



IXOM Chlor- Alkali Plant Repack Facility

*Section 75W
Modification Assessment
(DA 35/98 MOD 5)*

October 2018

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1. Introduction

This report assesses a modification request by IXOM Operations Pty Ltd (the Proponent) to construct a Repack Facility on Block A of the Botany Industrial Park (BIP). The request has been lodged pursuant to former section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The project was originally approved under Part 4 of the EP&A Act. The project is a transitional Part 3A project under Schedule 2 to the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* (EP&A (STOP) Regulation). The power to modify transitional Part 3A projects under the former section 75W of the EP&A Act as in force immediately before its repeal on 1 October 2011 is being wound up – but as the request for this modification was made before the ‘cut-off date’ of 1 March 2018, the provisions of Schedule 2 (clause 3) continue to apply. Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove the modification of the project under the former section 75W of the EP&A Act.

1.1 Background

The BIP is a complex of chemical manufacturing and storage facilities which covers an area of approximately 74 hectares (ha) at Matraville in the Bayside Council local government area (LGA). The BIP is bounded by Denison Street to the east, Beauchamp Road to the south, freight railway to the west and established industrial developments to the north (see **Figure 1**).

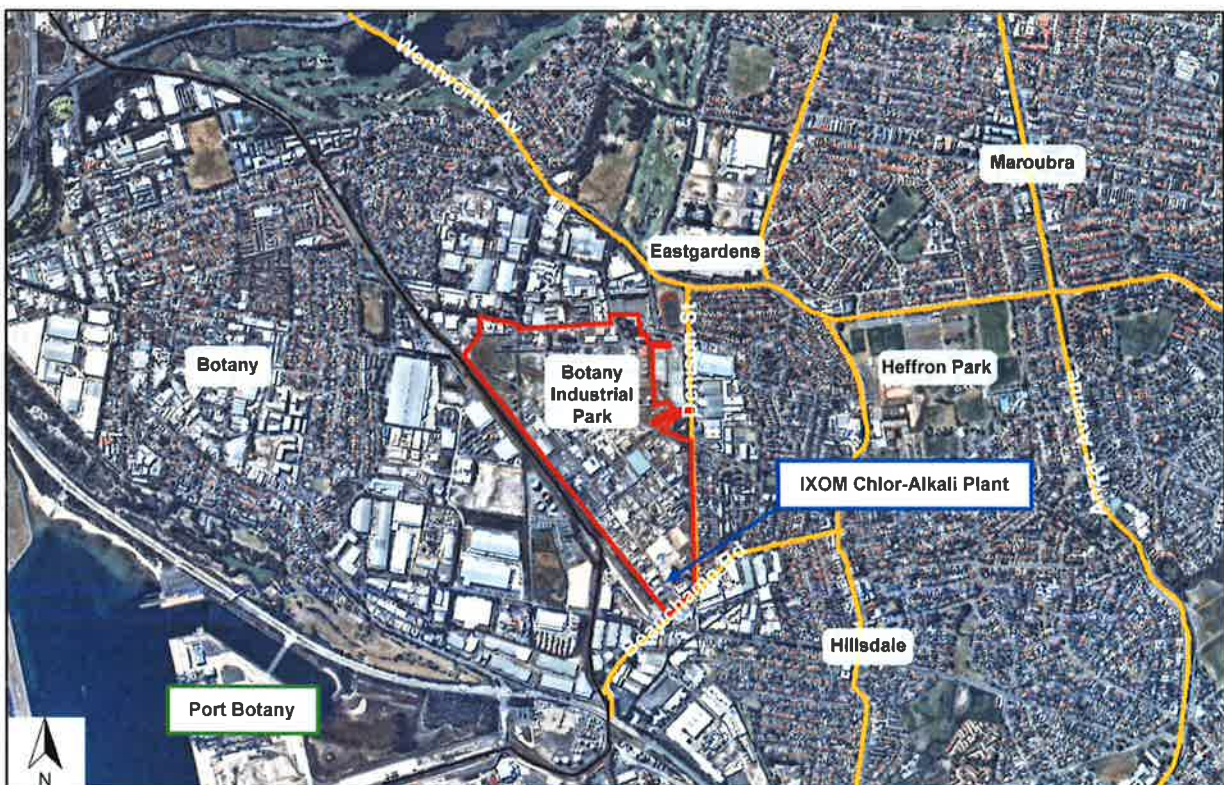


Figure 1 | Site Location

The Chlor-Alkali Plant which is located in the BIP is located approximately 9.4 kilometres (km) southeast of the Sydney CBD. The surrounding land use is mainly industrial with the exception of residential properties located to the east of Denison Street between Grace Campbell Crescent and Beauchamp Road.

The original Chlor-Alkali Plant commenced operation in 1941. On 6 November 1998, the then Minister for Urban Affairs and Planning approved the construction and operation of a new Chlor-Alkali Plant to replace the existing plant (DA 35/98). The new Chlor-Alkali Plant has been operational since 2002 and the former plant was demolished in 2007/2008.

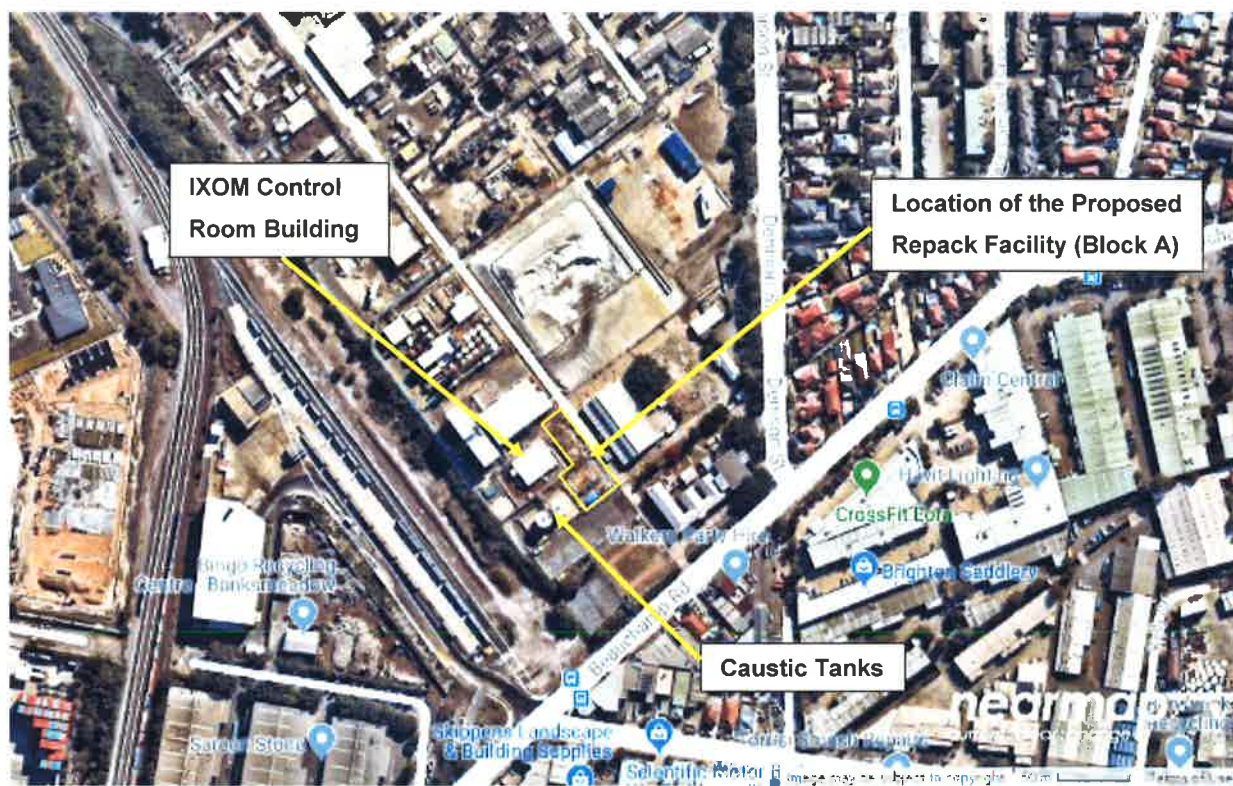


Figure 2 | Current site layout

Prior to 2015, the Chlor-Alkali Plant was owned and operated by Orica Australia Pty Ltd (Orica). In 2015, Orica divested its industrial chemical business to IXOM Operations Pty Ltd and the area identified as the 'Chemical Plant Area' of the BIP.

The Chlor-Alkali Plant produces chlorine-based products, mainly sodium hypochlorite, hydrochloric acid, caustic soda and ferric chloride from the electrolysis of natural sea salt. Chemical products produced at the Chlor-Alkali Plant are sold in bulk and distributed via tanker across Australia.

The Plant is regulated by the NSW Environment Protection Authority (EPA) through an Environment Protection Licence (EPL) No 2148 under the NSW *Protection of the Environment Operations Act 1997* (POEO Act).

Currently, the manufactured chemicals are sold in bulk and distributed via tanker. The chemicals are sold in bulk to re-packers who then parcel the product into smaller containers and sell to the end users, because the end-users have limited demand or storage capacity. The proposal to construct a Repack Facility on Block A of the BIP is sought to allow the Proponent to pack the manufactured chemicals on site prior to selling directly to the marketplace.

1.2 Approval History

On 6 November 1998, DA 35/98 was granted by the then Minister for Urban Affairs and Planning for the development of a Chlor-Alkali Plant to produce 35,000 tonnes per annum of gaseous chlorine. The consent was granted under Part 4 of the EP&A Act and *State Environmental Planning Policy No.34 – Major Employment-Generating Industrial Development* (SEPP 34) (now repealed).

The approval has subsequently been modified on four occasions. These modifications are shown in Table 1 below:

Table 1 | Summary of Modifications

Mod No.	Summary of Modifications	Approval Authority	Type	Approval Date
MOD 1	<ul style="list-style-type: none"> replacement and relocation of the Sodium Hypochlorite loading bay upgrading the Hypochlorite Storage Facility and increase the storage capacity from 400,000L to 500,000L replacement of the existing staff amenities building 	Department	96(1A)	9 January 2006
MOD 2	<ul style="list-style-type: none"> Demolition of the decommissioned Chlor-Alkali plant building 	Department	96(1A)	6 June 2006
MOD 3	<ul style="list-style-type: none"> dismantling existing structures at the new Chlor-Alkali Plant, including a steel gantry and concrete slab dismantling the deteriorated steel structure covering the existing Hypo Plant and removing the asbestos cement roofing construction of a new steel support structure with a colorbond roof relocation of the existing Hypo Plant including the primary hypo make tower, ferric backing tower, recirculation tanks, pumps and heat exchangers installation of two additional hypochlorite storage tanks with a dedicated bund adjacent to the proposed Hypo Plant location 	Department	96(1A)	29 September 2009
MOD 4	<ul style="list-style-type: none"> demolition of two disused caustic soda storage tanks disposal of some 50L of mercury-contaminated sludge and water contained within Tank 4 decontamination of Tank 4 demolition of Tanks 1 and 2 construction of two new double skinned liquid caustic storage tanks in the location of the demolished Tanks 3 and 4 construction of bunding around the two new tanks 	Department	75W	10 September 2012



2. Proposed Modification

The Proponent has lodged a modification request under the former section 75W of the EP&A Act to modify the BIP Chlor-Alkali Plant consent. The proposed modification seeks to construct a new Repack Facility for packaging sodium hypochlorite, sodium hydroxide and hydrochloric acid chemicals made at the Chlor-Alkali Plant into 1,000 litre (L) intermediate bulk containers (IBCs) and 200 L drums. The chemicals once packaged would be despatched onto rigid trucks (approximately 11 metres (m) in length). The modification is described in full in the Environmental Assessment (EA) included in Appendix B and is illustrated on **Figure 3**.

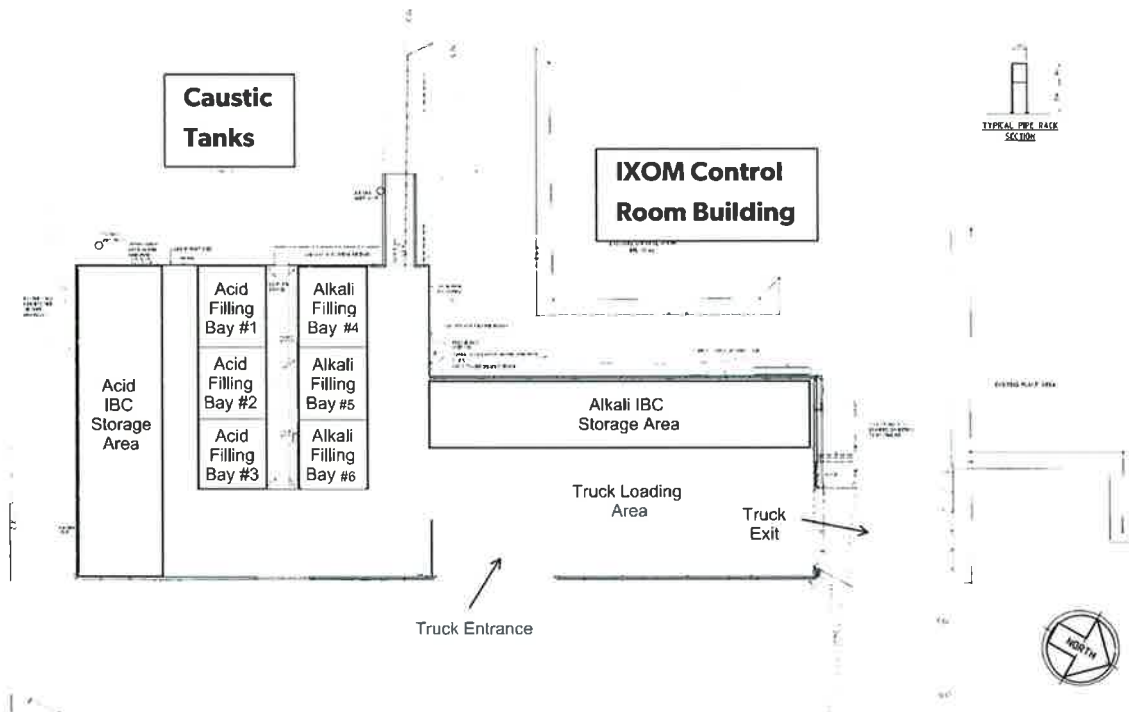


Figure 3 | Proposed Repack Facility Layout

To achieve these outcomes, the Proponent proposes to install a new 61 m x 26 m L-shaped building up to 7.6 m high comprised of two connected sheds, to establish and operate:

- six product makeup bays
- two separate bunded storage areas for acid and alkali, respectively
- a loading bay
- a new pipeline to transfer the manufactured chemicals from the Chlor-Alkali Plant to the repackaging facility
- a new pipeline to transfer process water, town water and firewater
- a new pipeline to discharge waste.

Construction of the Repack Facility will adopt a suspended slab constructed on piles. The selected approach will eliminate extensive excavation works and reduce the risk of encountering contaminated soil underlying the existing Chlor-Alkali Plant.

The initial maximum filling capacity of the proposed facility would be approximately 40 IBCs per day. The chemicals to be repackaged are currently produced and stored at the BIP, therefore there would be no additional dilution, blending or mixing of products as part of the modification request.



3. Strategic Context

3.1 Three Ports SEPP

The *Three Ports State Environmental Planning Policy* (Three Ports SEPP) is the environmental planning instrument that sets the land use planning and assessment framework for appropriate development at Port Botany, Port Kembla and the Port of Newcastle. The Three Ports SEPP aims to protect the ports from incompatible land uses and stipulates zones for the surrounding land to accommodate port activities.

The modification is consistent with the industrial use of the area surrounding Port Botany and the location of the Chlor-Alkali Plant Repack Facility will allow for the Proponent to export packaged chemicals in the future.

3.2 Greater Sydney Region Plan

In March 2018, the Greater Sydney Commission (GSC) published the Greater Sydney Region Plan (the Region Plan) and the associated District Plans. The Region Plan replaces *A Plan for Growing Sydney* and outlines how Greater Sydney will manage growth and change and guide infrastructure delivery. It sets the vision and strategy for Greater Sydney, to be implemented at a local level through District Plans. The Chlor-Alkali Plant is located within the industrial zoned Port Botany Precinct in the Eastern City District.

Objective 23 of the Region Plan seeks to ensure industrial and urban services land is retained, reviewed and planned. Industrial and urban services is land identified in the Department's Employment Lands Development Monitor, including industrial zoned land and some business zoned land which permits a number of industrial land uses. Industry and heavy manufacturing has been identified as generally needing to be close to critical infrastructure and separated from residential uses, typically on the urban fringe, near to trade gateways.

These objectives are further supported by the Actions set out in the Eastern City District Plan. For example, *Action 51 – retain and manage industrial and urban services*, in line with the principles for managing industrial and urban services in the Eastern City District by safeguarding all industrial zoned land from conversion to residential development.

Overall, the proposed modification is consistent with the strategic direction set out for Greater Sydney in the Region Plan and Eastern City District Plan.



4. Statutory Context

4.1 Scope of Modifications

Under clause 8J(8)(b) of Schedule 4 to the *EP&A (STOP) Regulation*, a development consent granted by the Minister for Planning for SEPP 34 is to be modified under the former section 75W of the EP&A Act. Despite the repeal of Part 3A of the EP&A Act on 1 October 2011, the effect of section 75W is continued for such consents by the operation of clause 12 of Schedule 2 to the *EP&A (STOP) Regulation* until the cut-off date established in clause 3BA of schedule 2 to the *EP&A (STOP) Regulation*.

The Department notes that:

- the primary function and purpose of the approved project would not change as a result of the proposed modification
- the modification is of a scale that warrants the use of former section 75W of the EP&A Act
- any potential environmental impacts would be appropriately managed through the existing or modified conditions of consent.

Therefore, the Department is satisfied the proposed modification is within the scope of former section 75W of the EP&A Act and does not constitute a new development application. Accordingly, the Department considers that the request should be assessed and determined under former section 75W of the EP&A Act rather than requiring a new development application to be lodged.

4.2 Consent Authority

The Minister for Planning is the approval authority for the request. Under the Minister's delegation of 11 October 2017, the Director Industry Assessments, may determine the request under delegation as:

- the relevant local council has not made an objection and
- a political disclosure statement has not been made and
- no public submissions in the nature of objections were received.

5. Engagement

5.1 Department's Engagement

Under the former section 75W of the EP&A Act, the Department is not required to notify or exhibit the modification request. Upon receipt, the request was placed on the Department's website and following a review of the documentation, the Department did not consider that further consultation was necessary.

Notwithstanding, the Department sought comments from relevant government agencies between 28 June 2018 and 18 July 2018.

The Department referred the application to Bayside Council (Council), the EPA, Roads and Maritime Services (RMS) and SafeWork NSW (SafeWork). The Department also notified the Botany Industrial Park Community Committee (BIP Community Committee), however it did not provide a submission on the modification request.

5.2 Key Issues – Government Agencies

EPA does not object to the modification and recommended the Construction Environmental Management Plan (CEMP) should address issues such as waste management and the management of any storm water or groundwater that may accumulate in the development footprint, associated with contaminated soil present at the proposed Repack Facility location. The EPA also recommended the CEMP include an Unexpected Finds Protocol (UFP). The EPA also commented on air quality and noise impacts.

SafeWork requested clarification of the planned approach to assess and ensure risk (including cumulative on-site risk) of the proposed modification is reduced so far as is reasonably practicable.

RMS raised no objection to the proposed modification.

5.3 Key Issues – Council

Bayside Council (Council) does not object to the modification request, however it raised concerns relating to the increased frequency of vehicle movements which results in a net increase in chemicals being moved from the Chlor-Alkali Plant. Council requested that the Department consider the impacts of more frequent vehicle movements and the cumulative risk generated from the modification, along with the cumulative air quality risk.

5.4 Response to Submissions

On 31 August 2018, the Proponent provided a response to submissions (RTS) report, which addressed the submissions from the key government agencies. The RTS is included in Appendix C.

The RTS was made publicly available on the Department's website and was provided to key agencies to consider whether it adequately addressed the issues raised. Council, the EPA and SafeWork all advised that the RTS had adequately addressed their concerns and comments.



6. Assessment

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered the:

- EIS and assessment report for the original application
- existing conditions of consent (as modified)
- EA supporting the proposed modification (Appendix B)
- submissions from State government authorities and Council (Appendix C)
- Proponent's response to issues raised in submissions
- relevant environmental planning instruments, policies and guidelines
- requirements of the EP&A Act, including the objects of the EP&A Act.

The Department considers the key assessment issues are:

- hazard and risk
- contamination.

The Department's assessment of other issues is provided in Table 2.

6.1 Hazard and Risk

The proposed modification is seeking to allow packaging of dangerous goods (corrosive substances) from existing product tanks into 1,000 L IBCs and 200 L drums. Dangerous goods storage in IBCs and drums associated with the proposal exceeds the relevant screening threshold quantity in the *State Environmental Planning Policy 33 – Hazardous and Offensive Development* (SEPP 33). As such, the proposed modification is deemed potentially hazardous and a Preliminary Hazard Analysis (PHA) was undertaken as part of the modification request.

Sherpa Consulting prepared a PHA in accordance with the Department's *Hazardous Industry Planning Advisory Paper (HIPAP) No 6 Hazard Analysis Guideline*. The analysis also considered existing risk assessments, including:

- *Quantitative Risk Assessment Summary Report BIP*, prepared by Sherpa Consulting, dated 25 September 2012
- *Quantitative Risk Assessment Report Chlor-Alkali Facility Orica, BIP*, prepared by Sherpa Consulting, dated 9 October 2017.

The PHA used the cumulative risk established for the BIP including the Chlor-Alkali Plant from the 2012 BIP Quantitative Risk Assessment. The PHA identified that the cumulative risks levels from the modification request are low compared to risks from the existing Chlor-Alkali Plant. As such, the modification request will not significantly increase the risks from the existing plant and will not alter the conclusions from the 2012 BIP Quantitative Risk Assessment.

The PHA also assessed the changes in dangerous goods transport movements. The PHA noted the net change in dangerous goods transport, relating to vehicle movements and quantities, is significantly below the thresholds in the Department's *Applying SEPP 33 Guideline*. As such, the proposed operation is not potentially hazardous in terms of dangerous goods transport. In addition, the PHA identified that Dangerous Goods Class 8 Corrosive Substances do not significantly contribute to existing dangerous goods transport risks along Denison Street.

Therefore, the modification request will not increase dangerous goods transport risks along Denison Street to unacceptable levels and will not alter conclusions from the 2012 BIP Quantitative Risk Assessment.

In response to Council's submission, the Department also considered the *Dangerous Goods Transport QRA for Denison Street, Hillsdale* prepared by Scott Lister in February 2015. The review of the document found that transport movements of Class 8 and Class 5.1 Dangerous Goods had been screened out from the Quantitative Risk Assessment because the impact or the release of any dangerous goods would be limited to the point of the incident. Therefore, the transport movements related to this modification would not impact the overall risks imposed by transport movements on Denison Street.

SafeWork NSW's submission advised that the Proponent had not provided its intended approach to assess and ensure risks (including cumulative on-site risk) posed by the modification request in accordance with SafeWork NSW requirements. In the RTS, the Proponent confirmed its intention to consult SafeWork NSW prior to commencement of the operations and, once operational, implement controls to reduce the identified risks. SafeWork NSW was satisfied with the response provided by the Proponent in the RTS.

The Department agrees with the conclusions of the PHA and recommends the modified consent includes conditions to manage hazards associated with the construction, commissioning and operation of the modification, including:

- a Construction Safety Study for the modification consistent with the Department's relevant guidelines
- a Hazard and Operability Study for the modification consistent with the Department's relevant guidelines
- an updated Fire Safety Study to incorporate any changes associated with the modification
- an updated Emergency Plan and Safety Management System to incorporate any changes associated with the modification; and
- the implementation of any additional measures arising from the requested studies.

The Department is also satisfied the proposed modification would not increase the hazard and/or risk which has already been assessed for the Chlor-Alkali Plant and can therefore be adequately managed through the existing and recommended conditions.

6.2 Contamination

The proposed modification has the potential to result in the excavation of contaminated material, which could cause soil and groundwater impacts to the surrounding environment.

Due to the historical industrial use of the site, the BIP has an extensive history of soil and groundwater contamination. The land owner has previously undertaken investigations and remediation works across large areas of the BIP and has procedures and monitoring programs in place to manage the known contaminants of concern. The main contaminant of concern within the proposed location of the Repack Facility is mercury.

Block A has been remediated in accordance with the Remediation Action Plan (RAP) prepared by Golder (2012). At the completion of the remediation works, a Site Audit concluded the site was suitable as an open area on an industrial site. A long-term environmental management plan is in place which states that no enclosed buildings can be erected on Block A without a human health and environmental risk assessment.

The proposed repack shed will be built on a suspended slab constructed on piles. Therefore, the excavation works will only involve the disturbance of approximately 30m³ of fill material. This approach will therefore reduce the risks associated with encountering contaminated material underlying the site.

In accordance with the long-term environmental management plan, the Proponent engaged Environmental Risk Sciences Pty Ltd (enRiskS) to review the potential risks associated with the proposed construction of the Repack

Facility. The proposed modification was only evaluated in relation to human health risk issues, as the site had been remediated to a criteria of 200 mg/kg which was well below the adopted protection of the environment risk based criteria of 893 mg/kg. The enRiskS review established that the residual levels of mercury in the soil under the proposed shed structure poses no human health risk issues of concern to intrusive construction workers, to future workers in the buildings and during intrusive maintenance.

Given the minimal soil disturbance during the construction phase, the EPA considers that the proposed modification would pose no human health risk to construction workers and future workers at the Repack Facility. However, the EPA noted that should the proposed modification result in a change of risk in relation to any pre-existing contamination on the site, then the Proponent may be held responsible for any potential human health and/or environmental impacts caused by the contamination under the *Contaminated Land Management Act 1997*. The EPA recommended the CEMP for the modification request:

- addresses the handling, waste classification and offsite disposal of the fill material, and
- includes an Unexpected Finds Protocol which should be acted upon if mercury concentrations in the fill material exceeds 893 mg/kg.

The Department is satisfied the selected construction design will minimise the potential exposure pathways to contamination underlying the site. To ensure the potential risks associated with disturbing the underlying soil are appropriately managed, the Department recommends including a condition requiring the preparation of a CEMP. The CEMP will need to address the appropriate handling, storage, classification and disposal of any excavated soil and an Unexpected Finds Protocol to be acted upon in the event mercury concentrations in the fill material exceeds 893 mg/kg.

Accordingly, the Department’s assessment concludes the impacts associated with soil and groundwater during construction of the Repack Facility are minimal and short-term in nature and can be managed by the recommended conditions.

6.3 Other Issues

The Department’s assessment of other issues is provided in Table 2.

Table 2 | Other assessment issues raised

Issue	Findings	Recommended Condition
Traffic and Transport	<ul style="list-style-type: none"> • It is estimated an average of two additional trucks would enter and exit the site each week during the six-month construction stage of the proposed modification. • The Proponent has committed to implementing several initiatives to mitigate the potential impact of the construction works on the existing road network at Denison Street and Beauchamp Road. A traffic management plan will be incorporated into the CEMP • The Proponent has estimated the Repack Facility, once operational, would eliminate one off-site tanker truck movement for each unit of chemical repacked. At this stage, the Proponent considers it will take years to reach full production, however once fully operational it is anticipated the production will require up to 10 additional rigid truck movements per week • RMS did not raise any concerns about the traffic associated with construction or operation of the proposed modification request 	<p>Require the Proponent to address traffic management during the construction phase in the CEMP.</p> <p>No conditions are required for operation.</p>

	<ul style="list-style-type: none"> • The Department considered Council's comments, and is satisfied the impacts from the additional truck movements on the road network would be negligible • The Department's assessment concludes the potential traffic and access impacts associated with the construction and operation of the proposed modification works would be minimal 	
Noise and vibration	<ul style="list-style-type: none"> • The modification request has the potential to generate additional noise impacts to nearby sensitive receivers resulting from the construction and operation • In the EA, the Proponent considered potential noise impacts could arise from cutting and demolition of existing structures during construction and forklifts reversing during operation • The EA outlined measures that would be implemented to minimise the extent and duration of cutting and demolition and use a forklift with reversing alarm at lower frequency to mitigate the potential adverse noise impacts • No noise-related concerns were raised by Council in its submission • The EPA advised in its submission that the proposed construction hours are consistent with the current EPL conditions • The construction and operation of the facility is unlikely to result in significant noise that would exceed the relevant noise limits detailed in the EPL. The proposed weekly truck increase is unlikely to have significant noise impacts for Denison Street • The Department recommends the CEMP details the noise mitigation measures outlined in the EA • Accordingly, the Department's assessment concludes that the proposed modification would not result any significant noise impacts beyond those which have already been assessed under the existing consent 	Require the Proponent to address noise and vibration management during the construction phase in the CEMP
Air Quality and Odour	<ul style="list-style-type: none"> • The modification request has the potential to generate dust emissions due to earthworks associated with the construction of the new Repack Facility. • The EA considered the air quality impacts would be minimal during the construction phase, however water sprays would be implemented where required to control dust associated with the onsite earthworks • Once operational, the modification request may potentially impact air quality if the filling of hydrochloric acid into the IBCs is not appropriately managed. The Proponent proposes to construct pipelines and a new scrubber to filter hydrochloric acid vapours prior to transfer through a stack • The EPA recommended the Proponent submits an EPL variation application which includes details of the new scrubber and its associated discharge points. Based on the information provided, the 	No additional conditions are required

EPA would assess the need to include the discharge point and any monitoring requirements on the EPL

- The Department is satisfied that air quality impacts associated with the modification request would be minimal and can be managed via the Chlor-Alkali Plant's existing (or modified / varied) EPL. As such, no new conditions are required

Surface and stormwater management

- Surface water runoff and potential soil erosion during construction will be managed through the diversion of natural drainage away from excavation pits, silt barriers, sandbags and temporary drain diversions
- The stormwater system to be installed in the Repack Facility will be fully enclosed, to ensure chemical and stormwater cross contamination cannot occur. Stormwater across the Repack Facility will be managed in accordance with the existing BIP stormwater management protocol
- The EPA recommended the CEMP includes erosion and sediment controls for the management of any stormwater or groundwater that may accumulate in the development footprint
- The Department's assessment concludes stormwater impacts associated with the construction and operation of the proposed modification works would be minimal and can be managed by the recommend condition in the CEMP and the existing application of the Chlor-Alkali Plant operational protocols

Require the Proponent to address surface and stormwater management during the construction phase in the CEMP

Waste Management

- Minor demolition of existing services and infrastructure will be required prior to construction of the Repack Facility
- General demolition construction waste would be stored in skip bins prior to being disposed offsite to a waste facility
- Small amounts of liquid waste and water waste generated during the construction works would be reused onsite where practicable. Alternatively, this waste would be transported to the BIP effluent treatment plant
- During operation, any washdown water would be collected and transported to the BIP effluent treatment plant. Wastewater generated from the acidic scrubbers will be periodically pumped to and treated at the Chlor-Alkali Plant effluent treatment plant
- The Department recommends the Proponent addresses construction waste management in the CEMP
- The Department's assessment concludes that waste associated with the construction and operation of the proposed modification works would be minimal and can be managed the recommend condition in the CEMP and the existing application of the Chlor-Alkali Plant operational protocols

Require the Proponent to address waste management during the construction phase in the CEMP

Footprint of the Repack Facility

- The Department's assessment identified the footprint provided in the Repack Facility Layout

No additional conditions are required

Figure in the RTS differed from the footprint provided in Figures of the EA

- The Department requested the Proponent to confirm the footprint layout prior to approval
- On 9 October 2018, the Proponent advised the Repack Facility will be built as per the footprint and location as identified in the EA (see **Figure 3**)

Administrative amendments

- In reviewing the development consent as part of the modification request, the Department identified the Lot and DP listed may no longer apply to the site
- The Department requested the Proponent to confirm the Lots and DPs the Chlor-Alkali Plant including the Repack Facility occupy within the BIP
- In the RTS, the Proponent advised the Chlor-Alkali Plant operates on Lot 110 in DP 1204999
- The Lot and DP identified by the Proponent differed from that listed on the consent. Accordingly, the Department recommends the Site definition listed under the abbreviations and interpretation section of the consent is updated with the new Lot and DP details
- In addition, a condition is included in the recommended instrument of modification to change "shall" to "must" and minor amendments have been made to the definitions listed under the abbreviations and interpretation section of the consent

Under the abbreviations and interpretation section of the consent, update the Lot and DP definition for the Site



7. Evaluation

The Department has assessed the modification request, EA, RTS and submissions in accordance with the requirements of the EP&A Act.

The assessment found the selected construction design will minimise the potential exposure pathways to contamination underlying the site and that once operational the modification would not increase the cumulative risk of the Chlor-Alkali Plant beyond those originally assessed and approved. The modification will allow the Proponent to repack Class 8 Dangerous Goods produced onsite into smaller volume packages and trucks. By removing the third party responsible for repacking the chemicals, the modification will therefore eliminate the need for bulk distribution of chemicals from the Chlor-Alkali Plant. Further, the Proponent has adequately addressed the concerns raised by Council, the EPA and SafeWork NSW.

Consequently, the Department is satisfied that the modification should be approved, subject to conditions.



8. Recommendation

It is recommended that the Director Industry Assessments, as delegate for the Minister for Planning:

- **considers** the findings and recommendations of this report
- **determine** that the request (DA 35/98 MOD 5) falls within the scope of former section 75W of the EP&A Act
- **determine** that the environmental assessment requirements have been addressed
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application;
- **modify** the consent DA 35/98
- **signs** the attached modification of approval (Appendix A)

Recommended by:



25/10/18

Melissa Prochazka
Senior Planning Officer, Industry Assessments

Recommended by:



25/10/18

Kane Winwood
Team Leader, Industry Assessments



9. Determination

The recommendation is: **Adopted by:**

Chris Ritchie
Director
Industry Assessments

26/10/18.



Appendices

Appendix A – Notice of Modification

Modification of Minister's Approval

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the development consent referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie
Director
Industry Assessments

Sydney 26 OCTOBER

2018

File OBJ16/11729

SCHEDULE 1

Development Consent (DA 35/98), granted by the former Minister for Urban Affairs and Planning on 6 November 1998 for the installation of the replacement Chlor-Alkali Plant to produce 35,000 tonnes per annum gaseous chlorine at Botany Industry Park, Matraville in the Bayside local government area (formerly Botany local government area).

SCHEDULE 2

This consent is modified as follows:

1. In abbreviations and interpretation section, delete the definitions for the Department, the Director-General, the Council, the Applicant and Site and insert the following definitions in alphabetical order:

Applicant	IXOM Operations Pty Ltd, or any other person(s) carrying out any development which this consent applies
Council	Bayside Council
Department	NSW Department of Planning and Environment
Planning Secretary	Planning Secretary (or delegate)
Site	Site of the development, being Lot 110 DP 1204999 (formerly Lot 1, DP 608153)

2. Delete all references to "Director-General" and replace with "Planning Secretary".
3. Delete all references to "shall" and replace with "must".
4. Delete Condition 1 and replace with:
 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;
 - (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; and
 - (h) the conditions of this consent.
5. Delete Condition 1A. and replace with the following:
- 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.
6. Insert new Conditions 1C. to 1E. after Condition 1B.
- 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.
7. Insert new subheadings and Conditions 10A to 10E after Condition 10:

HAZARDS AND RISK - MOD 5

PRE-CONSTRUCTION

- 10A. Prior to completion of detailed design, the applicant must consult with SafeWork NSW on the identification and implementation of the controls to reduce risks so far as is reasonably practicable.
- 10B. The Applicant must prepare the studies set out under (a) and (b) below (the pre-construction studies). Construction, other than of preliminary works that are outside the scope of the hazard studies, must not commence until study recommendations have been considered and, where appropriate, acted upon. The Applicant must submit the studies to the Planning Secretary no later than one month prior to the commencement of construction of MOD 5 (other than preliminary works), or within such further period as the Planning Secretary may agree:
 - (a) CONSTRUCTION SAFETY STUDY
Construction Safety Study for the MOD 5, prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety' guideline. The study must include and not be limited to identifying hazards and safeguards relevant to commissioning of the Repack facility.
 - (b) HAZARD AND OPERABILITY STUDY
A Hazard and Operability Study for the MOD 5, chaired by a qualified person, independent of the modified development, approved by the Planning Secretary prior to the commencement of the study. The study must be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented. The study must be based on the detailed design of the facility and sufficiently cover all MOD 5 processes, including the operation of existing tanks, plant and equipment.

PRE-COMMISSION

- 10C. Prior to operating the new operation under MOD 5, the Applicant must implement the controls required to reduce risk so far as is reasonably practicable.

- 10D. Prior to commissioning, the Applicant must update the Fire Safety Study under Condition 9, and the Emergency Plan and Safety Management System under Condition 10 to include all aspects relevant to MOD 5. Commissioning must not commence until Fire Safety Study recommendations have been considered and, where appropriate, acted upon.
- 10E. The Applicant must comply with all reasonable requirements of the Planning Secretary on the implementation of any measures arising from the studies in respect of Conditions 10B and 10D within such time as the Planning Secretary may agree.
8. Insert new Condition 19C and after Condition 19B.
- 19C. Prior to the commencement of construction of MOD 5, the Applicant must prepare a Construction Environment 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.
9. Insert new Condition 19D after Condition 19C.
- 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.

Appendix B – Environmental Assessment

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8180

Appendix C – Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8180

Appendix D – Submissions Report

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8180