PLANNING PLUS

Proposed Liquid Waste Treatment Plant
SSD 8304
Response to Submissions Report

DGL Group Limited
(Formerly Hydromet Corporation Pty Limited)
201 Five Islands Road Unanderra, New South Wales
Planning Plus (NSW) Pty Ltd
Project 20105– December 2021

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PREPARED FOR

DGL Group Limited
(Formerly Hydromet Corporation Pty Limited)

PREPARED BY

Planning Plus (NSW) Pty Ltd (Planning Plus)

Office: **7 Rosemont Street, West Wollongong NSW 2500**
PO Box 113 Keiraville NSW 2500
Telephone: 0418 616 443
E-mail: info@planningplus.com.au

Planning Plus (NSW) Pty. Ltd. (Incorporated in NSW) ACN 637 852 138

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1.0 INTRODUCTION

1.1 The Proposal

In June 2021 Planning Plus (NSW) Pty Ltd (Planning Plus) submitted a State Significant Development (SSD 8304) Application and accompanying Environment Impact Statement (EIS) through the NSW Major Projects Portal on behalf of the Applicant DGL Group Limited (DGL) for a Liquid Waste Treatment Plant at 201 Five islands Road Unanderra , New South Wales.

The EIS was prepared under Section 4.12(8) of the *Environmental Planning and Assessment Act 1979 (EP&AAct*) and Schedule 2 Clauses 6 & 7 of the *Environmental Planning and Assessment Regulations 2000 (EP&A Regs).* Pursuant to the EP&A Act the Proposal will require development approval from the Minister for Planning.

The proposed Liquid Waste Treatment Plant will process the existing on-site 48,000 tonnes per annum (tpa) of liquid waste streams (consisting of 40,000tpa of waste water and 8,000tpa of battery acid) and will process an additional 8,500 tpa of inorganic liquid waste streams comprising 6,500tpa of Spent Pickle Liqour (SPL) and 2000 tpa of waste caustic, totalling 56,500 tpa at maximum.

The Proposal will take advantage of:

- The existing site infrastructure that is conducive to the establishment of a LWTP.
- The site's proximity to the sources of industrial liquid waste streams at the BlueScope Port Kembla Steelworks and surrounding heavy industries.
- Heavy industrial zoning (IN3) permitting hazardous waste processing activities.
- Its Environmental Protection Licence administered by NSW Environment Protection Authority (EPA) permitting storage, handling and recovery of hazardous and other waste.
- Consent issued by Sydney Water permitting discharge of industrial trade wastewater to sewer.
- The technical capabilities and process knowledge of the management personnel and staff on site.

1.2 The Subject Land

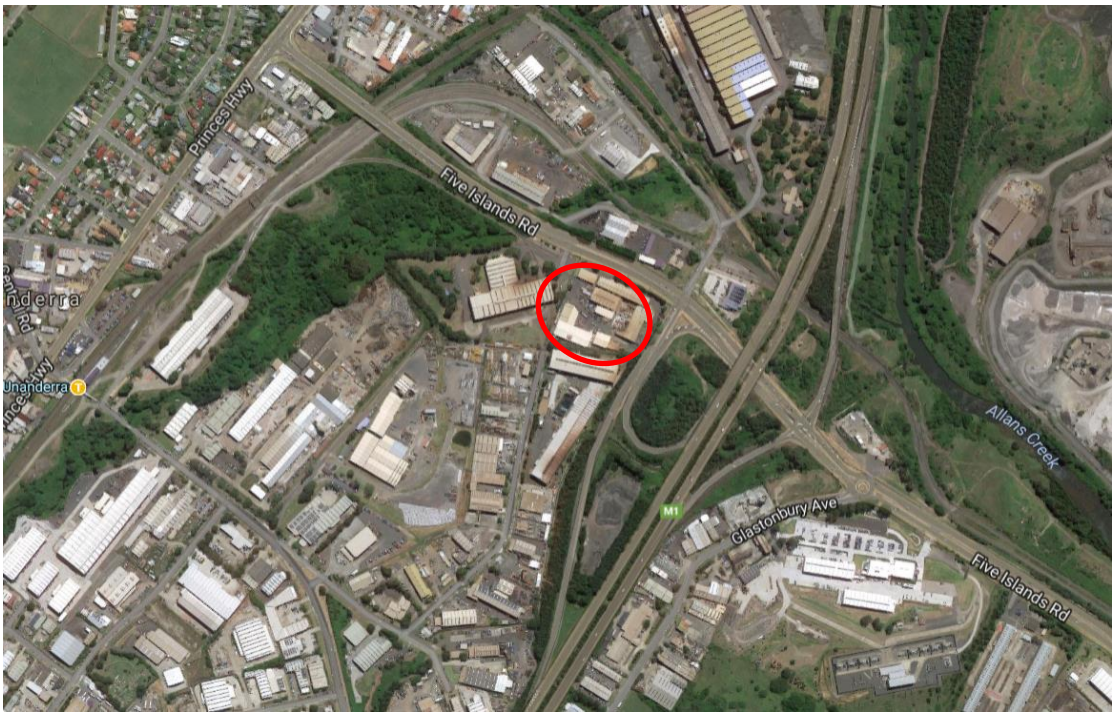
The subject land is located within an industrial precinct at Lot 3 DP 259921, 201 Five Islands Road, Unanderra, New South Wales. The site is located on the corner of Five Islands Road and the M1 Princes Motorway. The site is on the southern side of Five Islands Road, immediately west of the M1 Princes Motorway and the associated Five Islands Road on ramp and off ramp. The site has access off Five Islands Road along its northern boundary.

The site is on the edge of the heavy industrial area of Port Kembla and Unanderra in the Wollongong Local Government Area (LGA) approximately 90km south of Sydney Central Business District (CBD) and 8km from Wollongong CBD.

The site covers an area of approximately 20,000 square metres (sqm) (4 hectares) within a land use zone of IN3 Heavy Industrial under Wollongong Local Environment Plan (WLEP) 2009. The facility adjoins land zoned SP2 Infrastructure.

Figure 1.0 shows the location of the subject land circled in red.

Figure 1.0: Location of Subject Land



Source: Google Maps ***Planning Plus (NSW) Pty Ltd***

2.0 EXHIBITION OF PROPOSAL

2.1 Public Exhibition and Referrals

The State Significant Development Application (including the detailed EIS and all Appendices) for the Proposal was placed on public exhibition for a period of 30 days to 3 August 2021.

A total of seven (7) submissions were received from government departments and agencies in response to the public exhibition and agency referral process.

One (1) letter of objection was received in response to the public exhibition of the Proposal.

This Report constitutes a Response to the Submissions made to the Proposal .

2.2 Respondents

Submissions were received by the following government departments and agencies:

- Department of Planning, Industry & Environment (DPIE)
- NSW Environment Protection Authority (EPA)
- Wollongong City Council (WCC)
- Transport for NSW (TfNSW)
- Fire and Rescue NSW (F&R)
- Sydney Water
- Water & Natural Resources Access Regulator (NRAR)

Each submission was reviewed and the issues raised addressed in detail. The full response to the submissions are detailed in Table 1.0 and the Attachments to this Report.

Table 1.0: Response to Submissions Table

RESPONSE TO SUBMISSIONS SSD-8304 : Unanderra Liquid Waste Treatment Plant	RESPONSE
Dept Planning, Industry & Environment	
• Confirm whether existing concrete floor in Building E will be demolished and whether excavation works referred to in the EIS are required.	Only sections of the concrete floor in Building E will be demolished where channel drains and foundations for process plant are required to be installed. Following demolition of these sections, excavations works will be undertaken in these locations in accordance with the protocols set out in the Phase 2 Contamination Report. Finally, a 200-300 mm thick concrete layer will be laid over the entire floor area for strength and additional capping.
• Show the loading/unloading zone located in front of the Site Office on Figure 2.4 or Site Plan and provide details of how vehicles will safely travel through this area if trucks are loading / unloading	Heavy vehicle loading/unloading zone is shown in the updated Site Plan in Attachment A. A 3m exclusion zone has been painted within the loading/unloading zone. Other trucks have sufficient clearance to avoid the exclusion zone and mobile equipment unloading within this zone. A Safe Work Procedure has been developed and implemented for workers responsible for safe loading/unloading of vehicles. Refer Attachment B. The Site Plan in Attachment A has been updated to show the arrangement for the 2 unloading areas for the liquid waste tankers and the IBC's.
• Provide additional details of how wastewater and battery acid from the battery recycling plant is transferred to Store B and whether any changes are proposed.	Battery acid and wastewater from the Battery Recycling Plant is collected in storage tanks within the Battery Recycling Plant. The storage tanks have been fitted with float levels that automatically activate when the tank level reaches a set height and starts a transfer pump. The respective fluid is pumped via a network of overhead plastic pipes that have been installed on a pipe rack which runs through Building G, Store E, via an inground channel between Store E and Building B and into Store B. No changes are proposed to the transfer network.
• Provide details of the current tank farm and whether it would relate to the proposed Liquid Waste Treatment Plant (LWTP).	The current tank farm has been in operation for over 60 years and contains many legacy process vessels that are redundant. As DGL plan to decommission the tank farm and demolish these assets, there is no relation to

	the proposed Liquid Waste Treatment Plant. The decommissioning and demolition of the old tank farm will be undertaken via a Pollution Reduction Program (PRP) with the NSW EPA as part of the EPL review. The new Liquid Waste Treatment Plant will be supplied with liquid waste from the new tank farm located in Store B.
• Describe or show where the packaged waste received would be stored in Store B including an updated Figure 4.1 for the layout of the liquid waste storage.	With reference to Figure 4.1, packaged waste is to be stored in the depot designated 'IBC Storage Area' on the south-western corner of the facility.
• Explain how packaged waste would be transferred from the designated storage area in Store B to the tanks.	DGL will only accept packaged waste stored in Intermediate Bulk Containers (IBCs). All other types of storage receptacles are not accepted. IBCs are transferred by forklift into the Liquid Waste Treatment Plant where a designated bunded area has been assigned for temporary IBC storage. With reference to the LWTP layout presented in Appendix K of the EIS, the proposed location is in front of TK102. The IBC bund is installed with a chemical dosing pump and a chemical hose. The operator attaches the chemical hose to the IBC and opens the valve and starts the pump to transfer the contents of the IBC. The operator then rinses out the IBC before decoupling the chemical hose and returning the empty IBC into Store F.
• Provide further details on what is currently stored in Store F under existing operations.	Store F is currently used to store DG Class 8 packaged chemicals (namely hydrochloric acid) and spent battery acid. As stated in the PHA Report and the Fire and Incident Management Report Store F is currently utilised for the storage of spent battery acid in packages. Store F is completely bunded and suitably fitted with splash guards in compliance with the requirements of *AS 1940-2017.*
• Include reference to landscaping (Section 4.11) and new rainwater tanks (Section 4.12.1) in the description of development in Section 4.2 and other relevant sections as these form part of the DA.	Noted. Amended Description of Development is : The Construction of a Liquid Waste Treatment Plant in Building E at DGL Environmental Unanderra with a capacity to process 56,500 tpa of liquid waste incorporating the following elements: • Construction of new concrete floor. • Construction of new concrete block perimeter bunding.

	• New sumps and drains, • New concrete ramps. • New electrical services. • Installation of Liquid Waste Treatment Plant. • Associated Site Landscaping. • New rainwater tanks.
• Confirm plantings are within the boundaries of the site (as show in Appendix M – Landscape Plan).	All proposed plantings to enhance the site are totally within the property boundaries of Lot 3 DP 259921.
• Confirm whether demolition of the tank farm is proposed or confirm if any demolition is required to install new rainwater tanks.	Demolition of the old tank farm is proposed to be carried out under a Pollution Reduction Program (PRP) with approval of the NSW EPA. Installation of new rainwater tanks will require demolition of a 100 square meter section of the tank farm along the north eastern corner of the old tank farm.
• Confirm the proposal does not include the decommissioning and removal of the existing Wastewater Treatment Plant (WTP) and explain how approval for the decommissioning and removal of the WTP would be obtained. The Department notes the application does not seek development consent for concurrent operation of both facilities.	DGL is seeking development approval to construct a Liquid Waste Treatment Plant. The decommissioning and demolition of the legacy tank farm does not form part of the application. As mentioned in the previous point above, DGL propose to negotiate a Pollution Reduction Program (PRP) with NSW EPA for the demolition of the old WTP as part of its ongoing commitment for continued improvement and environmental upgrades on the site.
Waste Management • Section 4.4.1 states the LWTP will process aqueous waste, specifically limited to SPL and waste caustic. Confirm the LWTP will also process existing wastewater.	Wastewater and battery acid currently generated from the Battery Recycling Plant will be processed along with SPL and waste caustic sourced from third parties in the LWTP. As stated in Section 4.1 and throughout the EIS document the LWTP will process 6,500 tonnes per annum of SPL, 2,000 tonnes per annum of waste caustic, totalling 8,500 tonnes per annum of new liquid wastes from external sources, plus the existing 48,000 tonnes per annum of wastewater and battery acid from the existing Battery Recycling Plant on site. Thus, the design capacity of the proposed LWTP is 56,500 tonnes per annum of liquid waste input.

• Provide details of the current waste management procedures e.g. a copy of the existing Waste Management Plan.	All solid and liquid waste generated on site and/or disposed in landfill or discharged to sewer follow a rigorous QC regime. The site chemist collects samples of the respective waste streams at periodic intervals. For example: gypsum is sampled and tested 3 times per day both internally and sent to a accredited lab for testing. Trade waste is sampled and tested weekly. As per the Sydney Water Trade Waste Discharge Consent, a sample is collected and sent for external testing every 60 days. All analytical records are tabulated into a QC database which automatically checks for waste conformance. Additionally, DGL have prepared a Waste Classification Report to classify the gypsum waste according to the NSW EPA waste classification guidelines (*Waste Classification Guidelines Part 1: Classifying Waste, NSW EPA 2014*). Report attached in Attachment C. DGl currently does not have one comprehensive Waste Management Plan. However, the Statement of Commitments in Chapter 12 of the EIS contains a commitment to develop a Waste Management Plan for the DGL operations at Unanderra.
• Provide the waste products / outputs for the proposed new LWTP (Table 3.2 sets out the existing operations only).	The following Tables from the EIS document provide the waste product inputs and outputs for the new LWTP: **Table 4.6: Input Waste Types & Quantities into LWTP** **Waste Type** / **Annual Quantity (tonnes)** / **Weekly Quantity (tonnes)** / **Daily Quantity (tonnes)** Wastewater ex BRP: 40,000 / 833 / 167 Battery acid ex BRP: 8,000 / 167 / 33 SPL: 6,500 / 135 / 27 Waste caustic: 2,000 / 42 / 8 **Total: 56,500 / 1,177 / 235** ***Source: DGL Group Limited***

Table 4.7: Waste Streams Generated from the LWTP

Waste Type	Description	Waste Classification	Annual Quantity (1)	Management Fate
Solid Waste	A friable cake with a moisture content between 10% -12% composed of a mixture of iron hydroxide and calcium sulphate.	GSW [2]	5,000	EPA licensed landfill facility.
Trade Wastewater	A saline liquid made of calcium chloride.	n/a	180,000(3)	Sewer discharge
Chemical containers & packaging	Washed IBCs and drums that may be contaminated with original chemical residues.	GSW / RSW (2)	<1	Collection by EPA licenced transporter to EPA licenced drum recycling facility.

(1)All figures reported in tonnes per annum.
(2) GSW: General Solid Waste; [2] RSW: Restricted Solid Waste
(3)180,00tpa = 750kl/day x 240 days a year
Source: DGL Group Limited

• Confirm the capacity of the average truck and the largest truck. Provide details of the time taken to unload the liquid waste from those vehicles into tanks or designated storage locations.	Capacity of a typical liquid waste tanker is 21 tonnes. The capacity of the largest tanker is 28 tonnes. The existing tanker pump out manifold located in the dedicated tanker unloading bay within Store B is rated to 30 cubic meters per hour. Therefore, it is anticipated that a tanker carrying a 21 tonne load will be pumped out in under 45 minutes. For a 28 tonne load, it would take approximately 1 hour to empty the tanker.
• Provide details on the time taken to process the liquid waste e.g. average time taken for each step of the proposed process.	A typical batch size is 65kL and can be processed in under 4 hours. With reference to Section 4.4 of the EIS which details the process steps. The average time taken to complete each of the process steps is listed below:. • Batching 2 hours • Treatment 1 hour • Filtration 0.5 hours

	With respect to pH adjustment and drying, these steps operate as a continuous process. It is only batching, treatment and filtration that is performed on a batch operation.
Air Quality • Include relevant information to identify receivers e.g. addresses.	Noted. Addressed in Response to Submissions Report – Table 1 by Todoroski Air Sciences in Attachment D.
• Confirm the air quality impact assessment (AQIA) includes the proposed scrubber for Building E and provide details of this scrubber.	Noted. Addressed in Response to Submissions Report – Table 2 by Todoroski Air Sciences in Attachment D.
• Confirm the dispersion modelling predictions for the other pollutants in Table 7-3 of the AQIA includes an assessment of cumulative impacts by combining the estimated background concentrations.	Noted. Addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.
• Address EPA comments on air quality including additional information on air emissions inventory, control efficiency for the cyclone and inconsistencies with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*.	Noted. Addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.
• GHG assessment refers to the proposal as a modification – clarify the terminology used in the assessment. Confirm the GHG assessment is for the proposed operation.	Noted. Addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.
Noise • Include relevant information to identify receivers e.g. addresses.	Noted. Addressed in Response to Submissions Report – Table 3 by Todoroski Air Sciences in Attachment D.
• It is noted that Table 6-2 shows that while predicted noise impacts would be below the criteria these are above the current noise limits included the EPL for the site. Please confirm whether a variation to the EPL would be sought.	Noted. Addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D. It is expected a variation to the current EPL would be sought as part of this Proposal.

• The table of sensitive receivers does not appear to include the Aquatic Centre. Please confirm if this receiver has been assessed. Noting that the current EPL includes a noise limit of 45dBA at the Aquatic Centre.	Noted. Addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D. The Aquatic Centre at 1 Marley Place is identified as Receiver Ind-4 in the Noise Impact Assessment.
Soil and Water • Update the flood assessment to address Council comments. Including amending flood controls based on the most up-to-date flood level information, being Council's adopted Allans Creek Flood Study dated 2019, and the relevant controls in Appendix C of Chapter E13 Floodplain Management of the Wollongong Development Control Plan (DCP) 2009.	The Flood Risk Management Report has been updated in consultation with Wollongong City Council and the requirements of the latest Allans Creek Flood Study dated 2019. Council Engineers have viewed the updated Report and informally endorsed it but await formal referral from DPIE to give formal comments and draft conditions of consent. The updated Report is located in Attachment F.
• Address Sydney Water's comments on servicing requirements for this development.	The Proponent has engaged Cardno (NSW/ACT) Pty Ltd as its Water Servicing Coordinator for the Project to satisfy all of Sydney Water's requirements. See letter of engagement from Cardno in Attachment G.
Contamination • Consider demolition/excavation works for the concrete floor in Building E and potential impacts on groundwater contamination including exposure pathways.	As explained in the first point in this table only sections of the concrete floor in Building E will be demolished where channel drains and foundations for process plant are required to be installed. Following demolition of these sections, excavations works will be undertaken in these locations in accordance with the protocols set out in the Phase 2 Contamination Report to ensure no groundwater contamination occurs and there are no exposure pathways to contractors or the environment. An appropriate Waste Management Plan will be implemented for any spoil recovered from the excavation. Additionally a specialist consultant will be engaged to test and classify any soils recovered from the works and soils and materials will be disposed of to an appropriate facility in accordance with the classifications and protocols.

• It is noted the site has been notified to the EPA as being potentially contaminated. Please confirm if the site is being regulated under the *Contaminated Land Management Act 1997.*	DGL is waiting for further directions from NSW EPA with respect to site being regulated under the *Contaminated Land Management Act 1997.*
Hazards • It is noted two scenarios are identified in Table 14 of the PHA which may cause significant impacts. Full detailed calculations are requested for the following scenarios: * Scenario #2a – Cl_2 Release due to incorrect road tanker transfer; and * Scenario #2c – SO_2 Release due to incorrect road tanker transfer.	A meeting was held between the DPIE's Hazard Section and the Proponents Hazard Consultant on Monday 30 August 2021 to discuss this matter. Ongoing consultation and correspondence occurred between Colin Barker from Advitech and Nicholas Hon from DPIE regarding the matter. An addendum to the original PHA Report has been prepared to address these matters and is located in Attachment H.
Traffic • TIA includes 43 light vehicle movements (additional 6 which corresponds to the additional employees). Explain the difference between light vehicles entering and exiting the site each day and the employment numbers.	While there is a maximum of 29 staff on-site at any given time, over a 24hr period there are 43 staff each generating one (1) IN trip and one (1) OUT trip.
• The EIS notes that trucks can arrive over a 14-hour period. Confirm the peak operational hours for trucks entering and exiting the site or how trucks are managed to ensure there would not be any queuing off-site.	The Unanderra site does not operate with peak operating hours as such where trucks queue up to enter the site. Trucks are spread over a 14 hour period from 6am to 8pm as stated in Section 3.8 of the EIS. The site can accommodate up to 5 semi-trailers (1 being unloaded and 4 waiting in queue) at any time. However, it is rare to see this occurring as DGL have an online truck scheduling system where carriers can schedule a 2 hour time slot in advance. This eliminates any yard congestion or queuing on Five Islands Road.
Environment Protection Authority	
Air Quality **Additional Information Required Regarding the Emissions Inventory.** An annual quantity of 6,500tpa of Spent Pickle Liquor (SPL) and 2,000tpa of waste caustic is proposed to be received and treated through the LWTP. The SPL	The comments from the NSW EPA focus on Air Quality and have been addressed by additional work undertaken by Todoroski Air Sciences in the form of a Response to Submissions Report in Attachment D .

and caustic will be sourced from the aluminium extrusion and galvanizing industries. It is noted in Section 4.4.5 of the EIS (DOC21/563579-1) that '*SPL and waste caustic do not have any contaminants of concern, such as heavy metals'*. However, no data was provided to support this. In Section 4.4.3 of the EIS, it is stated that: '*the solidified material from the neutralisation process is composed of a mixture of iron hydroxide (Fe(OH)2) and calcium sulphate (CaSO4), commonly referred to as gypsum. The liquid component is a concentrated salt solution of calcium chloride'.* No data has been provided to support this and there is no discussion regarding the possibility that the solidified material contains any other hazardous materials or pollutants of concern. The waste liquid being treated through the LWTP is sourced from metal processing and related industries, including the Battery Recycling Plant (BRP). It is therefore feasible that dissolved metals, including hazardous (Type 1 and Type 2) metals may be present in both solid and liquid (dissolved in solution) form in the waste liquid. As such, there is a risk these pollutants may be released to air via the kiln dryer. However, the potential for hazardous metals has not been assessed. The AQIA has included an assessment of Mercury emissions from the premises, by assuming that emissions are 10% of the Protection of the Environment Operations (POEO) (Clean Air) Regulation emission limits. However, there is no justification for the assumed emission concentration. Further, there is no discussion as to why Mercury has been considered, and other hazardous metals have not been. EPA considers more detailed characterisation of the potential air emissions from the kiln dryer is required. Adequate justification must be provided to support the pollutants assessed and the adopted emission rates. **EPA recommends the AQIA be revised to include characterisation of air emissions from the kiln dryer. Characterisation of the solid and liquid components of the pressed slurry material being processed through the**	That Report has been informed by the following: *An Emissions Equipment Criteria Report on the LWTP for DGL Group by Advitech – Attachment E. *Additional information provided by DGL in terms of NO2, H2SO4 etc, *Review of the Human Health Risk Assessment Report. Noted and addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.

rotary kiln dryer is required to support the adopted emissions inventory used in the assessment. **Adopted Control Efficiency for the Cyclone is Unjustified** In Section 6.2.3.2 of the AQIA it is stated that the cyclone, which will be used to control emissions from the kiln dryer, is assumed to meet at least 90% control efficiency of the POEO (Clean Air) Regulation limits for assessed pollutants. Cyclones are predominantly used to control dust emissions. Whilst EPA recognises a 90% efficiency may be achievable for particles (noting overall efficiency will be determined based on the particle characteristics and flow rates), it is unlikely that a cyclone would achieve such high removal efficiencies for gaseous pollutants and aerosols, such as NO2, H2SO4, Pb, Hg and HCl. The proponent should provide further justification regarding the adopted control efficiency and associated emission rates for these pollutants. Whilst EPA may consider it reasonable for the project to assess emissions at the regulatory worst case (at the Clean Air Regulation limits), it is noted that a further 90% reduction in these emissions is proposed, which no longer represents regulatory worst case. Typically, it is recommended that sources are modelled at licence limits, or at concentrations that could be adopted as licence limits. EPA seeks confirmation that the pollutant concentrations assessed are at the proposed licence limits. **EPA recommends further justification for all pollutant emission concentrations adopted in the assessment be provided in a revised assessment. It should be confirmed that the assessed emission rates are achievable and can be applied as emission limits in the site's environment protection licence.** **Potential for Impacts Have Not Been Adequately Assessed** Table 7-3 presents the predicted dispersion modelling results at assessed residential receptor locations. The modelling predicts minor incremental impacts	Noted and addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.

at these locations. However, impacts at the swim-school (McKeon's Swim Centre), located <200m from the site, on the adjacent corner lot (Corner of Marley Place and Five Island Rd Unanderra), were not explicitly provided. Due to the nature of the activities undertaken and materials handled at the DGL premises, EPA considers the swim-school should be recognised as a community sensitive receptor and tabulated impacts at this receptor be provided. Furthermore, it is noted that Table 7-3 and associated Figure 7-9, lists the impact assessment criterion for lead as 0.5 µg/m3 at 1-hour average, rather than annual. Whilst it is likely a typographical error, and it is recognised that a 1-hour criterion presents a more conservative approach, for complete transparency it should be corrected in the revised assessment. **EPA recommends the AQIA be revised to;** **1) Consider potential for ground level impacts at the swim-school (McKeon's Swim Centre) located on the corner of Marley Place and Five Island Rd, Unanderra.** **2) Address identified inconsistencies between the AQIA and Approved Methods for the Modelling and Assessment of Air Pollutants in NSW in regards to correct averaging periods for assessing impacts of lead emissions.**	Noted and addressed in Response to Submissions Report by Todoroski Air Sciences in Attachment D.
Wollongong City Council	
Planning • The site is zoned IN3 – Heavy Industrial pursuant to Wollongong Local Environmental Plan (WLEP) 2009. The proposed liquid waste treatment plant is considered permissible in the zone.	Noted and described in Section 7.2.2.1 of the EIS document.
• There is no maximum building height or floor space ratio for the subject allotment pursuant to WLEP 2009. It is noted that the proposal comprises of the installation of equipment and an internal fit out for the purposes of liquid waste treatment within the existing Building E. Whilst it is appears that no external or structural works are proposed to the existing building, any building works if proposed are to comply with the Building Code of Australia/NCC.	Noted. All building works will comply with the Building Code of Australia.

Development Engineering

- Council's records indicate the site is flood affected and coded as 'Flood Risk Precinct Classification under Review'. Information on flooding at the site can be found in Council's adopted Allans Creek Flood Study dated 2019. Council's adopted flood model files can also be downloaded from the NSW State Emergency Service (SES) Flood Data Portal.

- The flood assessment report by SitePlus (Rev No. 2 dated May 2021) uses information from a superseded flood study (being the Allans Creek Flood Study conducted in September 2006 by Lawson & Treloar) to address flood controls for the development. This has resulted in an underestimation of flood levels and flood affectation on the site. The flood assessment report and development proposal needs to be amended to address flood controls using the most up-to-date flood level information, being Council's adopted Allans Creek Flood Study dated 2019.

- Council's adopted Allans Creek Flood Study dated 2019 indicates a significant flood flow path through the site flowing adjacent to and around the existing building within which a liquid waste treatment plant is proposed (i.e., 'Building E'), with predicted flood levels and corresponding above floor flood depths in existing Building E being as per the table below.

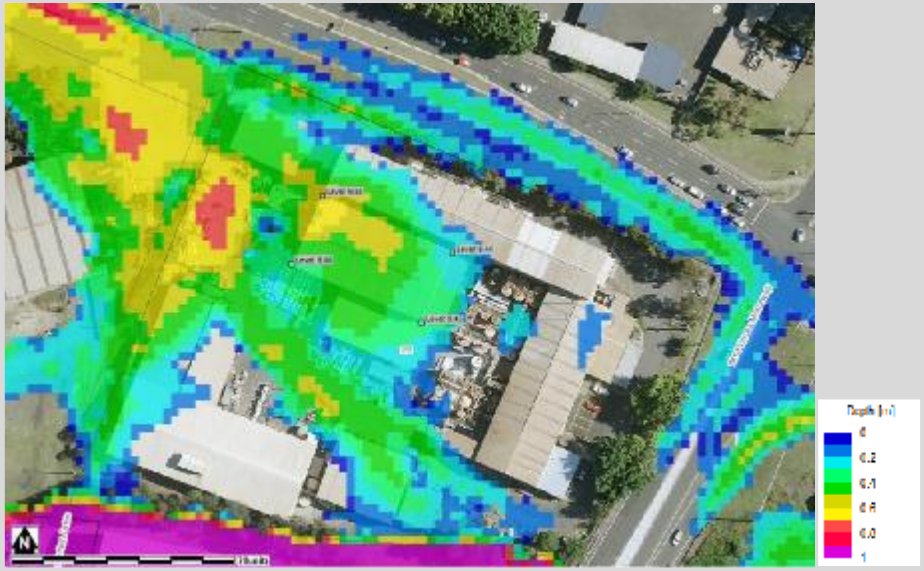
	10 % AEP (10 year ARI)	1 % AEP (100 year ARI)	PMF (Probable Maximum Flood)
Flood Level (m AHD)*	9.53	9.84	10.43
Above Floor Flood Depth (m)**	0.35	0.66	1.25

*The maximum flood level at Building E – predicted by Council's adopted Allans Creek Flood Study dated 2019.
**Above floor flood depth determined using the surveyed finished floor level for Building E (RL 9.18 m AHD) shown on the site survey plans appended to submitted flood risk assessment report by SitePlus.

All development engineering and flood comments have been addressed in consultation with Council's Senior Stormwater Development Engineer Matthew Carden.

A revised Flood Risk Management Report was prepared and sent to Council for comment on 19 August 2021. Council responded that the report resolved Council's flooding related concerns. Council would provide flooding related conditions once the application and amended Flood Risk Management Report was formally re-referred to Council by DPIE.

A copy of the revised Flood Risk Management Report is located in Attachment F.

1 % AEP Flood Depths and Spot Flood Levels (m AHD) *NOTE: Image is in colour*  • Council's adopted Allans Creek Flood Study dated 2019 also maps the location of Building E as a mix of hydraulic hazard category '*H2 – Unsafe for small vehicles*' and '*H3 – Unsafe for all vehicles, children & elderly*'. • Due to the predicted flood levels, depths, and hazard through the site and within Building E (as above), the development proposal presents significant flood risks, due to potential damage to plant/equipment, machinery, etc., and pollution of the surrounding land in the event of floodwater combining with liquid waste.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.

• Due to the flood depths and hazard on the site, the area inside the existing building is categorised as Medium Flood Risk Precinct, in accordance with the definitions in Section 6.3 of Chapter E13 of the Wollongong DCP 2009. The development is categorised as 'Industrial and Commercial' development according to Appendix A – Land Use Categories in Chapter E13 of the Wollongong DCP 2009.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.
• The following controls apply to Industrial development within the Medium Flood Risk Precinct (refer Schedule 4: Prescriptive Controls – Allans Creek Floodplain, in Appendix C of Chapter E13 of the Wollongong DCP 2009): – For industrial land use only – All Floor Levels to be equal to or greater than the 1% AEP flood, being equal to or greater than RL 9.84 m AHD in this instance, unless justified by site specific assessment. – Habitable floor levels to be equal to or greater than the 1% AEP flood level plus 0.5m (freeboard), being a level of RL 10.34 m AHD. In applying this control, a habitable floor area means:	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.
In an **industrial or commercial situation:** *an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.* – All structures to have flood compatible building components below or at the 1% AEP flood level plus 0.5m (freeboard), being a level of RL 10.34 m AHD.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.
– Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyancy up to and including a 1% AEP flood plus freeboard (being RL 10.34 m AHD), or a PMF plus freeboard (being RL 10.93 m AHD) if required to satisfy evacuation criteria (*see below*). -Engineers report required to certify that the development will not increase flood affectation elsewhere, includes medium and high density residential proposals. – Reliable access or refuge required during a 1% AEP flood.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.

– The development is to be consistent with any relevant flood evacuation strategy or similar plan. – Site Emergency Response Flood plan required (except for single dwelling-houses) where floor levels are below the PMF. – Applicant to demonstrate that area is available to store goods above the 1% AEP flood level plus 0.5m (freeboard), being a level of RL 10.34 m AHD. – No external storage of materials below the *flood planning level* (being a level of RL 10.34 m AHD) which may cause pollution or be potentially hazardous during any flood.	
• In addition to the above and given the nature of the development and risk of environmental pollution in the event of a flood, it is also recommended that measures be integrated into the design of the development to ensure that liquid waste cannot physically come into contact with floodwaters in the event of a flood.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.
• Due to the flash flooding nature of the catchment, measures that rely on manual activation and/or human intervention are unlikely to be effective. The proposed method of physically segregating liquid waste from floodwaters should be failsafe and inherently integrated into the design and operation of the facility, e.g., permanent bunding with a suitable freeboard provided between the maximum flood levels and top of bund level or elevating all liquid waste treatment/storage/processing areas above the maximum flood levels such that there is no possibility of the liquid waste coming into contact with floodwater.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.
• In relation to the above, where it is found to be unfeasible or impractical to provide a suitable and failsafe method of physically separating liquid waste from floodwater flows, then the proposal is unlikely to be a suitable use for the site.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.

Traffic	
It is noted that the site is accessed via the State Road network which is under the jurisdiction of TfNSW. Comments would need to be sought from TfNSW regarding the network and intersection impacts.	The Project has been referred to Transport for NSW and it has approved the Project and provided DPIE with conditions of consent .
From review of the DA, it can be seen that background traffic growth has been established from previous traffic counts using pre-COVID data to estimate current and future (10 year) traffic growth assumptions. This method is accepted due to the current downturn in traffic from COVID restrictions/lockdowns etc.	Noted.
The relevant intersections were assessed. The level of service at these intersections was found to exceed the operating capacity with background traffic alone.	
However, the additional development traffic (5 additional heavy vehicles per day, and 6 additional peak hour staff movements) were shown to have a minimal effect on the future operation of these intersections.	Noted and addressed in the EIS and Traffic Impact Assessment.
Swept paths demonstrate that the design vehicle is able to enter and exit the site in a forward direction.	Noted.
The proposed expansion of the internal car parking area appears to be generally acceptable. During construction the layout would need to comply with AS 2890.1:	Noted.
· The parking dimensions, internal circulation, aisle widths, kerb splay corner clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS 2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.	Noted.
· Each disabled person's parking space must comply with the current relevant Australian Standard AS 2890.6 – Off-street parking for people with disabilities. This requirement shall be reflected on the Construction Certificate plans.	Noted.

· Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS 2890.1 to provide for adequate sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.	Noted.
· Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development.	Noted.
· The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the roads act. It is advised that all applications are submitted, and fees paid, five (5) days prior to the works within the road reserve are intended to commence. The Applicant is responsible for the restoration of all Council assets within the road reserve which are impacted by the works/occupation. Restoration must be in accordance with the following requirements:	Noted.
a. All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's Road reserve".	Noted.
b. Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.	Noted.
Environment <u>Stage 1 and Stage 2 Site Investigation</u> Stage 2 Detailed Site Investigation resulted from the Stage 1 Preliminary Site Investigation recommending a targeted soil and groundwater sampling program and Environmental Management Plan (EMP). Council agrees with Dr James Fox (Principal Geochemist) Land & Water Consulting review and assessment of the Stage 2 Detailed Site Investigation	Noted.

BDAR Waiver There are no issues with the BDAR waiver as the site is entirely hardstand or existing buildings.	Noted.
Noise Impact Assessment The Noise Impact Assessment and Modelling assumed a potential worst-case scenario with predicted results being within applicable criteria. Council agrees that proposed project can operate within acceptable noise criteria at the designated sensitive receivers.	Noted.
Air Quality and Greenhouse Gas Assessment *Air Quality:* CALPUFF predictive air dispersion modelling was used to assess the potential for off-site air pollutant impacts. The consultant has stated… *"It is predicted that the Project would have a negligible incremental and cumulative impacts at the surrounding residential receptor locations and would* comply *with the relevant air quality criteria.* *Nevertheless, the site would apply appropriate air quality mitigation and management measures to ensure it minimizes the potential occurrence of excessive air emissions from the site."*	Noted.
Greenhouse Gas Assessment: The consultant predicts annual contribution annual greenhouse emissions to be 0.0007percent of the estimated greenhouse gas emissions for Australia during 2016 which was 533.0Mt CO2-e (Department of the Environment and Energy, 2019). Council is of the opinion with continued vigilance and improvement that this contribution is negligible.	Noted.
Council agrees that proposed project can operate without causing significant air quality impact at residential receptors in the surrounding environment.	Noted.
Water and Land Pollution Incident - Flash Flooding Council's Senior Stormwater Development Engineer's assessment using the Allans Creek flood model (2019) predicts that flooding in the 10yr ARI, 100yrARI and PMF would cause inundation of building to an above floor depth of 0.35m (10yr), 0.66m (100yr) and 1.25m (PMF). Additionally, due the nature of the catchment flooding could be categorised as flashy which will limit response time to a flooding event.	Noted. Addressed in the revised Flood Risk Management Report in Attachment F.

It would be essential for the applicant to meet the responsibilities of the POEO ACT (as a minimum the definition of water pollution) that the applicant provide assessments, documentation, design specifications of plant/equipment and management plans addressing the very real likelihood for the proposed project to be flooded during these events. Council would need to be assured that potential pollution incidents related to flooding events can be mitigated and/or contained on site.	Noted. DGL has developed a First Flush System (FFS) on the site to improve the management of stormwater and reduce environmental impacts. The majority of surface water runoff/stormwater falling on the buildings, open areas and internal road and carpark areas flows across the site from north west to south east and is directed to the FFS in the south east corner of the site. All surface water collected in the FFS is used for site activities, eg: dust suppression, wheel wash and processes on site . The excess is pumped into the WTP for further treatment and discharge to sewer. Additionally, to improve environmental outcomes, the existing sump pit and tank for the FFS will be modified by adding a splitter pit to separate the first 10mm of the site's runoff. The first 10mm is considered potentially contaminated and treated as wastewater and separated from the runoff and pumped into the FFS storage tank then sent to the wastewater tank in the LWTP tank farm. Water after the first 10mm , would be considered "clean" and could then be discharged from site, if necessary, into the existing stormwater network. A bund will be constructed around the splitter pit to ensure that no contaminated water bypasses the splitter pit, including in the event of a power outage where the pump does not function. This will provide an improved method of discharging the sites surface water after the first 10mm when necessary. Details of the FFS procedure is located in Appendix C of the Water Balance Study in Appendix T of the EIS.
Transport for NSW	
Transport for NSW (TfNSW) refers to the notification it received dated 7 July 2021 regarding the above State Significant Development (SSD) application. TfNSW has completed an assessment of the information provided and notes: - The key state classified road is Five Islands Road to which the development has direct access via Lot 2 DP 807642. - The SSD is seeking approval for a liquid waste treatment plant with a capacity of 56,500 tonnes per annum of liquid waste input. This comprising 8,500 tonnes per annum of liquid waste from external sources and 48,000 tonnes per annum	Noted. TfNSW has assessed and approved the Project. TfNSW has provided recommended conditions of consent for the Project to DPIE.

of liquid waste from within the site (from the existing battery recycling plant on the same lot). - The submitted Traffic Impact Study (prepared by Bitzios Consulting with reference P3793.006R dated 2 June 2021) details that all heavy vehicle access will be via the Princes Motorway with the use generating 5 truck arrivals per day. This equating to a total heavy vehicle movement for Lot 3 DP 259921 of 17 arrivals per day (i.e. existing approved heavy vehicle movements for Lot 3 + this SSD application). Having regard to the above, TfNSW does not object to the SSD application, in principle. TfNSW does however request the consent authority consider the points/suggested conditions outlined below: *Heavy/Service Vehicles* Heavy/service vehicles that are associated with the approved use shall: *a) Only use the heavy vehicle routes as detailed in Section 5.4 of the submitted Traffic Impact Study prepared by Bitzios Consulting with reference P3793.006R dated 2 June 2021;* *b) Comply with the development traffic volumes as detailed in Section 5.5 of the submitted Traffic Impact Study prepared by Bitzios Consulting with reference P3793.006R dated 2 June 2021; and* *c) Ensure no vehicles over 20m are to exit the site onto Five Islands Road as per the TfNSW Enforceable Network Maps.*	Noted.
Fire & Rescue NSW	
1. To ensure that the fire prevention, detection, protection and fire fighting measures are appropriate to the specific fire hazards and adequate to meet the extent of potential fires, a comprehensive Fire Safety Study (FSS) is recommended to be undertaken.	DPIE has advised that the requirement for a comprehensive Fire Safety Study (FSS) would be a condition of consent and does not have to occur prior to the approval of the proposed LWTP.

2. That the FSS is developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper No.2 (HIPAP No.2).	Noted.
3 That the FSS is required to be developed in consultation with FRNSW. Approval of the FSS by both FRNSW and NSW Department of Planning , Industry and Environment should be a condition of consent.	Noted.
4. That the development of the FSS considers the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence.	Noted.
5. FRNSW preference is to review the Preliminary Hazards Analysis (PHA) report as this will determine the approach and design of the recommended fire safety study.	Noted. DPIE have advised that the PHA has been referred to Fire & Rescue NSW for information and comment.
Sydney Water	
Servicing •The site has existing potable water and wastewater connections, and is subject to an existing trade waste agreement, consent number 18024, between Sydney Water Corporation and Hydromet Corporation Pty Ltd. •The proposed development presents significant servicing demands above and beyond current usage and the existing trade waste agreement and as such, further investigation will be required to determine the servicing requirements for this development. •It is recommended that the proponent engage a Water Servicing Coordinator as soon as possible, and lodge a feasibility application with Sydney Water prior to a Section 73 Application being made.	Noted. Noted. The Proponent has engaged Cardno (NSW/ACT) Pty Ltd as its Water Servicing Coordinator for the Project. See letter confirming this appointment in Attachment G.

•It is further recommended that an inception meeting is held with Sydney Water once the proponent has prepared a detailed concept servicing proposal for potable water and wastewater services.	Noted.
Section 73 Compliance Certificate A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water. The proponent is advised to make an early application for the certificate, as there may be water and wastewater pipes to be built that can take some time. This can also impact on other services and buildings, driveways or landscape designs. Applications must be made through an authorised Water Servicing Coordinator. For help either visit www.sydneywater.com.au > Plumbing, building and developing > Developing > Land development or telephone 13 20 92.	Noted.
Building Plan The approved plans must be submitted to the Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met. The Tap in™ service provides 24/7 access to a range of services, including: • building plan approvals • connection and disconnection approvals • diagrams • trade waste approvals • pressure information • water meter installations • pressure boosting and pump approvals • changes to an existing service or asset, e.g. relocating or moving an asset.	Noted.

Sydney Water's Tap in™ online service is available at: https://www.sydneywater.com.au/SW/plumbing-building-developing/building/sydney-water-tap-in/index.htm Sydney Water recommends developers apply for Building Plan approval early as in some instances the initial assessment will identify that an Out of Scope Building Plan Approval will be required. Requirements for **Business Customers for Commercial and Industrial Property Developments.** **Trade Wastewater Requirements** If this development is going to generate trade wastewater, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. You must obtain Sydney Water approval for this permit before any business activities can commence. It is illegal to discharge Trade Wastewater into the Sydney Water sewerage system without permission. The permit application should be emailed to Sydney Water's Business Customer Services at businesscustomers@sydneywater.com.au A Boundary Trap is required for all developments that discharge trade wastewater where arrestors and special units are installed for trade wastewater pre-treatment. If the property development is for Industrial operations, the wastewater may discharge into a sewerage area that is subject to wastewater reuse. Find out from Business Customer Services if this is applicable to your development. **Backflow Prevention Requirements** Backflow is when there is unintentional flow of water in the wrong direction from a potentially polluted source into the drinking water supply. All properties connected to Sydney Water's supply must install a testable Backflow Prevention Containment Device appropriate to the property's hazard	Noted. Noted.

rating. Property with a high or medium hazard rating must have the backflow prevention containment device tested annually. Properties identified as having a low hazard rating must install a non-testable device, as a minimum. Separate hydrant and sprinkler fire services on non-residential properties, require the installation of a testable double check detector assembly. The device is to be located at the boundary of the property. Before you install a backflow prevention device: 1. Get your hydraulic consultant or plumber to check the available water pressure versus the property's required pressure and flow requirements. 2. Conduct a site assessment to confirm the hazard rating of the property and its services. Contact PIAS at NSW Fair Trading on 1300 889 099. For installation you will need to engage a licensed plumber with backflow accreditation who can be found on the Sydney Water website: http://www.sydneywater.com.au/Plumbing/BackflowPrevention/ **Water Efficiency Recommendations** Water is our most precious resource and every customer can play a role in its conservation. By working together with Sydney Water, business customers are able to reduce their water consumption. This will help your business save money, improve productivity and protect the environment. Some water efficiency measures that can be easily implemented in your business are: • Install water efficiency fixtures to help increase your water efficiency, refer to WELS (Water Efficiency Labelling and Standards (WELS) Scheme, http://www.waterrating.gov.au/ • Consider installing rainwater tanks to capture rainwater runoff, and reusing it, where cost effective. Refer to http://www.sydneywater.com.au/Water4Life/InYourBusiness/RWTCalculator.cfm • Install water-monitoring devices on your meter to identify water usage patterns and leaks.	Noted.

• Develop a water efficiency plan for your business. It is cheaper to install water efficiency appliances while you are developing than retrofitting them later. **Contingency Plan Recommendations** Under Sydney Water's customer contract Sydney Water aims to provide Business Customers with a continuous supply of clean water at a minimum pressure of 15meters head at the main tap. This is equivalent to 146.8kpa or 21.29psi to meet reasonable business usage needs. Sometimes Sydney Water may need to interrupt, postpone or limit the supply of water services to your property for maintenance or other reasons. These interruptions can be planned or unplanned. Water supply is critical to some businesses and Sydney Water will treat vulnerable customers, such as hospitals, as a high priority. Have you thought about a contingency plan for your business? Your Business Customer Representative will help you to develop a plan that is tailored to your business and minimises productivity losses in the event of a water service disruption. For further information please visit the Sydney Water website at: http://www.sydneywater.com.au/OurSystemsandOperations/TradeWaste/ or contact Business Customer Services on 1300 985 227 or businesscustomers@sydneywater.com.au	Noted.
DPIE – Water & Natural Resources Access Regulator (NRAR)	
The Department of Planning, Industry and Environment (DPIE) – Water and the Natural Resources Access Regulator (NRAR) have reviewed the EIS and have no *recommendations or comments.*	Noted.

Source: Planning Plus (NSW) Pty Ltd

2.3 Letter of Objection

In response to the public exhibition of the Proposal one letter of objection was received from a Mr Peter Hinde of P&L Property & Investment Pty Ltd dated 2 August 2021.

The following section provides Mr Hinde's comments in italics followed by the response :

Air Quality
I am concerned about the additional heavy truck traffic movements that this Liquid Waste Treatment Plant (LWTP) will generate and the subsequent increase in dust and deterioration of air quality generally. Our business stores tables and chairs, crockery, marquees and the like both in a warehouse (internally) and in open air storage (externally). I believe the increased heavy traffic movement will create additional dust and airborne pollutants that will require additional and ongoing cleaning of our plant and equipment, increasing operational costs. Additionally, I am concerned about the increased corrosion and deterioration that will occur and the potential for acid rain to fall on our property, reducing the life cycle of our plant and equipment and increasing business operational costs. We note that this has occurred already in the vicinity of our site.

Response
The DGL site in Unanderra currently experiences 10-12 truck arrivals per day. The increase in truck movements associated with h LWTP is up to 5 trucks per day. This has been assessed in the Traffic Impact Assessment Report and in the Air Quality Report and is deemed to be a relatively small increase on current operations and will have minimal impact on noise or air quality. Additionally, all liquid waste products will be transported in specifically designed road tankers or IBC's so as to reduce impacts on the environment and reduce to risk of spills or leaks into the environment.

The updated Air Quality Report has found that based on the investigations and evidence there are unlikely to be any significant ground level air impacts from the LWTP. Finally, the proposed LWTP is to be housed in an existing building on the site , fitted with a scrubber further reducing the potential for air impacts off site.

Traffic
The transportation of highly contaminated liquid waste by truck on already very busy arterial roads has the potential for a major vehicle accident and subsequent spillage of contaminated waste onto nearby properties and into the local waterways. This could have a devastation impact on the local flora and fauna, as well as the wider human population.

Response
The DGL Unanderra premises is licenced under its EPL 5874 to accept, store and process these waste materials. All liquid waste transport will comply with Australian Dangerous Goods Transport Regulations including using only EPA licensed vehicles and correct placarding. Stringent waste transport and acceptance protocols will be implemented to ensure that waste transport and receivals conform to DGL's strict acceptance criteria and the EPA requirements.

The proposed LWTP is designed to only accept SPL and waste caustic in bulk in specially designed road tankers or packaged form in Intermediate Bulk Containers (IBC's). The controls and protocols to ensure safety and minimal environmental impact are outlined in Section 4.0 of the EIS.

Flooding

201 Five Islands Road, Unanderra, is located in a low, medium and high flood risk precinct. I am concerned that a major flood event, similar to the one the Illawarra experienced in 1998, would have a significant impact on the subject property and the flow on catastrophic polluting event to surrounding properties and waterways. This could have a destructive impact on the water quality for local flora and fauna also.

Response

A revised Flood Risk Management Study has been completed and accepted by Wollongong Council for the subject land . A copy of this Report is located in Attachment F to this Report. The Proponent has also installed a First Flush System (FFS) on the site to improve the control and collection of stormwater from hard surfaces on the site and ensure contaminated runoff does not have offsite impacts in the environment.

Contamination

The site is zoned Heavy Industrial and has been used for heavy industrial purposes since the 1960's and is undoubtedly contaminated. I am concerned that developing a LWTP on the land will increase the potential for further contamination of the site and more particularly the groundwater in this locality. Our property is close by, and I am concerned with potential leachate extending into the groundwater and beyond the boundaries of the subject land.

Response

The site is located in an historically heavy industrial area and does carry a IN3 Heavy Industrial zone. Therefore , it is considered that the proposed LWTP is commensurate with that zone and the surrounding heavy industrial landuses.

However, being mindful of this Stage 1 and Stage 2 Contamination Investigation Reports were undertaken on the site to determine ground water locations and potential contamination on the site due to the site history. It is considered that the site activities are suitably contained on hard stand areas with onsite wastewater recycling, runoff and capture control systems in place to reduce impacts. The proposed LWTP is assessed as a low risk to the groundwater resources and landuses in the area. This is primarily due to the fact that groundwater will not be intercepted by the proposed operations of the LWTP and the footprint of the facility will remain unchanged as the proposed LWTP is completely contained in existing buildings. The recommendations and protocols detailed in the Stage 2 Report will be implemented when constructing the LWTP within Building E on the site.

Intensification of the Existing Industrial Use

An existing resource recovery facility , including used lead battery recycling, is currently operating from the site. I am concerned that the additional heavy industrial use, represented by this LWTP will have an increased cumulative

detrimental impact on the local environment and amenity particularly for the residents in the locale.

Response
The DGL Unanderra site currently only operates a Battery Recycling Plant (BRP) and the associated Wastewater Treatment Plant on site. All environmental assessment reports prepared as part of the EIS addressed the cumulative impacts of operating the BRP and the LWTP together on the site and all found that the cumulative impacts would be negligible as the proposed LWTP is new state of the art technology which will replace the old wastewater plant and provide environmental improvements on the site operations.

COVID 19
The Covid 19 pandemic, that has occurred over the past 18 months, has resulted in reduced economic activity generally. I am therefore concerned that the traffic, air quality, noise and vibration studies that have been competed have utilised data that has been skewed due to reduced economic activity. Non – pandemic data may indicate that the cumulative impact of this additional heavy industrial use at this locality will be substantially more than realised.

Response
All the data used in the specialist studies assessing the potential environmental impact of the proposed LWTP have used pre- Covid data (prior to 2020/2021) to estimate current and future traffic growth, air quality and noise. This approach and method has been accepted by Wollongong City Council , Transport for NSW and DPIE due to the current downturn in traffic and activity from covid restrictions and lockdowns during 2020/2021.

3.0 CONCLUSION

It is concluded that the proposed LWTP on the DGL site at Unanderra is commensurate with other heavy industrial uses in the area and will not result in impacts in the area affecting the environment or neighbouring commercial or industrial landuses. The services offered will assist and stimulate other businesses in the area whilst providing sustainable resource recovery and reuse opportunities for industrial waste in addition to employment and regional income benefits. The investigations have been prepared using contemporary professional standards and regulatory requirements and guidelines. The potential impacts on surrounding land uses have been addressed and are considered to be minimal.

It is therefore submitted that the Proposal on the subject land:

- Is currently permissible within the IN3 Heavy Industrial zone.
- Represents an economic and proper use of land and infrastructure.
- Is unlikely to result in a level of development which would adversely impact upon current traffic volumes or movements on the local road network.
- Will not result in impacts on flora and fauna.

- Will not result in any significant alteration to the existing landform.
- Will not result in unacceptable impacts on the environment or neighbouring landuses.

Accordingly, it is considered that this Response to Submissions Report has addressed all the issues raised by the Agencies and the one objector and it is requested that DPIE give favourable consideration to the development .