# Queanbeyan Resource Recovery Facility: DA 2015/338 Additional Information Submission

28 October 2016





1	PURPOSE & SCOPE	2
2	APPLICATION PROCESS TO DATE	4
3	<b>RESPONSES TO INFORMATION REQUESTS</b>	6
3.1	Information Request 9 March 2016	6
3.2	Information Request 5 April 2016	9
3.3	Information Request: Fire and Rescue NSW 9 May 2016	14
4	ADDITIONAL ODOUR STUDY	17
5 TR	HANDBOOK FOR DESIGN AND OPERATION OF RURAL AND REGIONAL ANSFER STATIONS	18
6	ADDITIONAL NOISE STUDY	19
7 E C T	WATER QUALITY & DRAINAGE Existing Environment Construction impacts Operation impacts Mitigation measures	20 20 21 21 22
8	TRAFFIC, ACCESS AND PARKING	22
9	CONCLUSION	23

- Annexure A: Revised Concept Plans and Elevations
- Annexure B: Submissions Table & Responses
- Annexure C: Odour Impact Assessment
- Annexure D: Noise Impact Assessment
- Annexure E: Traffic Impact Assessment
- Annexure F: Operational Environment Management Plan (Framework)
- Annexure G: Emergency Response Plan (Framework)



# 1 Purpose & Scope

The purpose of this report is to provide a consolidated response to Queanbeyan-Palerang Regional Council's (Council) information requests for SUEZ Australia's application for the proposed Resource Recovery Facility at Gilmore Road/Bowen Place, Queanbeyan West (DA 2015/338). In addition, this report provides clarification of the project and the additional studies completed as part of the 'Request for Information' letters obtained from Council.

The submissions received over the two notification periods have been collated and are appended to this report (**Annexure B**). Further, the additional studies confirm the findings of the original EIS, and with the removal of the retail component of the project, projected noise and traffic impacts are expected to be reduced.

This report also provides additional information as per the letters dated 9 March 2016; 5 April 2016; and 9 May, 2016; and consolidates the process of the application to date.

Since the submission of the Development Application (DA) and supporting Environmental Impact Statement (EIS) in September 2015, the following changes to the proposed development have been made by Suez:

Submitted DA	Proposed Alterations to the Application	Explanation	
Waste source: to include minor amounts of waste	Withdrawn from Proposal	Following the first public exhibition (2015), concerns were raised by Council regarding the potential for queuing at the entrance to the Facility, at Bowen Place.	
from the public in cars or cars with trailers.		The withdrawal of this element will also alleviate access constraints to the Facility associated with the siting of the weighbridge.	
<b>Air Quality:</b> No air extraction or filtration included in proposal (based on odour modelling)	Capability to install ventilation and odour treatment should this be required in future	During public exhibition, some concerns were raised in submissions, direct emails to SUEZ and the local paper about odour impacts from the proposal. To maintain a good relationship with the community, SUEZ have stated in their response to the community that capability for an air extraction and filtration system would be incorporated in the main waste sorting hall, should it be required in future.	
		An additional odour modelling study (TAS, 2016, Annexure C) was carried out comparing the potential odour impacts of no mitigation; mitigation proposed in the EIS; and the air extraction and filtration system. EPA have issued General Terms of Approval (GTA) approving the proposed Facility, based on the original odour assessment in the EIS (ie no extraction or filtration).	
		Council have requested that a specification of the system be provided in the CEMP. Should extraction and treatment be required in the future, this specification would be developed to meet EPA requirements.	
Water Management: Collection and treatment of process and	All process water now to sewer. Stormwater to OSD for reuse, or Council system.	NSW Health and EPA have indicated that the use of treated process water may cause potential health impacts. The proposal has since been amended to send all treated process water to sewer in accordance with a trade waste agreement.	
sent to the neighbouring		A general description of the water management system was provided in the DA/EIS; however Council have	



Submitted DA	Proposed Alterations to the Application	Explanation	
MonaroMix batch plant for beneficial reuse in the concrete batching process.		requested a detailed specification for the water management system. Stormwater will continue to be collected: roof water to OSD, and yard water to pass through grease and litter traps (advanced GPTs) prior to storage/attenuation tanks, then to OSD for reuse or to Council stormwater system.	
		Conceptual water cycle management description provided in this submission. Fully specified description to be developed during detailed design for submission to Council prior to issue of Construction Certificate.	
Site Layout & Traffic Access Arrangements	Redesign to enable access from Gilmore Road, minor changes to site layout ( <b>Annexure</b> <b>A</b> )	<ul> <li>The proposed processing building has been relocal slightly to enable trucks to enter the site from Gilm Road, and exit from Bowen Place (refer plans attached This results in deletion of the basement carpark, althout the number of proposed car parks would not change.</li> <li>additional weighbridge and signage has been added, a building height increased marginally. Several stora facilities have been relocated on site.</li> </ul>	
		Egress of 19m metre and B-double articulated semi- trailers is now proposed from Kealman Place to Gilmore Road and then to the signalised Canberra Avenue intersection, reducing the impact on the Kealman Road/Canberra Avenue intersection.	

The proposed changes to the proposed development, and the removal of the retail component, do not constitute a substantially different proposal, and the potential impacts are consistent or reduced from the original DA. It is therefore considered that an additional notification period is not required, and that the proposed development complies with the planning controls for the site.



# 2 Application Process to date

The following summarises key steps in the process to date:

- 13 August 2013: Application was made to the Department of Planning for the Director General Requirements (DGRs) for the completion of the EIS.
- 13 September 2013: DGR's issued.
- May 2014: A phased approach to the operation of the site was determined by Suez, with paper and cardboard bailing, fluorescent tubes and battery storage, bin storage and repair, wash bay, paint bay and internal fit out and fire safety upgrade of the existing building was to be the initial phase of the site.
- 5 June 2014: Pre-application meeting/development coordination and review panel meeting held with Council to discuss the proposal.
- 13 June 2014: Letter provided to Council providing a preliminary planning and environmental assessment for the Phase 1 application.
- September 2014: Phase 1 DA submitted Council for the paper and cardboard bailing of up to 3,000 tonnes/annum, fluorescent tubes and battery storage, bin storage and repair, wash bay, paint bay and internal fit out and fire safety upgrade of the existing building.
- January 2015: Phase 1 Consent issued. (DA#337/2014)
- 8 August 2015: Phase 2 pre-application consultation undertaken with the NSW EPA Queanbeyan Office.
- August 2015: Phase 2 pre-application meeting with Council.
- 10 September 2015: Phase 2 DA submitted to Council.
- November 2015: DA 2015/338 exhibited and notified. Two (2) submissions received, in addition to agency submissions.
- 8 January 2015: Retail component was formally withdrawn by SUEZ.
- 11 January 2016: Letter for additional information was received by Council.
- February 2016: Second letter for additional information was received by Council, RMS and EPA (Lorn Road school noise impacts).
- February 2016: DA 2015/338 re-notified and re-exhibited.
- February 2016: Written response was provided to Queanbeyan City Council for the additional information letter sent on 11 January 2016.
- 9 February 2016: Joint Regional Planning Panel visits the site for inspection and description of proposed development.
- 10 February 2016: Presentation to Council regarding the proposed development.
- 19 February 2016: Letter circulated by Suez providing details and contact information for the proposal. The letter also invites the local community to attend a public information session.
- 25 February 2016: Public information session was held by Suez. Approximately 60 people attended, with four Suez representatives.
- 2 March 2016: Written response was provided to Council for the additional information letter sent on 4 February 2016.



- 9 March 2016: Third letter for additional information was received by Council.
- 15 March 2016: JRPP public meeting held.
- April 2016: Fourth letter for additional information was received by Queanbeyan City Council.
- 19 April 2016: NSW EPA General Terms of Approval (GTA) issued.
- 12 August 2016: QPRC Letter received regarding DA response status



# **3** Responses to Information Requests

## 3.1 Information Request 9 March 2016

The third part of this report is to provide a response to the information request dated 9 March 2016.

No	Information Request	Response
1	Vehicle Access	
a	Confirmation that the proposed maximum sized trucks to be used in and out of the site are B-Double trucks, otherwise please nominate maximum sized trucks.	B-Double trucks are the maximum sized trucks to enter the site.
b	Confirmation that the NSW Roads and Maritime Service issues have been addressed with their satisfaction.	Revised traffic and access arrangements and assessments with this submission.
С	A breakdown of traffic movements during peak operational times for the batching plant and the proposed waste facility. The response to the additional information letter dated 5 February 2016, Item 7 seems to contradict the Traffic Report.	Item 7 of the letter dated 5 February related to the movement of water tankers from the proposed site to the Monaro Mix Concrete batching plant. Reuse to MonaroMix now withdrawn from proposal
2	Swept Paths	
a	The tracking of vehicles onto the opposite carriageway onto Bowen Place and Kealman Drive is not acceptable. New swept paths are required to address this issue.	Noted. New swept paths have been completed to show that vehicles will not track onto the opposite side of Bowen Place and Kealman Drive (this submission).
b	The swept paths do not show truck movements within the subject site, facility hall and into and out of Gilmore Road. Swept paths are required for the maximum sized trucks to be used on site.	Revised traffic and access arrangements and assessments with this submission.
С	The swept path analysis plans submitted on 5 February, 2016 show the tracking of truck movements contradicting each other with regard to the positioning of the vehicle. New swept paths shall be submitted clarifying this contradiction.	Noted. New swept paths have been completed to clarify the movement of vehicles (this submission).
3	Trade waste	Noted. Trade waste will not be connected
	Trade waste disposal shall not connect to stormwater. Details of proposed trade waste disposal to sewer is required showing trade waste	to stormwater. It will be connected to Sewer in accordance with Council Trade Waste requirements and agreement. A Section 68 approval was submitted with

TABLE 1. Additional	Information	Request	and Res	nonse
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No	Information Request	Response
	storage and its proposed treatment process.	the Development Application dated 4 September 2015.
	Please note that all trade waste connections are to connect to sewer via an appropriate storage / pre- treatment processes, including:	Conceptual description of the proposed water cycle management system, included with this submission. Washbay and process water will be trade prior to
	a) the truck wash bay; and	sewer discharge. Full details to be developed during detailed design and
	b) the wash down area in the receival hall.	submitted to Council for review prior to the approval of the Construction Certificate.
	For information, a Section 68 approval under the <i>Local Government Act,</i> <i>1993</i> is required for liquid waste to be accepted into Councils sewerage system.	Noted.
4	Stormwater	
а	Clarification and written information is required for the following stormwater issues:	
i	How stormwater held on site and will be delivered to Monaro Mix site?	Stormwater reuse to MonaroMix now withdrawn.
ii	How many vehicle movements will this add to the movements in and out of the site and onto Bowen Place?	Stormwater reuse to MonaroMix now withdrawn.
iii	From what street is the stormwater to be carted out of? (Gilmore or Bowen)	Stormwater reuse to MonaroMix now withdrawn.
iv	Show swept paths out of the waste facility into the batch plant if this is to exit via Bowen Place.	Stormwater reuse to MonaroMix now withdrawn.
v	Is a dual access proposed with Monaro Mix?	No.
b	Stormwater from all hard stand areas and roof rainwater must connect to the Council stormwater system via an onsite detention tank. The grading of hard stand areas to direct stormwater to the property boundaries is not acceptable. Details of the stormwater connection shall be submitted for clarification.	Noted and agreed. Direct connection of stormwater to Council system proposed. Conceptual description of the proposed water cycle management system, included with this submission. Full details to be developed during detailed design and submitted to Council for review prior to the approval of the Construction Certificate.
5	Grease trap waste	
	Details of the K110 grease trap waste shall be submitted including:	
a	Confirmation that 2,400 t/yr is the total quantity	Confirmed.
b	How it will be received	Grease trap waste would be received at



No	Information Request	Response
		the facility via appropriately licensed liquid waste vehicles. These are fully self- contained vehicles which pump the waste via a hose into the storage tanker.
С	Where it will be stored, its location and bunding shall be shown on plan	The location of the grease trap waste is within the dedicated liquid waste storage container shown on the site plans (Annexure A). All safeguards and bunding to comply with Council, WorkSafe and EPA requirements will be included.
d	How it will be disposed of	Grease trap waste would be collected by specialist liquid waste vehicles and taken to a treatment facility for further processing, treatment and beneficial reuse.
e	how odour emissions will be managed	The liquid waste vehicles, storage tank and hoses are a self-contained propriety system. This process is well established at other facilities, & recognised by NSW EPA.
6	Other/Miscellaneous	
a	The batching (Monaro Mix) plant may need a NSW Environment Protection Agency licence to receive trade waste water from the proposed adjoining waste or resource facility. You should seek further advice on this matter.	Noted. Now withdrawn.
b	Council has referred the application to NSW Health as requested by the JRPP.	Noted
С	The JRPP has requested an audio- visual showing how the proposed facility may operate.	SUEZ operates approximately twelve recycling facilities within Australia and many more internationally. As the proposed facility will be purpose built, there are no equivalent sites. However inspections can be arranged at Sydney of older facilities.
d	For clarification purposes Council would like justification on the total materials to be processed to ensure that this is not a State Significant Development as soon as possible including, life expectancy of the operation and of what % of the 70,000 tonnes is putrescible and non- putrescible waste.	The facility has been designed to accept up to 95,000 t/yr of waste. Up to 70,000 t/yr of general solid waste (putrescible and non-putrescible) is proposed. Approximately 50% of this waste would be putrescible waste. Suez has signed a long term lease option with the property owner to operate the facility at the site.
е	Confirmation that the total quantity of J120 Water/Hydrocarbons mixtures is	Confirmed. The location of the J120 waste is within the dedicated liquid waste



No	Information Request	Response
	2,400 t/yr and where it will be stored. Details of its storage location and bunding to be shown of plan.	storage container shown on the attached plans. All safeguards and bunding to comply with WorkSafe, FRNSW and EPA requirements will be included.
f	There appears to be contradictory information contained in the AusWide traffic report in terms of total volumes of putrescible waste, the EIS Executive Summary stating 70,000 t/yr of putrescible and non-putrescible waste and in the mitigation measures 100 tonnes of putrescible waste is proposed. The inconsistency of this type information containing within the EIS is disconcerting and must be classified.	The Traffic Report and EIS are both accurate. 70,000 t/year of general solid waste (putrescible and non-putrescible) is proposed to be accepted at the site. As stated within the mitigation measures of the Air Quality section, 100 tonnes of putrescible waste is to be stored <b>at any</b> <b>one time</b> . This is to avoid large amounts of putrescible waste being stored on the site at any time, reducing the potential for odour impacts.
7	Progress	Noted.
	The submissions period closed on Friday 4 March. One hundred and twenty six (126) submissions were received. Council staff are currently reviewing these and endeavour to have a summary forwarded to your office early next week.	
	Before Council can prepare a report to the JRPP the following remains outstanding to date:	
	GTA's from the EPA	
	<ul> <li>Comments from the RMS, NSW Health and HMAS Harman</li> </ul>	
	<ul> <li>Information contained in this letter; and</li> </ul>	
	<ul> <li>Applicants response to submissions.</li> </ul>	

# 3.2 Information Request 5 April 2016

No	Information Request	Response
1	Environmental Management Plan Council requires the preparation of an Environmental Management Plan (EMP) which specifies how the effectiveness of environmental management measures will be controlled and monitored. It should	The existing EMP for the site has been revised and provided with this submission. Please note that this will be updated during detailed design for Council review, and then finalised and submitted to Council and relevant authorities prior to application for Occupancy and EPA Operating Licence,



No	Information Request	Response
	include the control systems, methodology, frequency and duration of monitoring activities. It should also include trigger values or conditions under which corrective actions are taken. The plan should also specify if, and when, follow up action is required and how monitoring records will be maintained.	to ensure it fully incorporates all operational controls, processes and responsibilities. Please note that SUEZ has independently accredited Safety, Environment and Quality System (EQ&S) which meets ISO14001 Environmental Management
	The plan should include but not be limited to:	System, AS4801 Occupational Health & Safety System and ISO9001 Quality Management System. This EQ&S system
	and treatment)	facilities, and the environmental
	Ventilation	management plans will comply with these and be subject to regular auditing and
	Noise control	reporting.
	Water management (stormwater and sewer)	
	Trade Waste requirements	
	Hazardous materials, and	
	Vermin control	
	There should be a clear organisation structure associated with the EMP's implementation. This should include the nomination of personnel responsible for environmental management, related monitoring and report, emergency procedures, incidents and complaint handling. The roles and responsibilities of these nominated personnel should be specified.	
2	Emergency Management Plan	A draft Site Emergency Management
	Due to the potential for hazards and risks as identified in Appendix C of the Environmental Impact Statement (EIS), a Site Emergency Management Plan shall be prepared in accordance with relevant Australian Standards such as <i>AS3780-2008 "The Storage and</i> <i>Handling of Corrosive Substances"</i>	Plan has been completed and attached for your consideration. As above, this will be updated and submitted to Council and relevant authorities prior to application for the Occupancy Certificate and EPA Licence. All relevant Australian Standards will be incorporated.
	and AS1940-2004 "The Storage and Handling of Flammable and Combustible Liquids" and be submitted to Council for consideration.	Please note that SUEZ has independently accredited Safety, Environment and Quality System encompassing all its operations and facilities, and the environmental management plans will comply with these and be subject to regular auditing and reporting.



No	Information Request	Response
3	Odour and Ventilation The EIS provides minimal information on odour management including natural and mechanical ventilation, odour extraction and treatment from the facility. Odour was a significant concern raised during the submissions period and details of odour management, taking in consideration storage of waste and fumes associated with machinery, delivery, movement and processing of waste and the fact that the shed will not be enclosed at all times shall be submitted to Council for consideration.	The Odour Assessment and subsequent updated Technical Memorandum concluded that the proposal will meet all relevant NSW EPA requirements. The operation will be stringently regulated by NSW in accordance with the EPA General Term of Approval. Capability for future upgrading of ventilation and odour treatment will be incorporated into the design of the building.
4	Noise Given the concerns raised in the submissions and the issues raised at the Joint Regional Planning Panel community briefing regarding noise, the applicant shall consider the impacts of the development on the residents in the locality including residents of 1 Kealman Road and respond to the submissions raised during the submission period.	The revised Noise Impact Assessment completed as per Council and EPA's request in November 2015 included anticipated impacts to the resident at 1 Kealman Road. Section 6 of this submission summarises the findings (as detailed to Council in the letter from Wilkinson Murray dated 29 November 2015). In addition, the General Terms of Approval issued by the EPA on 19 April 2016 state that the sensitive receiver identified at 1 Kealman Road is located within an industrial zoning. Section 2.1.1 of the <i>Industrial Noise Policy</i> recommends that isolated residences within industrial zones, be treated as industrial receivers. In accordance with the <i>Industrial Noise Policy</i> the industrial amenity criteria of 70dBA would be applied to this residence. The Noise Impact Assessment projected a noise level of 60dBA to be applied to this receiver which meets the amenity criteria outlined within the <i>Industrial Noise Policy</i> . In addition, EPA's GTAI require ongoing periodic noise monitoring to confirm compliance with the EPL, which will ensure that noise impacts to the receivers within the Industrial Estate are minimised. Responses to the submissions have been provided as Annexure B.



No	Information Request	Response	
5	Water Management The water treatment information provided to date is insufficient for assessment. Detailed specifications and design of the proposed water management systems remain outstanding and shall be submitted for consideration. Please note, as previously advised, that it is not acceptable for treated wastewater from washdown activities to be diverted to the stormwater system as identified in your letter 5 February 2016.	Noted. Conceptual description of the proposed water cycle management system included with this submission. Full details to be developed during detailed design and submitted to Council for review prior to the approval of the Construction Certificate. It should be noted that wastewater from process areas will be treated and disposed of the <b>sewer</b> in accordance with the requirements and specifications of a trade waste agreement to be entered into with Council. An application for a s68 approval was sought in the original development application form.	
	NSW Health state that there is a potential public health risk associated with reusing the leachate and wastewater at the neighbouring concrete batching plant. Full details of the quality and quantity of the leachate/wastewater and the proposed level of treatment and disinfection shall be submitted to Council for consideration. The EIS details storage of liquid waste for extended periods. As required in Council's letter of 9 March details of the bunding possible toxic fumes	Noted. SUEZ have withdrawn the proposed use of treated stormwater for beneficial reuse at MonaroMix. Details of the bunding of the liquid storage tanks has now been provided on site plans. Storage tanks and waste vehicles are completely enclosed, ensuring that toxic fumes or potential spills are negligible. Full details to meet all relevant OH&S, Fire Safety,	
	associated with filling and emptying the storage containers shall be submitted to Council for consideration.	Dangerous Goods and other regulatory requirements will be carried out during detailed design, and submitted for approval prior to Construction Certificate.	
6	Vermin Control	As per Point 1 above, vermin control has	
	The EIS identified the implementation of a vermin control program. Due to concerns raised in submissions and by NSW Health, details of the program shall be submitted to Council for consideration including implementation, monitoring and control strategies.	been included in the site's EMP. All SUEZ facilities have approved vermin control programs implemented to prevent vectors, public health risks and amenity impacts.	
7	Public Health	Noted. SUEZ's operational management	
	NSW Health has indicated concern for the protection and preservation of amenity to residents in close proximity to the development as the impact from the accumulation of waste and exudates associated with the	<ul> <li>protocols do not include the use of an Operational Management Plan, however a combination of the following is used, depending on the requirements of the sites EPL:</li> <li>Traffic Management Plan</li> </ul>	



No	Information Request	Response		
	development has not been adequately addressed in the EIS. An outline of an Operational Management Plan shall be submitted that addresses public health and work, health and safety matters including personal protective equipment, immunisations and handwash/decontamination facilities.	<ul> <li>Emergency Response Plan</li> <li>Pollution Incident Response Management Plan</li> <li>Environmental Management Plan</li> <li>Odour Management Plan</li> <li>Odour Management Plan</li> <li>Work instructions and a suite of Safe Work Method Statement (SWMS) are used to ensure the operation of the facility meets expected guidelines and licencing requirements. The final SWMS's and other plans will be completed during the detailed design of the facility and will be provided to Council &amp; NSW Health for review as part of the Occupation Certificate application.</li> </ul>		
8	<b>Public Submissions</b> Further to Council's email of 3 March 2016 and draft Summary of Submissions, a final Summary of Submissions is attached for your comment. Please prepare a response to the issues raised and address any inconsistencies in the EIS's technical reports.	Responses to the submissions are attached as Annexure B.		
9	Consistency of EIS Council's letter of 9 March raised issues of inconsistencies between technical reports within the EIS. These instances and those alluded to in the submission may require the entire EIS to be updated. It is important that the EIS and supporting information is robust and consistent to allow the full assessment of the application.	The EIS and technical reports have been reviewed, and as noted in Table 1 above, no inconsistencies were found. Please note: The mitigation measure of 100 tonnes of putrescible waste is intended to mean <b>at</b> <b>any one time</b> not over a whole year. "At any one time" has been included to provide clarity.		
10	<b>Progress</b> Please be advised that Council will refer any additional information to NSW Health and other relevant referral authorities for their comment. Council may also decide to publicly re-exhibit the development application in accordance with Section 79 of the <i>EP&amp;A Act 1979</i> after additional information is received. You will be updated on this matter in due course.	Noted.		



# 3.3 Information Request: Fire and Rescue NSW 9 May 2016

No	Information Request	Response	
1	FRNSW has reviewed the EIS and the following comments, which form the basis of our recommendations to Council and the JRPP, are provided for informative purposes, (please note, FRNSW does not object to our	Noted. SUEZ propose to include automatic fire detection systems to ensure the timely management of potential fire incidences at the site. The dust and odour suppression sprays proposed may also be used in the suppression of fire.	
	comments being forwarded to the proponent for their information should Council or the JRPP so wish).	SUEZ operated many Resource Recycling Facilities in Australia and internationally, and has considerable experience in fire prevention and suppression.	
	FRNSW has concerns in relation to the following matters:		
	<ul> <li>Due to the use of the building and site there is significant likelihood for fires to occur and for fires to significantly escalate.</li> </ul>	stormwater and process water at the site is required to be contained on site and cannot escape the site without passing through oil and litter traps or the water treatment system proposed at the site. Valves to prevent fire suppression chemicals/water will be installed. Spill kits	
	<ul> <li>The main building is not proposed to be provided with automatic fire detection or automatic fire suppression systems.</li> </ul>	will also be provided on site to contain and contaminated water that may escape bunding.	
	<ul> <li>Due to the nature of materials processed, there is also potential for contaminated fire water runoff to pollute off-site stormwater management systems and water courses. Due to the significant potential there is an increased likelihood that FRNSW personnel would need to actively manage the containment of polluted fire water runoff during a fire incident (NB a specific duty imposed upon the Commissioner of FRNSW by virtue of Section 10A of the Fire Brigades Act 1989 is to protect the environment.</li> </ul>	The detailed design to be supplied at the construction certificate stage of the proposal will include the appropriate containment of both sprinkler and fire hydrant systems to ensure contaminated fire water is contained on the site	
1	It appears that the proposed building will incorporate a fire compartment with a capacity of more than 40 motor vehicles. FRNSW recommends that the car park is provided with an automatic sprinkler system that complies with the requirements of Clause E1.5 of Volume 1 of the	Noted and agreed. Automatic sprinkler system will be included within buildings. Note that basement carparking has been withdrawn from proposal.	



No	Information Request	Response	
	National Construction Code (NCC)		
2	It is FRNSW experience that these types of facilities are frequently involved in fire incidents that escalate to a point where significant fire fighting resources must be deployed by FRNSW in order to safely resolve emergency fire incidents. Due to the nature and quantity of materials stored and processed FRNSW considers that special problems of firefighting could arise. Consequently, it is FRNSW opinion that Clause E1.10 of the NCC is applicable to the proposed development. FRNSW recommends that the subject building be fitted with a sprinkler system that complies with the requirements of Clause E1.5 of the NCC.	Noted and agreed. The building will be fitted with a sprinkler system that complies with the requirements of Clause 1.5 of the NCC.	
3	To ensure that an early FRNSW response to a fire incident can be initiated, it is recommended that a suitable smoke detection system be installed within the building. The detection system is recommended to comply with Clause 4 of Specification E2.2a of Volume 1 of the NCC and be connected to a fire alarm monitoring system that complies with Clause 7 of the aforementioned Specification.	Noted and agreed. A smoke detection system with a connection to a fire alarm monitoring system will be installed at the site, to comply with NCC requirements. SUEZ will consult with FRNSW regarding monitoring and first-response protocols as part of finalising the Emergency Response Plan, prior to Occupancy.	
4	As discussed earlier, the nature of this particular development will require FRNSW personnel to pro-actively manage the containment of polluted fire water runoff during a fire incident. Consequently FRNSW recommends that the site's surface and stormwater management systems be designed to provide FRNSW with an ability to contain contaminated fire water runoff to the site, e.g. a site stormwater drain isolation valve. The design of the systems' capacities is recommended to take into account the concurrent operation of sprinkler and fire hydrant systems.	Noted and agreed. The detailed design to be provided at the construction certificate stage of the proposal will include the appropriate containment of both sprinkler and fire hydrant systems to ensure contaminated fire water is contained on the site.	
5	The appropriate emergency procedures are developed by the proponent to address and mitigate as far as reasonably practicable the consequences of fire and hazmat	Noted. An Emergency Response Plan has been drafted (Annexure G) to be finalised prior to Occupancy.	



No	Information Request	Response		
	incidents and the potential health risks to fire fighters undertaking emergency operations in relation to foreseeable fire/hazardous material scenarios.			
6	That two copies of the emergency plan (detailed in recommendation 5 above) be stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to facility's main vehicle entry point.	Noted and agreed. This will be implemented during the operation of the facility.		
7	That appropriate first aid fire fighting equipment is provided throughout the facility. In addition, that all personnel be trained so that effective first aid fire fighting operations can be undertaken with the equipment provided.	Noted and agreed. This will be implemented during the operation of the facility.		
8	FRNSW notes that Section 9 of the PHA acknowledges that the operation of the proposed development slightly exceeds the SEPP 33 screening thresholds and that additional multi- level risk assessments have been undertaken. The additional assessments have determined that the development is not deemed hazardous or offensive. Notwithstanding, should development consent be granted it is FRNSW recommendation that a condition of consent be imposed requiring a fire safety study (FSS) be undertaken in accordance with the requirements of Hazardous Industry Planning Advisory Paper No. 2 (HIPAP No.2) and that the FSS be approved by FRNSW.	A FSS was completed as part of the EIS. If required, an additional FSS to be approved by FRNSW can be incorporated into the documentation required for the construction certificate.		
9	In the event of a FSS being undertaken in order to fulfil a condition of development consent, FRNSW recommends that our above recommendations (i.e. 1 to 7 inclusive) be validated by formal analysis undertaken during development of the FSS.	Noted.		



# 4 Additional Odour Study

An additional odour study was carried out by Todorski Air Sciences in March 2016 (refer to **Annexure C**) due to a number of concerns regarding the potential for offsite odour impacts to nearby sensitive receptors. The dispersion modelling within the original air quality assessment was based on conservative assumptions of the potential odour source and applicable odour emission rate. To demonstrate the potential improvement associated with the adoption of the proposed mitigation measures for the project, the second air dispersion modelling considered two scenarios:

- 1. Implementation of the mitigation measures outlined within the EIS; and
- 2. Inclusion of an extraction and filtration odour management system.

Other potential odour sources such as parked garbage trucks and the storage of small and large bins were still considered in the dispersion modelling.

Two isopleth diagrams were produced showing the predicted 99<sup>th</sup> percentile nose-response ground level odour level for the two scenarios. The table below has been reproduced from the additional odour assessment. The results show that the predicted odour levels at the sensitive receptors would be well below the applicable criteria for both scenarios.

Receptor ID	Original model	Scenario 1	Scenario 2	Criteria
1	0.6	0.5	0.2	2
2	0.6	0.5	0.2	2
3	0.6	0.5	0.2	2

The proposed facility is located within an industrial zoned land. The purpose of industrial zonings are to allow for the operation of facilities that have the potential to cause environmental impacts such as noise or air, outside its boundary in areas away from sensitive receptors, and thus not impact such receptors.

The NSW EPA odour impact assessment criteria applies to the existing or likely future offsite sensitive receptors and is provided by the *Approved Methods for Modelling and Assessment of Air Pollutants in New South Wales* (NSW DEC, 2005). The impact assessment criteria ranges from 2OU that are acceptable in the most sensitive receiving environments to 7OU in sparsely populated areas with the likelihood of individuals being less sensitive to odour.

The predicted odour levels are not expected to be greater than 7OU within the surrounding industrial precinct and can be characterised as being appropriate for a sensitive receptor located in a rural environment.

Scenario 1 shows that the nearest industrial neighbour, with a person residing within the commercial building, would likely experience 3-4OU with the proposed mitigation measures outlined within the EIS. Thus it is considered that the operation of the proposal would have a negligible impact and not lead to any unacceptable level of environmental harm or impact around the area. Operations will be monitored in accordance with the NSW EPA and Licence. Additional odour mitigation, such as the installation of an air extraction and filtration system is thus not proposed.

However, the building design will incorporate provision for ventilation, extraction and/or odour treatment in the future, should this be required. Based on SUEZ operational experience at other similar recycling facilities, air quality modelling, and stringent site management processes, it is concluded that the proposed development (including changes) will readily comply with the EPA GTA, and result in negligible, if any, adverse amenity impacts.



## 5 Handbook for Design and Operation of Rural and Regional Transfer Stations

The intent of the Handbook for Design and Operation of Rural and Regional Transfer Stations (DEC, 2006) ('the Handbook') is to provide Councils (and others) that wish to develop resource recovery and/or waste transfer facilities in rural and regional areas a tool to assist in the design and operation of such facilities. The Handbook is generally written for Councils and draws on the experience of other Council owned facilities across NSW. The Handbook is not a legal document and simply provides a resource to assist with the promotion of best practice in the design and operation of rural and regional transfer stations and resource recovery facilities.

Following a review of the Handbook, the decision to position the resource recovery facility at the proposed site is generally consistent with the steps and processes provided. Specifically:

1. Project drivers, such as the project needs and the reasons for developing the facility, were considered;

2. The site selection process incorporated factors such as planning requirements, area of land needed, buffer distances, and applying these in the context of any local and unique features of the site.

3. Community consultation was undertaken with the immediate land holders and Council prior to the submission of the development application. As the development is considered under Part 4 and is designated development, additional consultation was undertaken as part of that review process.

4. Planning approval process was considered, and an Environmental Impact Statement completed.

5. The details provided above were considered in the risk assessment, design, construction and operational aspects of the development. Financial and operational risk assessments were also completed, and results incorporated into the EIS.

6. During the concept design phase of the proposal, site layouts were considered and the optimal and most workable solution was provided in the EIS. This is based on over 20 years' experience in the waste management sector.

7. An enclosed structure was used for the resource recovery hall. This provides optimal security and additional buffers to noise and odour impacts.

8. The proposed site allows for flexibility into the design and construction of the facility catering for population growth and geography.

9. The proposed site allows for the appropriate management of traffic and noise impacts.

10. Based on the extensive experience of Suez and the staff who are responsible for the day to day operation of the site, issues relating to general housekeeping, staff training, environmental management controls, OH&S, community education and scavenging and material recovery is considered minimal.

A key issue raised from local community members relate to the buffer distances provided in the Handbook. The Handbook specifies that resource recovery facilities should be, wherever feasible, placed greater than 250m from residential receivers and within the appropriate zoning. It does not however, include a recommendation where residential receivers are located within Industrial zoning precincts, which is unique to the Queanbeyan LGA.



The proposed site is located approximately 200m from the nearest residential zoning. The Handbook states that where the 250m buffer cannot be adhered to, other means of buffering could be used, either natural or man-made. The Handbook provides the example of using landscaping and/or an enclosed building to act as a buffer to residential receivers. The proposal incorporates both landscaping features, and an enclosed building. All waste receival and sorting will occur within the enclosed building, with doors closed at all times. This is considered consistent with this requirement.

The Handbook also states that a buffer distance of greater than 250m from an environmentally sensitive area, or from an inappropriate area, such as a floodplain. As stated within the EIS, the site is within an industrial zoned precinct, away from environmentally sensitive areas. The site is not considered within 250m of an inappropriate area, and is not located within a floodplain.

The purpose of industrial zoning is to allow for the operation of facilities that have the potential to cause environmental impacts such as noise or air, outside its boundary in areas away from sensitive receptors, and thus not impact such receptors. The proposal is considered consistent with the objectives of the IN1-General Industrial zoning as outlined within the Queanbeyan Local Environmental Plan 2012. In addition, the site would be operated in accordance with an Environmental Protection Licence (EPL) which would place further mitigation and requirements on the facility. This means that stricter controls, including additional auditing and monitoring requirements will ensure the facility meets NSW criteria.

## 6 Additional Noise Study

A Noise Impact Assessment was conducted for the proposed development (Wilkinson Murray, 2015). This Assessment was revised in November, 2015 (**Annexure D**) following a request from Queanbeyan City Council. A letter was also provided to Council in November, 2015 which responded to Council's request for additional information (Lorn Road School). The assessment found the nearest sensitive receivers were located on John Bull Street, Stuart Street and Lorn Road, located between 210m and 315m from the site. It has also been noted that a resident is located within a commercial building in the Industrial Zone at 1 Kealman Road.

As the proposed operations are to occur 24 hours per day, seven days per week, the assessment considered the site activities against the applicable noise criteria for the day (7.00 am - 6.00 pm), evening (6.00 pm - 10.00 pm) and night time (10.00 pm - 7.00 am) periods. To comply with the NSW Industrial Noise Policy (INP), the proposal was assessed against two noise criteria: 'intrusiveness' criterion which assesses the likelihood of noise being intrusive above the ambient noise level; and 'amenity' criterion which ensure the total industrial noise from all sources in the area does not rise above a maximum acceptable level. Sleep disturbance and traffic noise was also considered.

The most significant sources of operational noise from the site would be vehicle movements within the site boundary and material handling activities within the transfer building. Within the transfer building, trucks and other material handling machinery would generate significant amount of noise. Review of the predicted worst case operational LAeq, 15min noise levels found that the operational LAeq 15 min meet the night time intrusiveness criterion for all identified sensitive receivers. Review of the predicted LAMAX Operational Noise Levels with the established sleep disturbance criterion found that they complied at receivers R1 and R2, and exceed the criterion by 1dBA at R3. A 1dBA is considered negligible and not perceptible to human hearing.

The sensitive receiver I1 at 1 Kealman Road is located within an industrial zoning. Section 2.1.1 of the Industrial Noise Policy (INP) recommends that isolated residences within industrial zones be treated as industrial receivers. The predicted operational noise levels at 1



Kealman Road are consistent with the criteria outlined within the INP for industrial receivers; and noise levels are not expected to exceed this criteria.

The most significant short duration high intensity noise events associated with the operation of the facility are the application of pneumatic truck parking brakes when they stop at the weighbridge and the entry doors at the transfer station building. Predicted maximum noise levels were found to comply with established sleep disturbance criteria at two of the sensitive receivers, however the criterion was exceeded by up to 1dBA at one sensitive receiver. Due to the proximity and exposure to traffic noise from Canberra Avenue, the existing background noise levels at this sensitive receiver are expected to be higher than the other receptors. Therefore, the predicted 1dBA exceedance of the sleep disturbance criterion is expected to be conservative. The proposed perimeter hoarding, as required by Council DCP, will further reduce operational noise below modelled predictions.

The assessment also concluded that where all truck movements generated by the development occurred during the night time period, the predicted increase in traffic noise levels at the most affected receivers would be less than 0.1dBA. This increase is not perceptible to human hearing.

In conclusion, the revised proposed development is concluded to readily be able to meet the NSW EPA GTA, and result in negligible, if any, adverse amenity impacts.

## 7 Water Quality & Drainage

#### **Existing Environment**

The proposal is within an existing industrial estate, at an existing resource recovery facility and the uses of water would be consistent with industrial uses. This includes vehicle washdown, process water and general landscaping. Water quality discharged from the site to the sewer and stormwater system would comply with NSW EPA and Council's stringent requirements as outlined in Queanbeyan Development Design Specification D5 Stormwater Drainage Design Version 1 – Jan 2013.

Local waterways and creeks are not located within the vicinity of the proposed site, however form part of the receiving waters for the stormwater system.

Due to the presence of rock, the site is largely impermeable. A phase 1 contamination study was conducted at the site by Robson Environmental (February 2015). This study can be provided upon request. The report identified, due to previous land uses, several elements requiring removal including asbestos sheets. Since this study was completed, bulk earthworks have occurred at the site, and these items have been removed and safely disposed. It is not expected that any remnant contamination is located at the site, as all remnant rock and soil at the site is likely to consist of excavated natural material.

The proposed water sources from the site are set out below (detailed design would be carried out prior to the issue of a Construction Certificate and commencement of construction, and subject to Council approval), in the attached plans and Stormwater Cycle Schematic:

- sewage discharged to Council system;
- Washbay and process water (all water potentially in contact with waste material, primarily within the proposed processing building). This would be captured and treated prior to discharged to Council's sewer system as part of a Trade Waste Agreement (to be obtained). Consultation with Council indicated this will be considered a Category C site, which will be subject to extensive assessment and monitoring. Storage of liquid waste (oily water and grease trap waste) would be bunded (110% of largest tank volume) in accordance with EPA requirements. All contents would be treated prior to



discharge to Council sewer;

- Stormwater, from the hardstand paved parking and storage areas would be treated by advanced Gross Pollutant Traps (GPTs) prior to on site detention (OSD) storage then reuse or discharge to the stormwater system;
- Stormwater, comprising clean water from the building roof, would be captured and reused on site where possible. Any water above this would be discharged to stormwater. Water would drain towards the Gilmore Road perimeter, where it would be treated, stored to attenuation requirements, then connected to Council's system.
- Water Sensitive Urban Design (WSUD) methods shall be incorporated in accordance with the Australian Runoff Quality manual (ARQ) and Aus-Spec D7 Erosion Control and Stormwater Management – Queanbeyan – Version 1.

No radioactive or clinical wastes would be accepted at the site.

Water would generally be used for vehicle washdown and landscaping, and not used to clean external hard surfaces.

#### **Construction impacts**

Construction of the proposed changes would involve excavation works for the main warehouse, underground water storage tanks, footings and utilities. Excavation of the site would be minimised wherever possible. Material would be tested and classified in accordance with EPA waste classification requirements, prior to being removed from site for beneficial reuse or to a licensed waste facility for disposal.

Construction impacts on water quality could arise from the disturbance of soils, erosion whilst the soils are in a disturbed state and transportation of sediments to holding areas. Construction activities would take place on flat land, within a recently levelled site. Erosion and sediment control measures, in accordance with the "Blue Book", would be implemented to ensure sediments do not enter into the estate stormwater system.

The proposed construction works would not impact on the extent or duration of flooding risks from the site.

#### **Operation impacts**

An operational water management plan would be prepared for the site for both process water and stormwater management. All process water would be treated prior to being sent to the Council's sewer system as part of a Trade Waste Agreement (to be obtained).

Potential stormwater quality impacts will be mitigated by incorporating treatment solutions into the stormwater management system based on the principles set out in the NSW EPA Guidelines "Managing Urban Stormwater Treatment Techniques" and Council requirements. This approach will ensure that the design incorporates the principles of Water Sensitive Urban design (WSUD) and targets pollutants that are potentially present in the stormwater system so as to minimise the adverse impacts of these pollutants on receiving waters, and comply with Council requirements. WSUD measures will be incorporated into the OSD areas to attenuate stormwater flows and treat run-off for gross pollutants, suspended solids, oil and grease, and nutrients before entering the drainage system.

Stormwater captured on site will pass through oil and litter (GPTs) before being stored within underground storage tanks. Oil and grease interceptors will be installed in all new drainage pits to ensure that 95% of oils and grease are captured before entering the off-site drainage system.

Any water above this would be discharged to the Council stormwater system in accordance with flood attenuation requirements. No overland discharges would occur from the site.



Putrescible wastes would be accepted, sorted and handled within the enclosed building, built with an impervious base. Process water (generally small quantities) be generated within a fully enclosed building or, in the case of liquid waste and fuel storage, in an enclosed liquid waste or fuel storage tanker, surrounded by appropriate bunding. This would ensure that stormwater is kept out of process areas. No contaminated water would be able to leave the bunded areas. The potential of contamination of waterways or the stormwater system is anticipated to be negligible.

#### Mitigation measures

The following mitigation measures are proposed to manage water quality impacts:

Prior to Construction

- Sediment and erosion control measures are to be installed prior to any construction activities and maintained in an effective condition until earthworks have been completed and the site rehabilitated;
- The areas of soil exposure would be minimised as much as possible;
- Excavation would be minimised wherever possible;

**During Operation** 

- All operational areas to be bunded to contain any spills;
- Roofwater would be segregated from hardstand/parking areas and process water;
- Washbay process Water and any water that comes in contact with the waste, to remain separated from stormwater and to be treated prior to being disposed of via a Trade Waste Agreement to Council's sewer system;
- All paved areas are to be treated with appropriate GPT and oil separator prior to being disposed of via a Trade Waste Agreement to Council's sewer system ; and
- Fuel Supply bays shall be suitably covered and bunded to relevant standards.
- Fully stocked spill kits would be provided within all delivery trucks, where materials are stored, and in the truck/machinery maintenance area. All staff and truck drivers would be adequately trained in the use of spill kits.

It is therefore concluded that with the implementation of the proposed mitigation measures, there would be no adverse impacts on water quality, flooding or drainage from the proposed development.

## 8 Traffic, Access and Parking

A key feature of the estate is that it concentrates heavy vehicle movements and delivers them to an appropriate intersection within the regional road network. Streets within the estate have been designed to cater for the movement of heavy vehicles, and as such consist of wide carriageways with lay-bys and turning areas sufficient for vehicles to enter all sites.

Due to turning constraints for heavy semi-trailers, the site layout has been slightly modified. Semi-trailers are now proposed to enter the site from Canberra Avenue/Gilmore Road, and exit from Bowen Place then Kealman and Gilmore Roads to Canberra Avenue at the signalised intersection. In addition to the withdrawal of the retail component of the proposal, this is considered to considerably ease traffic and access, and reduce concerns regarding the Kealman Road/Canberra Avenue intersection.



During the construction phase of the proposed development, traffic is likely to be generated mainly by the deliveries of construction materials and construction worker access. It is anticipated that the temporary addition of construction vehicles would only increase the traffic by a minimal amount.

A Traffic Impact Assessment was carried out for the DA/EIS which assessed the traffic and access implications during the operational stage of the proposed facility. This assessment concluded that the proposed traffic flows on the adjacent road network would have minimal impact during the morning and afternoon peak periods. Outside of the peak times, the flows are anticipated to be lower and therefore, the impacts less. An updated Traffic Impact Assessment (October 2016, **Annexure E)** assesses the revised proposal, and also concludes full compliance with site, Council and RMS requirements.

Basement parking for staff and visitor vehicles is no longer proposed, with all parking at site level. As parking is provided within the proposed facility, no on-street parking demands would be generated. Full specification of parking layout and dimensions will be prepared during detailed design, including disabled parking requirements. The Traffic Impact Assessment concludes the parking meets all Council requirements for vehicles and trucks.

# 9 Conclusion

This submission responds to Council and other information requests, and assesses the proposed Queanbeyan Resource Recovery Facility, including changes, and concludes that:

- with the implementation of the proposed mitigation measures within the EIS and this submission, the facility complies with relevant zoning, DCP and regulatory requirements for the site
- would result in negligible environmental impacts to surrounding landuses and residents; and
- that the process and assessment complies with the relevant provisions requirements of the EP&A Act, and therefore additional notification is not required.