p> <p>إذا أردت مُساعدة لفهم هذه الرسالة، نرجوك الحضور إلى مركز خدمة عملاء المجلس وأطلب المساعدة في لغتك، أو يُمكنك الاتصال بخدمة الترجمة الهاتفية (TIS) على هاتف رقم 131 450 وأطلب منهم الاتصال بالمجلس على رقم 1300 722 542.</p>
<p><b>Chinese</b></p> <p>如果你需要人幫助你了解這封信的內容，請來市政會顧客服務中心要求翻譯服務，或者與電話傳譯服務 (TIS) 聯繫，號碼是 131 450。請他們幫助你打電話給市政會，號碼是 1300 722 542。</p>	<p><b>Russian</b></p> <p>Если Вам требуется помощь, чтобы разобраться в этом письме, то, пожалуйста, обратитесь в Муниципальный Центр Обслуживания Клиентов и попросите оказать Вам помощь на Вашем языке или же Вы можете позвонить в Телефонную Службу Переводчиков (TIS) по номеру 131 450 и попросить их связаться с Муниципалитетом по номеру 1300 722 542.</p>	<p><b>Serbian</b></p> <p>Ako vam treba pomoć da razumete ovo pismo, molimo vas da dođete do Centra za usluge mušterijama pri Opštini (Customer Service Centre) i zamolite ih da vam pomognu na vašem jeziku, ili možete nazvati Telefonsku prevodilačku službu (TIS) na 131 450 i zamolite ih da vas povežu sa Opštinom na 1300 722 542.</p>

